# FINANCIAL INTELLIGENCE CENTRE (FIC)

### Circular No.21 of 2014

Additional obligations for Accountable institutions (Als) and reporting Institutions (RIs) to report suspicious transactions(STRs) and suspicious activities(SARs) relating to Financing of Terrorism (FT) and Proliferation (PF), section 33 of the Financial Intelligence Act 2012, Act 13 of 2012, as amended (herein referred to as The FIA).

### Introduction

This circular is issued in terms of Section 9(1)(h) of The FIA and bears reference to the issued Financial Intelligence Centre (FIC) Circular 1 of 2013.

The FIC, as part of its continued efforts to assist the Government of the Republic of Namibia to reduce the national Money Laundering (ML), Terrorist Financing (TF) and Proliferation Financing (PF) risks will be circulating lists derived from the United Nations Security Council of designated individuals, entities and other groups<sup>1</sup>. These lists will be communicated via circulars to Als and RIs whenever updates are made on the said lists.

### The United Nations Security Council Resolution lists (1267, 1988, 1718 & 1737)

Attached hereto find the following UN Security Council lists on which Accountable Institutions (Als) and Reporting Institutions (Rls) are required to take relevant action as per the FIA:

1. Annexure "A" The List established and maintained by the 1267 Committee with respect to individuals, groups, undertakings and other entities associated with Al-Qaida as updated on 23 September 2014.

The Al-Qaida Sanctions List consists of two sections, specified below:

- a) Individuals associated with Al-Qaida: and
- b) Entities and other groups and undertakings associated with Al-Qaida.

<sup>&</sup>lt;sup>1</sup> This is as per mandated by the Prevention and Combatting of Terrorist and Proliferation Activities Act, 2014 (Act No. 4 of 2014) (PACOTPA) and its complementing regulations

The said list and updates thereto, can also be accessed at:

### http://www.un.org/sc/committees/1267/AQList.htm

2. Annexure "B" The List of individuals and entities established pursuant to Security Council Resolution 1988 (2011) as updated on 21 August 2014.

The 1988 list consists of the following two sections as specified below:

- a) Individuals associated with the Taliban; and
- b) Entities and other groups and undertakings associated with the Taliban

The said list and updates thereto, can also be accessed at:

### http://www.un.org/sc/committees/1988/list.shtml

3. Annexure "C" The consolidated list contains the entities and individuals subject to assets freeze and/or travel ban as decided by the Security Council and the Sanctions Committee established pursuant to resolution 1718 (2006) as updated on 30 July 2014.

The said list and updates thereto, can also be accessed at:

### http://www.un.org/sc/committees/1718/

In addition, an informal compilation of the names of the entities and individuals in the Korean language are available on the Committee's website at:

### http://www.un.org/sc/committees/1718/pdf/List\_Entities\_and\_Individuals Korean.pdf.

- **4. Annexure "D"** The updated list established and maintained by the 1737 Committee with respect to individuals, groups, undertakings and other entities directly associated with or:
  - a. providing support for the designated country's proliferation sensitive nuclear activities or:
  - b. for the development of nuclear weapon delivery systems;
  - c. including through the involvement in procurement of the prohibited items, goods, equipment, materials and technology.

The said list and updates thereto, can also be accessed at:

### http://www.un.org/sc/committees/1737/

**4.1 Additional attachments to UNSCR 1737:** The following attachments provide context to items prohibited for export to and import from the designated country:

4.1.1 **Attachment D1:** List of items related to nuclear programmes referred to in resolution 1929 (2010) for the export of nuclear material, equipment and technology (dated 12 November 2012)

http://www.un.org/sc/committees/1737/pdf/INFCIRC254Rev.11Part1.pdf

4.1.2 **Attachment D2:** List of items related to nuclear programmes referred to in resolution 1929 (2010) for transfers of nuclear-related dual-use equipment, material, software and related technology (dated 30 June 2010)

http://www.un.org/sc/committees/1737/pdf/INFCIRC254Rev.8Part2.pdf

4.1.3 **Attachment D3:** List of items, materials, equipment, goods and technology related to ballistic missile programmes related to nuclear programmes referred to in resolution 1929 (2010) (dated 20 December 2012)

http://www.un.org/ga/search/view\_doc.asp?symbol=S/2012/947

4.1.4 **Attachment D4:** Guidelines for sensitive missile-relevant transfers referred to in resolution 1737 (2006) (dated 07 December 2006)

http://www.un.org/ga/search/view\_doc.asp?symbol=S/2006/985

Als and RIs are directly in terms of the FIA, and indirectly in terms of the PACOTPA, mandated to screen names of all their new and existing clients, as well as all transactions processed by the institution, against the names of the individuals and organisations on all the above sanctions lists (including the relevant attachments) and the updates thereto.

Whilst the FIC will at all times circulate the updates to the above identified lists to Als and RIs, as per applicable legislative provisions contained in the PACOTPA and its complementing Regulations, both Als and RIs have the responsibility to continuously and timeously familiarize themselves with updates made by the United Nations Security Council to the above lists.

Potential matches resulting from such screening must be subjected to enhanced customer due diligence measures as required by sections 23 and 24 of the FIA. In the event that a positive match is determined and enhanced customer due diligence is performed, AIs and RIs should report this as well as any details of any funds held on behalf of the listed party, immediately to the FIC as required by section 33 of the FIA.

Further, it should be noted that, it is an offence in terms of sections 2, 3 and 23 of the PACOTPA to deal with, enter into or facilitate any transaction or perform any other act in connection with funds connected with or owned by individuals, entities and other groups associated with listed individuals or entities. The prohibitions contained

in the above sections further establishes an effective freeze over the funds connected with or owned by the said individuals, entities and other groups as contained in the lists to ensure no transaction or any other act is performed in connection with such funds.

An AI or RI which provides products or services to these individuals, entities and other groups as per the said lists, as a result of failing to implement adequate screening measures, commits an offence and in addition exposes itself to an extremely high risk of Terrorist Financing or/and advancing weapons proliferation objectives.

## Methods of reporting Suspicious Transaction Reports or Suspicious Activity Reports relating to Financing of Terrorism to the FIC

Als and RIs can report Suspicious Transaction Reports or Suspicious Activity Reports relating to Financing of Terrorism to the FIC through:

- a) Electronic submission(online/web based or xml by clicking on <a href="https://www.fic.na/goaml/">https://www.fic.na/goaml/</a>); or
- b) Completion of manual STR/SAR form (form can be send to helpdesk@fic.na)

### Non-compliance with the provisions of this Circular

Any non-compliance with the directions and specifications contained in this Circular is an offence in terms of section 63 of the FIA.

### **Further information**

### **Further information**

Enquiries can be directed to the FIC Help Desk by:

Email to helpdesk@fic.na

Tel: + 264 - 61-2835100

Fax: +264 - 61-2835259

The information contained in this document is intended only to provide a summary and a general overview on these matters and is not intended to be comprehensive. This document may contain statements of policy which reflect FIC's administration of the legislation in carrying out its statutory functions.

The guidance provided by the Centre in this circular, even though authoritative, is not intended to replace the FIA or PACOTPA including Regulations issued thereunder. The circular does vary the existing guidance note on reporting of suspicious transactions regarding ML as far as adding the obligations pertaining reporting of Financing of Terrorist and Proliferation transactions or activities are concerned. The said guidance note can be accessed at <a href="https://www.fic.na">www.fic.na</a>.

The information contained herein is current as at the date of this document.

Date issued: 26 September 2014

**Director: Financial Intelligence Centre** 



## The List established and maintained by the Al-Qaida Sanctions Committee with respect to individuals, groups, undertakings and other entities associated with Al-Qaida

Last updated on: 23 September 2014

### **Composition of the List**

The list consists of the two sections specified below:

A. Individuals associated with Al Qaida

B. Entities and other groups and undertakings associated with Al Qaida

Information about de-listing may be found on the Committee's website at: <a href="http://www.un.org/sc/committees/1267/delisting.shtml">http://www.un.org/sc/committees/1267/delisting.shtml</a>.

#### A. Individuals associated with Al-Qaida

QI.A.12.01. Name: 1: NASHWAN 2: ABD AL-RAZZAQ 3: ABD AL-BAQI 4: na

ن شوان عبد الرزاق عبد اله باقي : Name (original script)

**Title:** na **Designation:** na **DOB:** 1961 **POB:** Mosul, Iraq **Good quality a.k.a.:** a) Abdal Al-Hadi Al-Iraqi **b)** Abd Al-Hadi Al-Iraqi **Low quality a.k.a.:** Abu Abdallah **Nationality:** Iraqi **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 6 Oct. 2001 (amended on 14 May 2007, 27 Jul. 2007) **Other information:** Al-Qaida senior official. In custody of the United States of America, as of July 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.157.04. Name: 1: ABD AL WAHAB 2: ABD AL HAFIZ 3: na 4: na

ع بد اله و هلب ع بد الحافظ: Name (original script)

**Title:** na **Designation:** na **DOB:** 7 Sep. 1967 **POB:** Algiers, Algeria **Good quality a.k.a.: a)** Ferdjani Mouloud **b)** Rabah Di Roma **c)** Abdel Wahab Abdelhafid, born 30 Oct. 1968 in Algeria **Low quality a.k.a.: a)** Mourad **b)** Said **Nationality:** na **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 17 Mar. 2004 (amended on 26 Nov. 2004, 9 Sep. 2005, 21 Dec. 2007, 25 Jan. 2010, 16 May 2011) **Other information:** Sentenced in absentia in Italy to 5 years of imprisonment. Arrest warrant issued by the Italian authorities on 19 May 2005. Considered a fugitive from justice by the Italian authorities as of Jun. 2009. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.A.255.08. Name: 1: ADIL 2: MUHAMMAD 3: MAHMUD 4: ABD AL-KHALIQ

عادل محمد محمود ع بد ال خال ق :(Name (original script

Title: na Designation: na DOB: 2 Mar. 1984 POB: Bahrain Good quality a.k.a.: a) Adel Mohamed Mahmoud Abdul Khaliq b) Adel Mohamed Mahmood Abdul Khaled Low quality a.k.a.: na Nationality: Bahraini Passport no.: Bahraini passport number 1632207 National identification no.: na Address: na Listed on: 10 Oct. 2008 (amended on 24 Jul. 2013) Other information: Has acted on behalf of and provided financial, material and logistical support to Al-Qaida (listed under permanent reference number QE.A.4.01.) and the Libyan Islamic Fighting Group (LIFG, listed under permanent reference number QE.L.11.01.), including provision of electrical parts used in explosives, computers, GPS devices and military equipment. Trained by Al-Qaida in small arms and explosives in South Asia and fought with Al-Qaida in Afghanistan. Arrested in the United Arab Emirates (UAE) in Jan. 2007 on charges of being a member of Al-Qaida and the LIFG. Following his conviction in the UAE in late 2007, he was transferred to Bahrain in early 2008 to serve out the remainder of his sentence.

QI.A.289.11. Name: 1: SAID JAN 2: 'ABD AL-SALAM 3: na 4: na

سع يد جان ع بد ال سلام :Name (original script)

Title: na Designation: na DOB: a) 5 Feb. 1981 b) 1 Jan. 1972 POB: na Good quality a.k.a.: a) Sa'id Jan 'Abd-al-Salam b) Dilawar Khan Zain Khan, born 1 Jan. 1972 Low quality a.k.a.: a) Qazi 'Abdallah b) Qazi Abdullah c) Ibrahim Walid d) Qasi Sa'id Jan e) Said Jhan f) Farhan Khan g) Aziz Cairo h) Nangiali Nationality: Afghan Passport no.: a) Afghan passport number OR801168, issued on 28 Feb. 2006, expires 27 Feb. 2011, under name Said Jan 'Abd al-Salam b) Pakistani passport number 4117921, issued on 9 Sep. 2008, expires 9 Sep. 2013, issued under name Dilawar Khan Zain Khan National identification no.: Kuwaiti Civil Identification number 281020505755, under name Said Jan 'Abd al-Salam Address: na Listed on: 9 Feb. 2011 Other information: In approximately 2005, ran a "basic training" camp for Al-Qaida (QE.A.4.01.) in Pakistan.

QI.A.192.05. Name: 1: ABD ALLAH 2: MOHAMED 3: RAGAB 4: ABDEL RAHMAN

ع بد الله محمد رجب ع بد الرحمن :(Name (original script

**Title:** na **Designation:** na **DOB:** 3 Nov. 1957 **POB:** Kafr Al-Shaykh, Egypt **Good quality a.k.a.: a)** Abu Al-Khayr **b)** Ahmad Hasan **c)** Abu Jihad **Low quality a.k.a.:** na **Nationality:** Egyptian **Passport no.:** na **National identification no.:** na **Address:** Believed to be in Pakistan or Afghanistan **Listed on:** 29 Sep. 2005 (amended on 13 Dec. 2011) **Other information:** Member of Egyptian Islamic Jihad (QE.A.3.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.A.54.01. Name: 1: MAJEED 2: ABDUL CHAUDHRY 3: na 4: na
Title: na Designation: na DOB: a) 15 Apr. 1939 b) 1938 POB: na Good quality a.k.a.: a) Majeed,
Abdul b) Majeed Chaudhry Abdul c) Majid, Abdul Low quality a.k.a.: na Nationality:
Pakistani Passport no.: na National identification no.: na Address: na Listed on: 24 Dec.
2001 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.A.109.03. Name: 1: ZULKIFLI 2: ABDUL HIR 3: na 4: na

Title: na Designation: na DOB: a) 5 Jan. 1966 b) 5 Oct. 1966 POB: Muar Johor, Malaysia Good quality a.k.a.: a) Musa Abdul Hir b) Muslimin Abdulmotalib c) Salim Alombra d) Armand Escalante e) Normina Hashim f) Henri Lawi g) Hendri Lawi h) Norhana Mohamad i) Omar Salem j) Ahmad Shobirin k) Bin Abdul Hir Zulkifli Low quality a.k.a.: a) Abdulhir Bin Hir b) Hassan c) Hogalu d) Hugalu e) Lagu f) Marwan Nationality: Malaysian Passport no.: A 11263265 National identification no.: a) 660105-01-5297 b) driver license number D2161572 issued in California, USA Address: Seksyen 17, Shah Alam, Selangor, Malaysia Listed on: 9 Sep. 2003 (amended on 25 Jan. 2010) Other information: The Court for the Northern District of California, USA, issued a warrant of arrest for him on 1 Aug. 2007. At large in the Southern Philippines. Mother's name is Minah Binto Aogist Abd Aziz. Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Jun. 2009.

QI.A.200.05. Name: 1: DIEMAN 2: ABDULKADIR IZZAT 3: na 4: na

ل قادر عز تدي مان ع بد ا Name (original script): ا

Title: na Designation: na DOB: 4 Jul. 1965 POB: Kirkuk, Iraq Good quality a.k.a.: Deiman Alhasenben Ali Aljabbari, born 4 Jul. 1965 Low quality a.k.a.: na Nationality: Iraqi Passport no.: German travel document ("Reiseausweis") A 0141062 (revoked as at Sep. 2012) National identification no.: na Address: Bavaria, Germany. Listed on: 6 Dec. 2005 (amended on 25 Jan. 2010, 13 Dec. 2011, 15 Nov. 2012) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.A.18.01. Name: 1: ABDUL MANAN AGHA 2: na 3: na 4: na

ع يد الم نان آغا :Name (original script)

Title: Haji Designation: na DOB: na POB: na Good quality a.k.a.: Abdul Manan Low quality a.k.a.: a) Abdul Man'am Saiyid b) Saiyid Abd al-Man (formerly listed as) Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 17 Oct. 2001 (amended on 26 Jun. 2013) Other information: Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.295.11. Name: 1: MUHAMMAD 2: JIBRIL 3: ABDUL RAHMAN 4: na

Title: na Designation: na DOB: a) 28 May 1984 b) 3 Dec. 1979 c) 3 March 1979 (from false passport) POB: East Lombok, West Nusa Tenggara, Indonesia Good quality a.k.a.: a) Mohammad Jibril Abdurrahman b) Muhammad Jibriel Abdul Rahman c) Mohammad Jibriel Abdurrahman d) Muhamad Ricky Ardhan, born 8 Aug. 1980, (appears in false Indonesian passport number S335026) e) Muhammad Ricky Ardhan bin Muhammad Iqbal f) Muhammad Ricky Ardhan bin Abu Jibril Low quality a.k.a.: a) Muhammad Yunus b) Heris Syah Nationality: Indonesian Passport no.: na National identification no.: a) Indonesian national identity card number 3219222002.2181558 b) Identification number 2181558 Address: a) Jalan M. Saidi RT 010 RW 001 Pesanggrahan, South Petukangan, South Jakarta, Indonesia b) Jalan Nakula of Witana Harja Complex Block C, Pamulang, Banten, Indonesia Listed on: 12 Aug. 2011 Other information: Senior member of Jemaah Islamiyah (QE.J.92.02.) directly involved in obtaining funding for terrorist attacks. Sentenced in Indonesia to five years in prison on 29 Jun. 2010. Father's name is Mohamad Iqbal Abdurrahman (QI.A.86.03.).

QI.A.229.07. Name: 1: ALY 2: SOLIMAN 3: MASSOUD 4: ABDUL SAYED

**Title:** na **Designation:** na **DOB:** 1969 **POB:** Tripoli, Libyan Arab Jamahiriya **Good quality a.k.a.:** a) Ibn El Qaim b) Mohamed Osman **Low quality a.k.a.:** Adam **Nationality:** Libyan **Passport no.:** Libyan Passport No. 96/184442 **National identification no.:** na **Address:** Ghout El Shamal, Tripoli, Libyan Arab Jamahiriya **Listed on:** 8 Jun. 2007 (amended on 13 Dec. 2011) **Other information:** Member of Libyan Islamic Fighting Group (QE.L.11.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 24 Nov. 2009.

QI.A.86.03. Name: 1: MOHAMAD 2: IQBAL 3: ABDURRAHMAN 4: na

Title: na Designation: na DOB: a) 17 Aug. 1957 b) 17 Aug. 1958 POB: a) Korleko-Lombok Timur, Indonesia b) Tirpas-Selong Village, East Lombok, Indonesia Good quality a.k.a.: a) Rahman, Mohamad Iqbal b) A Rahman, Mohamad Iqbal c) Abu Jibril Abdurrahman d) Fikiruddin Muqti e)

Fihiruddin Muqti f) Abdul Rahman, Mohamad Iqbal Low quality a.k.a.: na Nationality:
Indonesian Passport no.: na National identification no.: 3603251708570001 Address: Jalan Nakula, Komplek Witana Harja III Blok C 106-107, Tangerang, Indonesia Listed on: 28 Jan.

2003 (amended on 26 Nov. 2004, 16 May 2011, 10 Jun. 2011) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.A.309.12. Name: 1: ABDUR REHMAN 2: na 3: na 4: na

ع بد الـ رحمن :Name (original script)

QI.A.285.10. Name: 1: MUHAMMAD 2: ABDALLAH 3: HASAN 4: ABU-AL-KHAYR

محمد ع بدالله ح سن أب و ال خ بر :(Name (original script

Title: na Designation: na DOB: a) 19 Jun. 1975 b) 18 Jun. 1975 POB: Al-Madinah al-Munawwarah, Saudi Arabia Good quality a.k.a.: a) Mohammed Abdullah Hassan Abul-Khair b) Muhammad Abdallah Hasan Abu-al-Khayr c) Muhammad Bin- 'Abdullah Bin-Hamd Abu-al-Khayr d) Abdallah al-Halabi e) 'Abdallah al-Halabi al-Madani f) Abdallah al-Makki g) Abdallah el-Halabi h) Abdullah al-Halabi i) Abu 'Abdallah al-Halabi Low quality a.k.a.: a) Abu Abdallah al-Madani b) Muhannad al-Jaddawi Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number A741097, issued on 14 Nov. 1995 and expired on 19 Sep. 2000. National identification no.: Saudi Arabian national identification number 1006010555 Address: na Listed on: 24 Aug. 2010 Other

information: Appears on a 2009 list of 85 persons wanted by the government of Saudi Arabia.

QI.A.130.03. Name: 1: MOHAMED 2: GHASSAN 3: ALI 4: ABU DHESS

محمد غ سان ع لى أب و ده بس :Name (original script)

Title: na Designation: na DOB: 22 Jun. 1966 POB: Irbid, Jordan Good quality a.k.a.: a) Yaser Hassan, born 1 Feb. 1966 in Hasmija b) Abu Ali Abu Mohamed Dhees, born 1 Feb. 1966 in Hasmija c) Mohamed Abu Dhess, born 1 Feb. 1966 in Hashmija, Iraq Low quality a.k.a.: na Nationality: Jordanian Passport no.: a) German International travel document no.: 0695982, expired b) German International travel document no.: 0785146, valid until 8 Apr. 2004 National identification no.: na Address: Germany Listed on: 23 Sep. 2003 (amended on 23 Dec. 2008, 11 Mar. 2010, 10 Jun. 2011) Other information: Father's name is Mouhemad Saleh Hassan. Mother's name is Mariam Hassan, neé Chalabia. Associated with Ismail Abdallah Sbaitan Shalabi (QI.S.128.03.), Djamel Moustfa (QI.M.129.03.) and Aschraf Al-Dagma (QI.A.132.03.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Jan. 2010.

QI.A.224.06. Name: 1: ISMAIL 2: MOHAMED 3: ISMAIL 4: ABU SHAWEESH

ا سماع بل محمد ا سماع بل أب و شاوب ش

**Title:** na **Designation:** na **DOB:** 10 Mar. 1977 **POB:** Benghazi, Libyan Arab Jamahiriya **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Stateless Palestinian **Passport no.: a)** Egyptian travel document, passport number 0003684 **b)** Egyptian passport number 981354 **National identification no.:** na **Address:** Germany **Listed on:** 2 Aug. 2006 (amended on 11 Mar. 2010, 13 Dec. 2011) **Other information:** In detention since 22 May 2005. His brother is Yasser Mohamed Ismail Abu Shaweesh (QI.A.201.05). Review pursuant to Security Council resolution 1822 (2008) was concluded on 24 Nov. 2009.

QI.A.201.05. Name: 1: YASSER 2: MOHAMED 3: ISMAIL 4: ABU SHAWEESH

یا سر محمد ا سماع یل أب و شاوی ش

**Title:** na **Designation:** na **DOB:** 20 Nov. 1973 **POB:** Benghazi, Libyan Arab Jamahiriya **Good quality a.k.a.:** Yasser Mohamed Abou Shaweesh **Low quality a.k.a.:** na **Nationality:** Stateless Palestinian **Passport no.: a)** Passport substitute C00071659 issued by the Federal Republic of Germany **b)** Egyptian passport 0003213 **c)** Egyptian travel document 939254 **d)** Egyptian passport 981358 **National identification no.:** na **Address:** In prison in Germany **Listed on:** 6 Dec. 2005 (amended on 7 Sep. 2007, 11 Mar. 2010, 28 Sep. 2010, 13 Dec. 2011) **Other information:** Sentenced to 5 years and 6 months imprisonment in Germany on 6 Dec. 2007. His brother is Ismail Mohamed Ismail Abu Shaweesh (QI.A.224.06.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 24 Nov. 2009.

QI.A.304.12. Name: 1: MOCHAMMAD 2: ACHWAN 3: na 4: na

Title: na Designation: na DOB: a) 4 May 1948 b) 4 May 1946 POB: Tulungagung, Indonesia Good quality a.k.a.: a) Muhammad Achwan b) Muhammad Akhwan c) Mochtar Achwan d) Mochtar Akhwan e) Mochtar Akwan Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: Indonesian National Identity Card Number 3573010405480001 under name Mochammad Achwan Address: Jalan Ir. H. Juanda 8/10, RT/RW 002/001, Jodipan, Blimbing, Malang, Indonesia Listed on: 12 Mar. 2012 Other information: Acting emir of Jemmah Anshorut Tauhid (JAT) (QE.J.133.12.). Associated with Abu Bakar Ba'asyir (QI.B.217.06), Abdul Rahim Ba'aysir (QI.B.293.11) and Jemaah Islamiyah (QE.J.92.02.).

QI.A.316.13. Name: 1: IYAD 2: AG GHALI 3: na 4: na

ایہ اد اغ غالہ ی :Name (original script)

**Title:** na **Designation:** na **DOB:** 1958 **POB:** Abeibara, Kidal Region, Mali **Good quality a.k.a.:** Sidi Mohamed Arhali, born 1 Jan. 1958 in Bouressa, Bourem Region, Mali **Low quality a.k.a.:** na **Nationality:** Malian **Passport no.:** Malian passport number A1037434, issued on 10 Aug. 2001 expires on 31 Dec. 2014 **National identification no.:** na **Address:** Mali **Listed on:** 25 Feb. 2013 **Other information:** Founder and leader of Ansar Eddine. Member of the Tuareg Ifogas tribe. Linked to the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) and Mouvement pour

l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12). Name of father is Ag Bobacer Arhali, name of mother is Rhiachatou Wallet Sidi.

QI.A.203.05. Name: 1: FARHAD 2: KANABI 3: AHMAD 4: na

Name (original script): ف رهلد که نابي أحمد

Title: na Designation: na DOB: 1 Jul. 1971 POB: Arbil, Iraq Good quality a.k.a.: a) Kaua Omar Achmed b) Kawa Hamawandi (previously listed as) Low quality a.k.a.: na Nationality: Iraqi Passport no.: German travel document ("Reiseausweis") A 0139243 (revoked as at Sep. 2012) National identification no.: na Address: Iraq Listed on: 6 Dec. 2005 (amended on 31 Jul. 2006, 25 Jan. 2010, 13 Dec. 2011, 15 Nov. 2012) Other information: Released from custody in Germany on 10 Dec. 2010 and relocated to Iraq on 6 Dec. 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 5 Oct. 2009.

QI.A.226.06. Name: 1: NAJMUDDIN 2: FARAJ 3: AHMAD 4: na

**Title:** na **Designation:** na **DOB:** a) 7 Jul. 1956 b) 17 Jun. 1963 **POB:** Olaqloo Sharbajer, Al-Sulaymaniyah Governorate, Iraq **Good quality a.k.a.:** a) Mullah Krekar b) Fateh Najm Eddine Farraj c) Faraj Ahmad Najmuddin **Low quality a.k.a.:** na **Nationality:** Iraqi **Passport no.:** na **National identification no.:** na **Address:** Heimdalsgate 36-V, 0578 Oslo, Norway **Listed on:** 7 Dec. 2006 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QI.A.237.08. Name: 1: JABER 2: ABDALLAH 3: JABER 4: AHMAD AL-JALAHMAH

جاب ر ع بد الله جاب ر أحمد ال جلاهة :(Name (original script

Title: na Designation: na DOB: 24 Sep. 1959 POB: Al-Khitan area, Kuwait Good quality a.k.a.: a) Jaber Al-Jalamah b) Abu Muhammad Al-Jalahmah c) Jabir Abdallah Jabir Ahmad Jalahmah d) Jabir 'Abdallah Jabir Ahmad Al-Jalamah e) Jabir Al-Jalhami Low quality a.k.a.: a) Abdul-Ghani b) Abu Muhammad Nationality: Kuwaiti Passport no.: a) 101423404 b) Kuwaiti passport number 2541451, valid until 16 Feb. 2017 c) Kuwaiti passport number 002327881 National identification no.: Kuwaiti national identification number 259092401188 Address: Kuwait, (residence as at March 2009 and at December 2013) Listed on: 3 Jan. 2014 Other information: Previously listed between 16 Jan. 2008 and 3 Jan. 2014 (amended on 1 Jul. 2008, 23 Jul. 2008, 25 Jan. 2010). Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

QI.A.14.01. Name: 1: TARIQ 2: ANWAR 3: EL SAYED 4: AHMED

طاري ق أذ ور السيد احمد :Name (original script)

Title: na Designation: na DOB: 15 Mar. 1963 POB: Alexandria, Egypt Good quality a.k.a.: a) Hamdi Ahmad Farag b) Amr Al-Fatih Fathi c) Tarek Anwar El Sayed Ahmad Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 6 Oct. 2001 (amended on 26 Nov. 2004, 18 Jul. 2007, 16 May 2011) Other information: Reportedly deceased in October 2001. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

QI.A.193.05. Name: 1: ZAKI 2: EZAT 3: ZAKI 4: AHMED

Name (original script): حرت زکی احمد

Title: na Designation: na DOB: 21 Apr. 1960 POB: a) Sharqiyah, Egypt b) Zaqaziq, Egypt Good quality a.k.a.: a) Rif'at Salim b) Abu Usama Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: May be on the Pakistani-Afghan border Listed on: 29 Sep. 2005 (amended on 13 Dec. 2011) Other information: Father's name is Ahmed Ezat Zaki. Member of Egyptian Islamic Jihad (QE.A.3.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.A.161.04. Name: 1: FARID 2: AIDER 3: na 4: na

ف ریاد عایدر:Name (original script)

**Title**: na **Designation**: na **DOB**: 12 Oct. 1964 **POB**: Algiers, Algeria **Good quality a.k.a.: a)** Achour Ali **b)** Terfi Farid **Low quality a.k.a.**: Abdallah **Nationality**: Algerian **Passport no.**: na **National** 

identification no.: na Address: na Listed on: 17 Mar. 2004 (amended on 26 Nov. 2004, 25 Jan. 2010, 16 May 2011) Other information: Italian Fiscal Code DRAFRD64R12Z301C. Sentenced in Italy in Mar. 2002 to 8 years of imprisonment. Arrest warrant issued by the Italian authorities on 16 Nov. 2007. Considered a fugitive from justice by the Italian authorities as of 14 Dec. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.A.313.13 Name: 1: DJAMEL 2: AKKACHA 3: na 4: na

ع کا شة جمال :Name (original script)

**Title:** na **Designation:** na **DOB:** 9 May 1978 **POB:** Rouiba, Algiers, Algeria **Good quality a.k.a.: a)** Yahia Abou el Hoummam **b)** Yahia Abou el Hammam **Low quality a.k.a.:** na **Nationality:** Algerian **Passport no.:** na **National identification no.:** na **Address:** Mali **Listed on:** 5 Feb. 2013 **Other information:** Father's name is Slimane. Mother's name is Akrouf Khadidja. Coordinator of groups associated with The Organisation of Al-Qaida in the Islamic Maghreb (QE.T.14.01.) in northern Mali.

QI.A.91.03. Name: 1: MOHAMED 2: AMINE 3: AKLI 4: na

Name (original script): محمد أم ين اكلي

**Title:** na **Designation:** na **DOB:** 30 Mar. 1972 **POB:** Bordj el Kiffane, Algeria **Good quality a.k.a.:** a) Akli Amine Mohamed b) Killech Shamir c) Kali Sami **Low quality a.k.a.:** Elias **Nationality:** Algerian **Passport no.:** na **National identification no.:** na **Address:** Algeria **Listed on:** 25 Jun. 2003 (amended on 12 Apr. 2006, 17 Oct. 2007, 16 May 2011) **Other information:** Father's name is Lounes. Mother's name is Kadidja. Inadmissible to the Schengen area. Deported from Spain to Algeria in Aug. 2009. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.325.14. Name: 1: ABOU 2: MOHAMED 3: AL ADNANI 4: na

Title: na Designation: na DOB: Approximately 1977 POB: Binnish, Syrian Arab Republic Good quality a.k.a.: a) Yaser Khalaf Nazzal Alrawi b) Jaber Taha Falah c) Abou Khattab d) Abou Sadeq Alrawi e) Tah al Binchi f) Abu Mohammed al-Adnani g) Taha Sobhi Falaha h) Yasser Khalaf Hussein Nazal al-Rawi i) Abu Baker al-Khatab j) Abu Sadek al-Rawi k) Taha al-Banshi l) Abu Mohammed al-Adnani m) Abu-Mohammad al-Adnani al-Shami n) Hajj Ibrahim Low quality a.k.a.: na Nationality: Iraqi Passport no.: na National identification no.: na Address: na Listed on: 15 Aug. 2014 Other information: Official spokesman of Islamic State in Iraq and the Levant (ISIL), listed as Al-Qaida in Iraq (QE.J.115.04), and emir of ISIL in Syria, closely associated with Abu Mohammed al-Jawlani (QI.A.317.13) and Abu Bakr al-Baghdadi, listed as Ibrahim Awwad Ibrahim Ali al-Badri al-Samarrai (QI.A.299.11).

QI.A.328.14. Name: 1: HAJJAJ 2: BIN 3: FAHD 4: AL AJMI

**Title:** na **Designation:** na **DOB:** 10 Aug. 1987 **POB:** Kuwait **Good quality a.k.a.:** a) Hijaj Fahid Hijaj Muhammad Sahib al-Ajmi b) Hicac Fehid Hicac Muhammed Sebib al-Acmi c) Hajjaj bin-Fahad al-Ajmi d) Sheikh Hajaj al-Ajami e) Hajaj al-Ajami f) Ajaj Ajami **Low quality a.k.a.:** na **Nationality:** Kuwaiti **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 15 Aug. 2014 **Other information:** A Kuwait-based facilitator in charge of the 'committee of zakat' and financier for Al-Nusrah Front for the People of the Levant (QE.A.137.14).

QI.A.338.14. Name: 1: SHAFI 2: SULTAN 3: MOHAMMED 4: AL-AJMI

**Title:** Doctor **Designation:** na **DOB:** 1 Jan. 1973 **POB:** Warah, Kuwait **Good quality a.k.a.: a)** Shafi al-Ajmi **b)** Sheikh Shafi al-Ajmi **Low quality a.k.a.:** Shaykh Abu-Sultan **Nationality:** Kuwaiti **Passport no.:** 0216155930 **National identification no.:** na **Address:** Area 3, Street 327, Building 41, Al-Uqaylah, Kuwait **Listed on:** 23 Sep. 2014 **Other information:** Fundraiser for Al-Nusrah Front for the People of the Levant (QE.A.137.14).

QI.A.236.08. Name: 1: HAMID 2: ABDALLAH 3: AHMAD 4: AL-ALI

Name (original script): حامد ع بد الله أحمد الح علي

**Title:** na **Designation:** na **DOB:** 20 Jan. 1960 **POB:** Kuwait **Good quality a.k.a.: a)** Dr. Hamed Abdullah Al-Ali **b)** Hamed Al-'Ali **c)** Hamed bin 'Abdallah Al-'Ali **d)** Hamid 'Abdallah Al-'Ali **e)** Hamid

'Abdallah Ahmad Al-'Ali f) Hamid bin Abdallah Ahmed Al-Ali g) Hamid Abdallah Ahmed Al-Ali Low quality a.k.a.: Abu Salim Nationality: Kuwaiti Passport no.: Kuwaiti passport number 1739010 issued in Kuwait, issued on 26 May 2003 and expired on 25 May 2008 National identification no.: na Address: Kuwait (residence as at Mar. 2009) Listed on: 16 Jan. 2008 (amended on 1 Jul. 2008, 23 Jul. 2008, 25 Jan. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

QI.A.326.14. Name: 1: HAMID 2: HAMAD 3: HAMID 4: AL-'ALI

**Title:** na **Designation:** na **DOB:** 17 Nov. 1960 **POB:** a) Kuwait b) Qatar **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Kuwaiti **Passport no.:** a) Kuwaiti passport number 001714467 b) Kuwaiti passport number 101505554 **National identification no.:** na **Address:** na **Listed on:** 15 Aug. 2014 **Other information:** A Kuwait-based financier, recruiter and facilitator for Islamic State in Iraq and the Levant, listed as Al-Qaida in Iraq (QE.J.115.04), and Jabhat al-Nusrah, listed as Al-Nusrah Front for the People of the Levant (QE.A.137.14). Associated with Ibrahim Awwad Ibrahim Ali al-Badri al-Samarrai (QI.A.299.11) and Abu Mohammed al-Jawlani (QI.A.317.13).

QI.A.92.03. Name: 1: MEHREZ 2: BEN MAHMOUD 3: BEN SASSI 4: AL-AMDOUNI

محرز بن محمود بن ساسي اله عمدوني : Name (original script)

Title: na Designation: na DOB: 18 Dec. 1969 POB: Asima-Tunis, Tunisia Good quality a.k.a.: a) Fabio Fusco, born 25 May 1968 in Naples, Italy b) Fabio Fusco, born 18 Dec. 1968 in Tunisia c) Fabio Fusco, born 25 May 1968 in Algeria d) Mohamed Hassan e) Meherez Hamdouni f) Amdouni Mehrez ben Tah, born 14 Jul. 1969 in Tunisia g) Meherez ben Ahdoud ben Amdouni Low quality a.k.a.: Abu Thale Nationality: Tunisian Passport no.: Tunisian passport number G737411, issued on 24 Oct. 1990, expired on 20 Sep. 1997 National identification no.: na Address: Italy Listed on: 25 Jun. 2003 (amended on 26 Nov. 2004, 20 Dec. 2005, 17 Oct. 2007, 16 Sep. 2008, 24 Mar. 2009, 12 Jul. 2010, 16 May 2011) Other information: Father's name is Mahmoud ben Sasi. Mother's name is Maryam bint al-Tijani. Inadmissible to the Schengen area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.335.14. Name: 1: 'ABD AL-RAHMAN 2: KHALAF 3: 'UBAYD JUDAY' 4: AL-'ANIZI Title: na Designation: na DOB: Approximately 1973 POB: na Good quality a.k.a.: a) 'Abd al-Rahman Khalaf al-Anizi b) 'Abd al-Rahman Khalaf al-'Anzi Low quality a.k.a.: a) Abu Usamah al-Rahman b) Abu Shaima' Kuwaiti c) Abu Usamah al-Kuwaiti d) Abu Usama e) Yusuf Nationality: Kuwaiti Passport no.: na National identification no.: na Address: Syrian Arab Republic, (located in since 2013) Listed on: 23 Sep. 2014 Other information: Provides support to Al-Qaida (QE.A.4.01) and Islamic State in Iraq and the Levant, listed as Al-Qaida in Iraq (AQI) (QE.J.115.04), in Syria and Iraq.

QI.A.60.02. Name: 1: MOHAMED 2: BEN BELGACEM 3: BEN ABDALLAH 4: AL-AOUADI

محمد بن بد لقا سم بن عبد الله العوادي : Name (original script)

Title: na Designation: na DOB: 11 Dec. 1974 POB: Tunis, Tunisia Good quality a.k.a.: a) Aouadi, Mohamed Ben Belkacem b) Fathi Hannachi Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number L 191609 issued on 28 Feb. 1996, expired on 27 Feb. 2001 National identification no.: 04643632 issued on 18 June 1999 Address: 50th Street, Number 23, Zehrouni, Tunis, Tunisia Listed on: 24 Apr. 2002 (amended on 10 Apr. 2003, 26 Nov. 2004, 9 Sep. 2005, 20 Dec. 2005, 31 Jul. 2006, 7 Jun. 2007, 23 Dec. 2010) Other information: Italian Fiscal Code: DAOMMD74T11Z352Z. Mother's name is Ourida Bint Mohamed. Deported from Italy to Tunisia on 1 Dec. 2004. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.171.04. Name: 1: AQEEL 2: ABDULAZIZ 3: AQEEL 4: AL-AQEEL

عقيل عبد العزيزعقيل العقيل العقيل عبد العزيزعة

**Title:** na **Designation:** na **DOB:** 29 Apr. 1949 **POB:** Uneizah, Saudi Arabia **Good quality a.k.a.: a)** Aqeel Abdulaziz Al-Aqil **b)** Ageel Abdulaziz A. Alageel **Low quality a.k.a.:** na **Nationality:** Saudi Arabian **Passport no.: a)** Passport number C 1415363 - issued on 21 May 2000 (16/2/1421H) **b)** 

Passport number E 839024, issued on 3 Jan. 2004, expired on 8 Nov. 2008 National identification no.: na Address: Saudi Arabia (as at Apr. 2009) Listed on: 6 Jul. 2004 (amended on 23 Apr. 2007, 17 Jul. 2009, 13 Dec. 2011) Other information: In detention in Saudi Arabia as at Nov. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Oct. 2009.

QI.A.291.11. Name: 1: IBRAHIM 2: HASSAN 3: TALI 4: AL-ASIRI

Name (original script): إبراهيم حسن طال ع ال ع سديري Title: na Designation: na DOB: a) 19 Apr. 1982 b) 18 Apr. 1982 c) 24/06/1402 (Hijri Calendar) POB: Riyadh, Saudi Arabia Good quality a.k.a.: a) Ibrahim Hassan Tali Asiri (موه اربا) **b)** Ibrahim Hasan Talea Aseeri **c)** Ibrahim Hasan al-Asiri **d)** Ibrahim Hasan Tali Asiri e) Ibrahim Hasan Tali Assiri f) Ibrahim Hasan Tali'A 'Asiri g) Ibrahim Hasan Tali al-'Asiri h) Ibrahim al-'Asiri i) Ibrahim Hassan Al Asiri Low quality a.k.a.: a) Abu Saleh b) Abosslah c) Abu-Salaah Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number F654645, issued on 30 Apr. 2005, expired on 7 Mar. 2010. Issue date in Hijri Calendar 24/06/1426. Expiry date in Hijri Calendar 21/03/1431. National identification no.: Saudi Arabian civil identification number 1028745097 Address: Yemen Listed on: 24 Mar. 2011 (amended on 15 Apr. 2014) Other information: Operative and principal bomb maker of Al-Qaida in the Arabian Peninsula (AQAP) (QE.A.129.10.). Believed to be hiding in Yemen as at Mar. 2011. Wanted by Saudi Arabia. Also associated with Nasir 'abd-al-Karim 'Abdullah Al-Wahishi (QI.A.274.10.), Said Ali al-Shihri (QI.A.275.10.), Qasim Yahya Mahdi al-Rimi (QI.A.282.10.), and Anwar Nasser Abdulla Al-Aulagi (QI.A.283.10.).

QI.A.283.10. Name: 1: ANWAR 2: NASSER 3: ABDULLA 4: AL-AULAQI

اذ ور ذا صر ع بدالله ال عول قي :(Name (original script

Title: na Designation: na DOB: a) 21 Apr. 1971 b) 22 Apr. 1971 POB: Las Cruces, New Mexico, United States of America Good quality a.k.a.: a) Anwar al-Aulagi b) Anwar al-Awlaki c) Anwar al-Awlaqi d) Anwar Nasser Aulaqi e) Anwar Nasser Abdullah Aulaqi f) Anwar Nasser Abdulla Aulaqi Low quality a.k.a.: na Nationality: a) United States of America b) Yemeni Passport no.: na National identification no.: na Address: na Listed on: 20 Jul. 2010 (amended on 30 Nov. 2011) Other information: Confirmed to have died on 30 Sep. 2011 in Yemen.

QI.A.93.03. Name: 1: CHIHEB 2: BEN MOHAMED 3: BEN MOKHTAR 4: AL-AYARI

شهاب بن محمد بن مختار الح ياري :(Name (original script

Title: na Designation: na DOB: 19 Dec. 1965 POB: Tunis, Tunisia Good quality a.k.a.: a) Hichem Abu Hchem b) Ayari Chihbe c) Ayari Chied d) Adam Hussainy, born 19 Dec. 1965 in Greece Low quality a.k.a.: a) Hichem b) Abu Hichem c) Moktar Nationality: Tunisian Passport no.: Tunisian passport number L246084, issued on 10 June 1996, expired on 9 June 2001 National identification no.: na Address: Bardo, Tunis, Tunisia Listed on: 25 Jun. 2003 (amended on 20 Dec. 2005, 17 Oct. 2007, 10 Aug. 2009, 16 May 2011) Other information: Extradited from Italy to Tunisia on 13 Apr. 2006. Mother's name is Fatima al-Tumi. Inadmissible to the Schengen area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.324.14. Name: 1: ABDUL MOHSEN 2: ABDALLAH 3: IBRAHIM 4: AL CHAREKH Title: na Designation: na DOB: 13 Jul. 1985 POB: Sagra, Saudi Arabia Good quality a.k.a.: a) Abdul Mohsen Abdullah Ibrahim Al-Sharikh b) Sanafi al Nasr Low quality a.k.a.: na Nationality: Saudi Arabian Passport no.: na National identification no.: na Address: na Listed on: 15 Aug. 2014 Other information: A long time facilitator and financier for Al-Qaida (QE.A.4.01), appointed as a regional leader of Jabhat al-Nusrah, listed as Al-Nusrah Front for the People of the Levant (QE.A.137.14).

QI.A.138.03. Name: 1: SAID 2: BEN ABDELHAKIM 3: BEN OMAR 4: AL-CHERIF

سع يد ب ن ع بد الدك يم ب ن عمر الشري ف :Name (original script)

Title: na Designation: na DOB: 25 Jan. 1970 POB: Manzil Tmim, Tunisia Good quality a.k.a.: a) Cherif Said, born 25 Jan. 1970 in Tunisia b) Binhamoda Hokri, born 25 Jan. 1970 in Sosa, Tunisia c) Hcrif Ataf, born 25 Jan. 1971 in Solisse, Tunisia d) Bin Homoda Chokri, born 25 Jan. 1970 in Tunis, Tunisia e) Atef Cherif, born 12 Dec. 1973 in Algeria f) Sherif Ataf, born 12 Dec. 1973 in Aras,

Algeria **g)** Ataf Cherif Said, born 12 Dec. 1973 in Tunis, Tunisia **h)** Cherif Said, born 25 Jan. 1970 in Tunis, Tunisia **i)** Cherif Said, born 12 Dec. 1973 in Algeria **Low quality a.k.a.: a)** Djallal **b)** Youcef **c)** Abou Salman **d)** Said Tmimi **Nationality:** Tunisian **Passport no.:** Tunisian passport number M307968, issued on 8 Sep. 2001, expires on 7 Sep. 2006 **National identification no.:** na **Address:** Corso Lodi 59, Milan, Italy **Listed on:** 12 Nov. 2003 (amended on 20 Dec. 2005, 21 Dec. 2007, 30 Jan. 2009, 16 May 2011) **Other information:** Mother's name is Radhiyah Makki. Sentenced to eight years and ten months of imprisonment for membership of a terrorist association by the Appeal Court of Milan, Italy, on 7 Feb. 2008. Sentence confirmed by the Italian Supreme Court on 15 Jan. 2009, which became definitive as of Feb. 2008. Subject to expulsion from Italy to Tunisia after serving the sentence. Review pursuant to Security Council resolution 1822 (2008) was concluded on 6 May 2010.

QI.A.231.07. Name: 1: SALEM 2: NOR ELDIN 3: AMOHAMED 4: AL-DABSKI

سال م ن ور الدي ن امحمد الدب يسكي :(Name (original script

**Title:** na **Designation:** na **DOB:** 1963 **POB:** Tripoli, Libyan Arab Jamahiriya **Good quality a.k.a.: a)** Abu Al-Ward **b)** Abdullah Ragab **Low quality a.k.a.: a)** Abu Naim **b)** Abdallah al- Masri **Nationality:** Libyan **Passport no.: a)** Libyan passport number 1990/345751 **b)** Libyan passport number 345751 **National identification no.:** Libyan national identification number 220334 **Address:** Bab Ben Ghasheer, Tripoli, Libyan Arab Jamahiriya **Listed on:** 8 Jun. 2007 (amended on 13 Dec. 2011) **Other information:** Mother's name is Kalthoum Abdul Salam al-Shaftari. Senior member of Libyan Islamic Fighting Group (QE.L.11.01) and member of Al-Qaida (QE.A.4.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 24 Nov. 2009.

QI.A.132.03. Name: 1: ASCHRAF 2: AL-DAGMA 3: na 4: na

ا شرف الدغمة :Name (original script)

Title: na Designation: na DOB: 28 Apr. 1969 POB: Abasan, Gaza Strip, Palestinian Territories Good quality a.k.a.: Aschraf Al-Dagma, born 28 Apr. 1969 in Kannyouiz, Palestinian Territories Low quality a.k.a.: na Nationality: Unresolved/Palestinian origin Passport no.: Refugee travel document issued by Landratsamt Altenburger Land (Altenburg County Administration Office), Germany, dated 30 Apr. 2000 National identification no.: na Address: Germany Listed on: 23 Sep. 2003 (amended on 23 Dec. 2008, 11 Mar. 2010, 10 Jun. 2011) Other information: Associated with Ismail Abdallah Sbaitan Shalabi (QI.S.128.03.), Djamel Moustfa (QI.M.129.03.) and Mohamed Abu Dhess (QI.A.130.03.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Jan. 2010.

QI.A.278.10. Name: 1: MUTHANNA 2: HARITH 3: AL-DARI 4: na

م د نی حارث ال ضاری: Name (original script)

Title: Doctor Designation: na DOB: 16 Jun. 1969 POB: Iraq Good quality a.k.a.: a) Dr. Muthanna Al Dari b) Muthana Harith Al Dari c) Muthanna Harith Sulayman Al-Dari d) Muthanna Harith Sulayman Al-Dhari e) Muthanna Hareth Al-Dhari f) Muthana Haris Al-Dhari g) Doctor Muthanna Harith Sulayman Al Dari Al-Zawba' h) Muthanna Harith Sulayman Al-Dari Al-Zawba' i) Muthanna Harith Sulayman Al-Dari al-Zawba'i j) Muthanna Hareth al-Dari k) Muthana Haris al-Dari I) Doctor Muthanna al-Dari m) Dr. Muthanna Harith al-Dari al-Zowbai Low quality a.k.a.: na Nationality: Iraqi Passport no.: na National identification no.: na Address: a) Amman, Jordan b) Khan Dari, Iraq (previous) c) Asas Village, Abu Ghurayb, Iraq (previous) d) Egypt (previous) Listed on: 25 Mar. 2010 Other information: Provided operational guidance financial support and other services to or in support of Al-Qaida in Iraq (QE.J.115.04.).

QI.A.149.03. Name: 1: NOUREDDINE 2: BEN ALI 3: BEN BELKASSEM 4: AL-DRISSI

نور الدين بن على بنب لقاسم الدريسي :Name (original script)

Title: na Designation: na DOB: 30 Apr. 1964 POB: Tunis, Tunisia Good quality a.k.a.: Drissi Noureddine Low quality a.k.a.: a) Abou Ali b) Faycal Nationality: Tunisian Passport no.: Tunisian passport number L851940, issued on 9 Sep. 1998, expired on 8 Sep. 2003 National identification no.: na Address: Via Plebiscito 3, Cermona, Italy Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 31 Jul. 2006, 21 Dec. 2007, 16 May 2011) Other information: Under administrative control measure in Italy until 5 May 2010. Inadmissible to the Schengen area. Mother's name is Khadijah al-

Drissi. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.59.02. Name: 1: KHALID 2: ABD AL-RAHMAN 3: HAMD 4: AL-FAWAZ

خالد ع بد الرحمن حمد الفواز :(Name (original script

Title: na Designation: na DOB: 24 Aug. 1962 POB: Kuwait Good quality a.k.a.: a) Khaled Al-Fauwaz b) Khaled A. Al-Fauwaz c) Khalid Al-Fawwaz d) Khalik Al Fawwaz e) Khaled Al-Fawwaz f) Khaled Al Fawwaz g) Khalid Abdulrahman H. Al Fawaz Low quality a.k.a.: na Nationality: Saudi Arabian Passport no.: Passport number 456682, issued on 6 Nov. 1990, expired on 13 Sep. 1995 National identification no.: na Address: United States of America Listed on: 24 Apr. 2002 (amended on 26 Nov. 2004, 23 Apr. 2007, 21 Oct. 2010, 4 Aug. 2014) Other information: Extradited from the United Kingdom to the United States of America on 5 Oct. 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.228.06. Name: 1: MOHAMMED 2: AL GHABRA 3: na 4: na

**Title:** na **Designation:** na **DOB:** 1 Jun. 1980 **POB:** Damascus, Syrian Arab Republic **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** British **Passport no.:** British passport number 094629366 **National identification no.:** na **Address:** East London, United Kingdom **Listed on:** 12 Dec. 2006 (amended on 13 Dec. 2011) **Other information:** Father's name is Mohamed Ayman Ghabra. Mother's name is Dalal. Review pursuant to Security Council resolution 1822 (2008) was concluded on 5 Oct. 2009.

QI.A.292.11. Name: 1: OTHMAN 2: AHMED 3: OTHMAN 4: AL-GHAMDI

ع ثمان أحمد ع ثمان ال غامدي :(Name (original script

Title: na Designation: na DOB: 27 May 1979 POB: Saudi Arabia Good quality a.k.a.: a) Othman al-Ghamdi, born 27 May 1979 in Saudi Arabia b) Uthman al-Ghamdi, born 27 May 1979 in Saudi Arabia c) Uthman al-Ghamidi, born 27 May 1979 in Saudi Arabia d) Othman bin Ahmed bin Othman Alghamdi e) Othman Ahmed Othman Al Omairah, born in 1973 in Shabwa, Yemen, nationality: Yemeni f) Uthman Ahmad Uthman al-Ghamdi g) Othman Ahmed Othman al-Omirah Low quality a.k.a.: a) Al Umairah al-Ghamdi b) Othman Bin Ahmed Bin Othman Nationality: Saudi Arabian Passport no.: na National identification no.: Saudi Arabian national identity card number 1089516791 Address: Yemen Listed on: 16 Jun. 2011 (amended on 15 Apr. 2014) Other information: Operational commander of Al-Qaida in the Arabian Peninsula (AQAP) (QE.A.129.10.). Has been involved in raising funds and stockpiling arms for AQAP operations and activities in Yemen. Known associate of Qasim Yahya Mahdi al-Rimi (QI.A.282.10.) and Fahd Mohammed Ahmed al-Quso (QI.A.288.10.). Father's name is Ahmed Othman Al Omirah.

QI.A.332.14. Name: 1: IBRAHIM 2: SULEIMAN 3: HAMAD 4: AL-HABLAIN

Title: na Designation: na DOB: 17 Dec. 1984 POB: Buraidah, Saudi Arabia Good quality a.k.a.:

Barahim Suliman H. al Hblian Low quality a.k.a.: a) Abu Jabal b) Abu-Jabal Nationality: Saudi

Arabian Passport no.: Saudi Arabian passport number F800691 National identification no.:

na Address: na Listed on: 23 Sep. 2014 Other information: Explosives expert and operative for the Abdallah Azzam Brigades (AAB) (QE.A.144.14). Wanted by the Saudi Arabian Government for terrorism. Physical description: eye colour: dark; hair colour: dark; complexion: olive. Speaks Arabic. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice.

QI.A.160.04. Name: 1: FETHI 2: BEN HASSEN 3: BEN SALEM 4: AL-HADDAD

ف تحى بن حسن بن سالم الحداد :(Name (original script

**Title:** na **Designation:** na **DOB:** a) 28 Jun. 1963 b) 28 Mar. 1963 **POB:** Tataouene, Tunisia **Good quality a.k.a.:** a) Fethi ben Assen Haddad b) Fathy Hassan al Haddad **Low quality a.k.a.:** na **Nationality:** Tunisian **Passport no.:** Tunisian passport number L183017, issued on 14 Feb. 1996, expired on 13 Feb. 2001 **National identification no.:** na **Address:** a) Number 184 Via Fulvio Testi – Cinisello Balsamo (MI), Italy b) Number 1 Via Porte Giove – Mortara (PV), Italy, (Domicile) **Listed on:** 17 Mar. 2004 (amended on 26 Nov. 2004, 20 Dec. 2005, 21 Dec. 2007, 25 Jan. 2010, 16 May 2011) **Other information:** Italian Fiscal Code: HDDFTH63H28Z352V. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.A.140.03. Name: 1: KAMAL 2: BEN MAOELDI 3: BEN HASSAN 4: AL-HAMRAOUI

كمال بن المولدي بن حسن الحمراوي :Name (original script)

Title: na Designation: na DOB: 21 Oct. 1977 POB: Beja, Tunisia Good quality a.k.a.: a) Hamroui Kamel ben Mouldi b) Hamraoui Kamel, born 21 Nov. 1977 in Morocco, c) Hamraoui Kamel, born 21 Nov. 1977 in Tunisia d) Hamraoui Kamel, born 20 Oct. 1977 in Tunisia Low quality a.k.a.: a) Kamel b) Kimo Nationality: Tunisian Passport no.: Tunisian passport number P229856, issued on 1 Nov. 2002, expires on 31 Oct. 2007 National identification no.: na Address: a) Via Bertesi Number 27, Cremona, Italy b) Via Plebiscito Number 3, Cremona, Italy Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 31 Jul. 2006, 21 Dec. 2007, 16 May 2011) Other information: Mother's name is Khamisah al-Kathiri. Subject to a decree of expulsion, suspended on 17 Apr. 2007 by the European Court of Human Rights. Re-arrested in Italy on 20 May 2008. Inadmissible to the Schengen area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 6 May 2010.

QI.A.254.08. Name: 1: ABD AL-RAHMAN 2: MUHAMMAD 3: JAFFAR 4: 'ALI

ع بد الرحمن محمد جع فر ع لي :Name (original script)

Title: na Designation: na DOB: 15 Jan. 1968 POB: Muharraq, Bahrain Good quality a.k.a.: a) Abd al-Rahman Muhammad Jaffir b) Abd al-Rahman Muhammad Jaffir 'Ali c) Abd al-Rahman Jaffir Ali d) Abdul Rahman Mohammad Jaffir Low quality a.k.a.: a) 'Ali Al-Khal b) Abu Muhammad Al-Khal Nationality: Bahraini Passport no.: na National identification no.: na Address: na Listed on: 10 Oct. 2008 Other information: Bahrain-based financier and facilitator for Al-Qaida (listed under permanent reference number QE.A.4.01). In Jan. 2008, convicted by the Bahraini High Criminal Court for financing terrorism, undergoing terrorist training, facilitating the travel of others to receive terrorist training abroad, and for membership in a terrorist organization. Released after Court verdict and completion of his sentence. Located in Bahrain (as of May 2008).

QI.A.21.01. Name: 1: AHMED 2: MOHAMMED 3: HAMED 4: ALI

Name (original script): احمد محمد حامد ع لي

Title: na Designation: na DOB: 13 Jan. 1967 POB: Badari, Asyout, Egypt Good quality a.k.a.: a) Abdurehman, Ahmed Mohammed b) Ahmed Hamed c) Ali, Ahmed Mohammed d) Ali, Hamed e) Hemed, Ahmed f) Shieb, Ahmed Low quality a.k.a.: a) Abu Fatima b) Abu Islam c) Abu Khadiijah d) Ahmed The Egyptian e) Ahmed, Ahmed f) Al-Masri, Ahmad g) Al-Surir, Abu Islam h) Shuaib Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 17 Oct. 2001 (amended on 2 Jul. 2007, 16 Dec. 2010) Other information: Afghanistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.154.04. Name: 1: SULAIMAN 2: JASSEM 3: SULAIMAN 4: ALI ABO GHAITH

سدل يمان جا سم سدل يمان علي أبوغ يث :Name (original script)

**Title:** na **Designation:** na **DOB:** 14 Dec. 1965 **POB:** Kuwait **Good quality a.k.a.:** na **Low quality a.k.a.:** Abo Ghaith **Nationality:** Kuwaiti citizenship withdrawn in 2002 **Passport no.:** Kuwaiti passport number 849594 issued in Kuwait, issued on 27 Nov. 1998 and expired on 24 Jun. 2003 **National identification no.:** na **Address:** na **Listed on:** 16 Jan. 2004 (amended on 23 Jul. 2008, 10 Jun. 2011) **Other information:** Left Kuwait for Pakistan in June 2001. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.A.299.11. Name: 1: IBRAHIM 2: AWWAD 3: IBRAHIM 4: ALI AL-BADRI AL-SAMARRAI Name (original script): إبراهيم عواد إبراهيم على الدري السامراذ

scale operations.

QI.M.296.11. Name: 1: MATI UR-REHMAN 2: ALI MUHAMMAD 3: na 4: na

دمط يع الرحمن على محم :Name (original script)

Title: na Designation: na DOB: Approximately 1977 POB: Chak number 36/DNB, Rajkan, Madina Colony, Bahawalpur District, Punjab Province, Pakistan Good quality a.k.a.: a) Mati-ur Rehman b) Mati ur Rehman c) Matiur Rahman d) Matiur Rehman e) Matti al-Rehman f) Abdul Samad g) Samad Sial h) Abdul Samad Sial i) Ustad Talha j) Qari Mushtaq Low quality a.k.a.: a) Tariq b) Hussain Nationality: Pakistani Passport no.: na National identification no.: na Address: na Listed on: 22 Aug. 2011 (amended on 10 May 2012, 17 Oct. 2013) Other information: Physical description: 5 feet 2 inches; 157,4 cm. Name of father: Ali Muhammad. Mati ur-Rehman is the chief operational commander of Lashkar i Jhangvi (LJ) (QE.L.96.03.). Associated with Harakat-ul Jihad Islami (QE.H.130.10).

QI.A.194.05. Name: 1: MOHAMMED 2: AHMED 3: SHAWKI 4: AL ISLAMBOLLY

Name (original script): محمد احمد شوق ي الا سدلام بول ي Title: na Designation: na DOB: 21 Jan. 1957 POB: El-Minya, Qena, Egypt Good quality a.k.a.: a) Abu Khalid b) Abu Ja'far c) Mohamed El Islambouli Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: Believed to be in Pakistan or Afghanistan Listed on: 29 Sep. 2005 (amended on 13 Dec. 2011) Other information: Father's name is Shawki al-Islambolly. Member of Egyptian Islamic Jihad (QE.A.3.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.A.327.14. Name: 1: ABDELRAHMAN 2: MOUHAMAD ZAFIR 3: AL DABIDI 4: AL JAHANI Title: na Designation: na DOB: a) 4 Dec. 1971 b) 1977 POB: Kharj, Saudi Arabia Good quality a.k.a.: a) Abd Al-Rahman Muhammad Zafir Al-Dubaysi Al-Juhni b) Abd Al-Rahman Muhammad Zafir al-Dubaysi al-Jahni c) Abd Al-Rahman Muhammad Zafir al-Dubaysi al-Jahani d) Abd Al-Rahman Muhammad Zafir al-Dubaysi al-Juhani e) Abdulrhman Mohammed D. Aljahani f) Abu al-Wafa' g) Abu Anas h) Abd al-Rahman Muhammad Zafir al-Dabisi al-Jahani i) Abu Wafa al-Saudi j) Abu al-Wafa k) Abd al-Rahman Muhammad Thafir al-Jahni I) Abd al-Rahman Muhammad al-Juhani m) Abdelrahman Mouhamad Zafir al Dabissi Juhan n) Abdelrahman Mouhamad Zafir al Dabissi Juhani Low quality a.k.a.: Abou Wafa al Saoudi Nationality: Saudi Arabian Passport no.: F508591 National identification no.: Saudi Arabian national identification number 1027508157 Address: na Listed on: 15 Aug. 2014 Other information: A member and regional commander of Jabhat al-Nusrah, listed as Al-Nusrah Front for the People of the Levant (QE.A.137.14) and a facilitator of foreign recruits for that group.

QI.A.176.04. Name: 1: IMAD 2: BEN BECHIR 3: BEN HAMDA 4: AL-JAMMALI

عماد بن الد بشير بن حمدا الحمالي : Name (original script)

Title: na Designation: na DOB: 25 Jan. 1968 POB: Manzal Tmim, Nabul, Tunisia Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number K693812, issued on 23 Apr. 1999, expired on 22 Apr. 2004 National identification no.: na Address: 4 Qistantiniyah Street, Manzal Tmim, Nabul, Tunisia (home address) Listed on: 23 Jun. 2004 (amended on 20 Dec. 2005, 31 Jul. 2006, 17 Oct. 2007, 13 Dec. 2011) Other information: Italian Fiscal Code: JMM MDI 68A25 Z352D. In detention in Tunis (Tunisia) as at Dec. 2009. Mother's name is Jamilah. Italian Judicial Authorities have issued a warrant of arrest against him, which had not been executed as of Sep. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 9 Apr. 2010.

QI.A.317.13. Name: 1: ABU MOHAMMED 2: AL-JAWLANI 3: na 4: na

أب و محمد ال جو لاذ ي :Name (original script)

Title: na Designation: na DOB: Between 1975 and 1979 POB: Syria Good quality a.k.a.: Abu Mohamed al-Jawlani, Abu Muhammad al-Jawlani, Abu Mohammed al-Julani, Abu Mohammed al-Golani, Abu Muhammad al-Golani, Abu Muhammad Aljawlani, Muhammad al-Jawlani (transliterations of original script name) Low quality a.k.a.: la hkyahS :snoitaretilsnart) شيخ الله فات ح ، اله فات ح ، اله فات ح Fatih ) (Translation: The Conqueror) (Nom de guerre) Nationality: Syrian Passport no.:

na National identification no.: na Address: Active in Syria as at Jun. 2013. Listed on: 24 Jul. 2013 (amended on 2 Jun. 2014) Other information: Since Jan. 2012, he is the Leader of Al-Nusrah Front for the People of the Levant (QE.A.137.14), a Syria-based group listed in May 2014, and previously listed as an alias of Al-Qaida in Iraq (AQI)(QE.J.115.04.) between 30 May 2013 and 13 May 2014. Associated with Ibrahim Awwad Ibrahim Ali Al-Badri Al-Samarrai (QI.A.299.11.) and Aiman Muhammed Rabi al-Zawahiri (QI.A.6.01.).

QI.A.58.02. Name: 1: ABU BAKR 2: AL-JAZIRI 3: na 4: na

أب وبكر الحزاد ري :Name (original script)

Title: na Designation: na DOB: na POB: na Good quality a.k.a.: Yasir Al-Jazari Low quality a.k.a.: na Nationality: a) Algerian b) Palestinian Passport no.: na National identification no.: na Address: na Listed on: 11 Jan. 2002 (amended on 18 Jul. 2007, 1 Feb. 2008, 16 May 2011) Other information: Finance chief of the Afghan Support Committee (ASC) (QE.A.69.02.). Al-Qaida (QE.A.4.01.) facilitator and communication expert. Believed to be in Algeria as at Apr. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.A.71.02. Name: 1: RIADH 2: BEN BELKASSEM 3: BEN MOHAMED 4: AL-JELASSI

Name (original script): رياض بن بال المحمد الحجلا صبي Title: na Designation: na DOB: 15 Dec. 1970 POB: Al-Mohamedia, Tunisia Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number L276046, issued on 1 Jul. 1996, expired on 30 Jun. 2001 National identification no.: na Address: Italy Listed on: 3 Sep. 2002 (amended on 20 Dec. 2005, 31 Jul. 2006, 10 Aug. 2009, 23 Dec. 2010) Other information: Mother's name is Reem Al-Askari. Member of Tunisian Combatant Group (QE.T.90.02). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Apr. 2010.

QI.A.101.03. Name: 1: FAOUZI 2: BEN MOHAMED 3: BEN AHMED 4: AL-JENDOUBI

ف وزي بن محمد بن احمد ال جندوبي : Name (original script)

the People of the Levant (QE.A.137.14.) as of early 2014.

Title: na Designation: na DOB: 30 Jan. 1966 POB: Tunis, Tunisia Good quality a.k.a.: Jendoubi Faouzi, born 30 Jan. 1966 in Morocco Low quality a.k.a.: a) Said b) Samir Nationality: Tunisian Passport no.: Tunisian passport number K459698, issued on 6 Mar. 1999, expired on 5 Mar. 2004 National identification no.: na Address: na Listed on: 25 Jun. 2003 (amended on 20 Dec. 2005, 31 Jul. 2006, 17 Oct. 2007, 16 May 2011) Other information: Mother's name is Um Hani al-Tujani. Inadmissible to the Schengen area. Reported untraceable by the Italian authorities since June 2002. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.337.14. Name: 1: MAYSAR ALI 2: MUSA 3: ABDALLAH 4: AL-JUBURI Title: Amir Designation: na DOB: 1 Jun. 1976 POB: a) Harara, Ninawa Province, Iraq b) Al-Shura, Mosul, Iraq Good quality a.k.a.: a) Muyassir al-Jiburi b) Muyassir Harara c) Muyassir al-Shammari d) Muhammad Khalid Hassan Low quality a.k.a.: a) Al-Shammari b) Mus'ab al-Qahtani c) Abu Maria al-Qatani Nationality: Iragi Passport no.: na National identification no.: na Address: na Listed on: 23 Sep. 2014 Other information: Sharia amir of Al-Nusrah Front for

QI.A.318.13 Name: 1: MUHAMMAD 2: JAMAL 3: ABD-AL RAHIM AHMAD 4: AL-KASHIF Name (original script): محمد جمال ع بدال رح يم أحمد الكافعة

Title: na Designation: na DOB: a) 1 Jan. 1964 b) 1 Feb. 1964 POB: Cairo, Egypt Good quality a.k.a.: a) Muhammad Jamal Abdo Al-Kashif b) Muhammad Jamal Abdo Al Kashef c) Muhammad Jamal Abd-Al Rahim Ahmad Al-Kashif d) Muhammad Jamal Abd-Al Rahim Al-Kashif e) Muhammad Jamal Abdu f) Muhammad Jamal Low quality a.k.a.: a) Muhammad Jamal Abu Ahmad (nom de guerre) b) Abu Ahmad (nom de guerre) c) Abu Jamal (nom de guerre) d) Muhammad Gamal Abu Ahmed e) Mohammad Jamal Abdo Ahmed (nom de guerre) f) Muhammad Jamal Abduh (nom de guerre) g) Muhammad Jamal Ahmad Abdu (nom de guerre) h) Riyadh (nom de guerre) Nationality: Egyptian Passport no.: a) Egyptian passport number 6487, issued 30 Jan. 1986, under name Muhammad Jamal Abdu b) Egyptian passport issued in 1993, under name Muhammad Jamal Abd-Al Rahim Ahmad Al-Kashif **c)** Yemeni passport number 388181, under name Muhammad Jamal Abd-Al Rahim Al-Kashif **National identification no.:** na **Address:** Egypt **Listed on:** 21 Oct. 2013 **Other information:** Trained in Afghanistan in the late 1980s with Al-Qaida (QE.A.4.01) to make bombs. Former top military commander of the Egyptian Islamic Jihad (QE.A.3.01). Since 2011, established Muhammad Jamal Network (MJN) (QE.M.136.13) and terrorist training camps in Egypt and Libya. Conducted MJN's terrorist activities with support from Al-Qaida in the Arabian Peninsula (AQAP) (QE.A.129.10). Reported to be involved in the attack on the United States Mission in Benghazi, Libya, on 11 Sep. 2012. Headed Nasr City terrorist cell in Egypt in 2012. Linked to Aiman al-Zawahiri (QI.A.6.01) and the leadership of AQAP and the Organization of Al-Qaida in the Islamic Maghreb (AQIM) (QE.T.14.01). Arrested and imprisoned multiple times by Egyptian authorities since ca. 2000. Released in 2011 but re-arrested by Egyptian authorities in Nov. 2012. Imprisoned in Egypt pending trial as of Sep. 2013. Wife's name is Samah 'Ali Al-Dahabani (Yemeni national).

QI.A.233.07. Name: 1: FAHD 2: MUHAMMAD 3: 'ABD AL-'AZIZ 4: AL-KHASHIBAN

ف هد محمد ع بد ال عزي ز ال خشد يان: Name (original script)

Title: na Designation: na DOB: 16 Oct. 1966 POB: Oneiza, Saudi Arabia Good quality a.k.a.: a) Fahad H. A. Khashayban b) Fahad H. A. Khashayban c) Fahad Mohammad Abdulaziz Alkhoshiban d) Fahad H. A. al-Khashiban e) Fahad H. A. Khashayban f) Fahad H. A. al-Khosiban g) Fahad H. A. Khasiban h) Fahd Muhammad 'Abd Al-'Aziz al-Khashayban i) Fahad Muhammad 'Abd al-'Aziz al-Khushayban j) Fahad al-Khashiban k) Fahd Khushaiban l) Fahad Muhammad A. al-Khoshiban m) Fahad Mohammad A. al-Khoshiban Low quality a.k.a.: a) Shaykh Abu Thabit b) Abu Thabit c) Shaykh Thabet d) Abdur Abu Rahman e) Abu Abdur Rahman Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number G477835, issued on 26 Jun. 2006, expired on 3 May 2011 National identification no.: na Address: Saudi Arabia Listed on: 9 Oct. 2007 (amended on 20 Feb. 2008, 13 Dec. 2011) Other information: Involved in the financing of and otherwise provided assistance to the Abu Sayyaf Group (QE.A.1.01.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

QI.A.170.04. Name: 1: HACENE 2: ALLANE 3: na 4: na

ح سن علانه ي :Name (original script)

Title: na Designation: na DOB: 17 Jan. 1941 POB: Médéa, Algeria Good quality a.k.a.: a) Hassan the Old b) Al Sheikh Abdelhay c) Boulahia d) Abu al-Foutouh e) Cheib Ahcéne Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 3 May 2004 (amended on 12 Apr. 2006, 7 Apr. 2008, 13 Dec. 2011) Other information: Confirmed to have died on 16 Apr. 2004 in northern Niger. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.A.177.04. Name: 1: HABIB 2: BEN 3: AHMED 4: AL-LOUBIRI

Name (original script): ب ب ن احمد ال لوب يريد بي

Title: na Designation: na DOB: 17 Nov. 1961 POB: Manzal Tmim, Nabul, Tunisia Good quality a.k.a.: Al-Habib ben Ahmad ben al-Tayib al-Lubiri Low quality a.k.a.: na Nationality:
Tunisian Passport no.: Tunisian passport number M788439, issued on 20 Oct. 2001, expires on 19 Oct. 2006 National identification no.: na Address: Al-Damus, Manzal Tmim, Nabul, Tunisia (habitual residence) Listed on: 23 Jun. 2004 (amended on 20 Dec. 2005, 17 Oct. 2007, 10 Aug. 2009, 13 Dec. 2011) Other information: Italian Fiscal Code: LBR HBB 61S17 Z352F. In detention in Tunisia as at Dec. 2009. Mother's name is Fatima bint al-Mukhtar. Review pursuant to Security Council resolution 1822 (2008) was concluded on 9 Apr. 2010.

QI.A.74.02. Name: 1: TAREK 2: BEN HABIB 3: BEN AL-TOUMI 4: AL-MAAROUFI

طارق بن الحد بيب بن الدتومي المعروف ي:(Name (original script

Title: na Designation: na DOB: 23 Nov. 1965 POB: Ghardimaou, Tunisia Good quality a.k.a.: a) Abu Ismail b) Abou Ismail el Jendoubi c) Abou Ismail Al Djoundoubi Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number E590976, issued on 19 Jun. 1987 expired on 18 Jun. 1992 National identification no.: na Address: Rue Léon Théodore Number 107/1, 1090 Jette, Brussels, Belgium Listed on: 3 Sep. 2002 (amended on 26 Nov. 2004, 20 Dec. 2005, 31 Jul. 2006, 3 Jul. 2007, 10 Aug. 2009, 25 Jan. 2010, 23 Dec. 2010) Other

**information:** Belgian nationality withdrawn on 26 Jan. 2009. In detention in Nivelles, Belgium, as of Oct. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.A.320.13. Name: 1: ABD-AL-HAMID 2: AL-MASLI 3: na 4: na

ع بدال حم يد اله صد لي :Name (original script)

Title: na Designation: na DOB: 1976 POB: a) Darnah, Libya b) Danar, Libya Good quality a.k.a.: a) Abd-al-Hamid Muhammad Abd-al-Hamid Al-Masli b) Abd-al-Hamid Musalli c) Hamid Masli Low quality a.k.a.: a) Hamza al-Darnawi b) Hamzah al-Darnawi c) Hamza Darnawi d) Hamzah Darnawi e) Hamzah Dirnawi f) Hamza Darnavi g) Hamza al-Darnavi h) Abdullah Darnawi i) Abu-Hamzah al-Darnawi Nationality: Libyan Passport no.: na National identification no.: na Address: Reportedly located in Waziristan, Federally Administered Tribal Areas, Pakistan. Listed on: 26 Nov. 2013 Other information: Leader and trainer of an Al-Qaida electronics and explosives workshop producing improvised explosive device components.

QI.A.330.14. Name: 1: AZZAM 2: ABDULLAH 3: ZUREIK 4: AL-MAULID AL-SUBHI Title: na Designation: na DOB: 12 Apr. 1976 POB: Al Baraka, Saudi Arabia Good quality a.k.a.: a) Mansur al-Harbi b) Azzam al-Subhi c) Azam Abdallah Razeeq al Mouled Alsbhua d) Abu Muslem al-Maky e) Abu Suliman al-Harbi f) Abu Abdalla al-Harbi g) Azam A.R. Alsbhua Low quality a.k.a.: na Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number C389664, issued on 15 Sep. 2000 expired on 15 Sep. 2005 National identification no.: na Address: na Listed on: 23 Sep. 2014 Other information: Has ties to numerous senior Al-Qaida (QE.A.4.01) leaders. Wanted by the Saudi Arabian Government for terrorism. Father's name is Abdullah Razeeq al Mouled al Sbhua. Physical description: eye colour: dark; hair colour: dark; complexion: dark. Speaks Arabic. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice.

**QI.A.276.10. Name:** 1: AKRAM 2: TURKI 3: HISHAN 4: AL-MAZIDIH

أكرم تركى ها شم المزيده المزيدة المراكم على المراكم ا

Title: na Designation: na DOB: a) 1974 b) 1975 POB: na Good quality a.k.a.: Akram Turki Al-Hishan Low quality a.k.a.: a) Abu Jarrah b) Abu Akram Nationality: na Passport no.: na National identification no.: na Address: Zabadani, Syrian Arab Republic Listed on: 11 Mar. 2010 Other information: Other possible date of birth: 1979. He is a cousin of Ghazy Fezza Hishan Al Mazidih (QI.A.277.10).

QI.A.277.10. Name: 1: GHAZY 2: FEZZA 3: HISHAN 4: AL-MAZIDIH

غازي فيزا ها شم المريده :Name (original script)

Title: na Designation: na DOB: a) 1974 b) 1975 POB: na Good quality a.k.a.: a) Ghazy Fezzaa Hishan b) Mushari Abd Aziz Saleh Shlash Low quality a.k.a.: a) Abu Faysal b) Abu Ghazzy Nationality: na Passport no.: na National identification no.: na Address: Zabadani, Syrian Arab Republic Listed on: 11 Mar. 2010 Other information: He is a cousin of Akram Turki Hishan Al Mazidih (Ql.A.276.10).

QI.A.334.14. Name: 1: 'ABD AL-RAHMAN 2: BIN 'UMAYR 3: AL-NU'AYMI 4: na Title: na Designation: na DOB: 1954 POB: na Good quality a.k.a.: a) Abd al-Rahman bin 'Amir al-Na'imi b) 'Abd al-Rahman al-Nu'aimi c) 'Abd al-Rahman bin 'Amir al-Nu'imi d) 'Abd al-Rahman bin 'Amir al-Nu'aymi e) 'Abdallah Muhammad al-Nu'aymi f) 'Abd al-Rahman al-Nua'ymi g) A. Rahman al-Naimi h) Abdelrahman Imer al Jaber al Naimeh i) A. Rahman Omair J Alnaimi j) Abdulrahman Omair al Neaimi Low quality a.k.a.: na Nationality: na Passport no.: Qatari passport number 00868774 expired on 27 Apr. 2014 National identification no.: Qatari identification number 25463401784 expires on 6 Dec. 2019 Address: na Listed on: 23 Sep. 2014 Other information: Financier and facilitator for Al-Qaida (QE.A.4.01) and Al-Qaida in Iraq (QE.J.115.04).

QI.T.76.02. Name: 1: ISAM 2: ALI 3: MOHAMED 4: ALOUCHE

ع صام ع لي محمد ع لوش :Name (original script)

Title: na Designation: na DOB: a) 1972 b) 21 Mar. 1974 POB: Baghdad, Iraq Good quality

a.k.a.: Mansour Thaer, born 21 Mar. 1974 in Baghdad, Iraq Low quality a.k.a.: na Nationality: Jordanian Passport no.: na National identification no.: na Address: na Listed on: 3 Sep. 2002 (amended on 18 Aug. 2006, 30 Jan. 2009) Other information: Was deported from Germany to Jordan in Feb. 2005. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.A.273.09. Name: 1: FAZEEL-A-TUL 2: SHAYKH ABU MOHAMMED 3: AMEEN 4: AL-**PESHAWARI** 

**Title:** na **Designation:** na **DOB:** a) Approximately 1967 b) Approximately 1961 c) Approximately 1973 POB: Shunkrai village, Sarkani District, Konar Province, Afghanistan Good quality a.k.a.: a) Shaykh Aminullah b) Sheik Aminullah c) Abu Mohammad Aminullah Peshawari d) Abu Mohammad Amin Bishawri e) Abu Mohammad Shaykh Aminullah Al-Bishauri f) Shaykh Abu Mohammed Ameen al-Peshawari g) Shaykh Aminullah Al-Peshawari Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: Ganj District, Peshawar, Pakistan Listed on: 29 Jun. 2009 (amended on 24 Jul. 2013) Other information: Associated with Al-Qaida (QE.A.4.01.). Head of Ganj madrasa, a.k.a. Madrasa Jamia Taleemul Quran wal Hadith, a.k.a. Madrasa Taleemul Quran wal Sunnah, located at the Ganj Gate, Phandu Road, Peshawar, Pakistan.

QI.A.339.14. Name: 1: 'ABD AL-RAHMAN 2: MUHAMMAD 3: MUSTAFA 4: AL-QADULI Title: na Designation: na DOB: a) 1959 b) 1957 POB: Mosul, Ninawa Province, Iraq Good quality a.k.a.: a) 'Abd al-Rahman Muhammad Mustafa Shaykhlari b) Umar Muhammad Khalil Mustafa c) Abdul Rahman Muhammad al-Bayati d) Tahir Muhammad Khalil Mustafa al-Bayati e) Aliazra Ra'ad Ahmad Low quality a.k.a.: a) Abu-Shuayb b) Hajji Iman c) Abu Iman d) Abu Ala e) Abu Hasan f) Abu Muhammad g) Abu Zayna Nationality: Iraqi Passport no.: na National identification no.: na Address: na Listed on: 23 Sep. 2014 Other information: Senior Islamic State in Iraq and the Levant (ISIL), listed as Al-Qaida in Iraq (AQI) (QE.J.115.04), official. Previously served as a representative of AQI to AI-Qaida (QE.A.4.01) senior leadership in Pakistan.

QI.A.282.10. Name: 1: QASIM 2: YAHYA 3: MAHDI 4: AL-RIMI

Name (original script): ق ا سم يح ين مهدي الحري مي ق ا سم يح ين مهدي الحري مهدي التال ق ا Title: na Designation: na DOB: 5 Jun. 1978 POB: Sanaa, Yemen Good quality a.k.a.: a) Qasim Al-Rimi b) Qasim al-Raymi c) Qassim al-Raymi d) Qasim al-Rami Low quality a.k.a.: a) Qasim Yahva Mahdi 'Abd al-Rimi b) Abu Huravah al-Sana'ai c) Abu 'Ammar Nationality: Yemeni Passport no.: Yemeni passport number 00344994, issued on 3 Jul. 1999 National identification no.: na Address: Yemen Listed on: 11 May 2010 (amended on 15 Apr. 2014) Other information: na

QI.A.23.01. Name: 1: NAZIH 2: ABDUL HAMED 3: NABIH 4: AL-RUQAI'I

نزيه عبد الحميد نبيه الراجعي :Name (original script)

Title: na Designation: na DOB: a) 30 Mar. 1964 b) 14 May 1964 POB: Tripoli, Libyan Arab Jamahiriya Good quality a.k.a.: a) Anas Al-Liby b) Anas Al-Sibai c) Nazih Abdul Hamed Al-Raghie Low quality a.k.a.: na Nationality: Libyan Passport no.: 621570 National identification no.: 200310/I Address: Al Nawafaliyyin, Jarraba Street, Taqsim Al Zuruq, Tripoli, Libyan Arab Jamahiriya Listed on: 17 Oct. 2001 (amended on 31 Jul. 2006, 16 Dec. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.A.275.10. Name: 1: SAID 2: ALI 3: AL-SHIHRI 4: na

سع يد ع لى ال شهري: Name (original script)

Title: na Designation: na DOB: 12 Sep. 1973 POB: Riyadh, Saudi Arabia Good quality a.k.a.: a) Sa'id Ali Jabir al-Kathim al-Shihri b) Said Ali Al Shahri c) Said Ali Jaber Al Khasaam Al Shahri d) Said Ali Jaber Al Khassam Low quality a.k.a.: a) Abu-Sayyaf b) Abu-Sufyan al-Azidi c) Abu-Sayyaf al-Shihri d) Abu Sufian Kadhdhaab Matrook e) Salah f) Salah Abu Sufyan g) Salah al-Din h) Abu Osama i) Abu Sulaiman j) Nur al-Din Afghani Azibk k) Alahhaddm I) Akhdam m) Abu Sufian Al Azadi n) Abu Asmaa Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number C102432, issued on 22 Apr. 2000, expired on 26 Feb. 2005. Issue date in Hijri Calendar 17/01/1421. Expiry date in Hijri Calendar 17/01/1426. National identification no.: Saudi Arabian national

identification number 1008168450 Address: na Listed on: 19 Jan. 2010 Other information: Since Jan. 2009, deputy to Nasir 'abd-al-Karim 'Abdullah al-Wahishi (QI.A.274.10.), leader of Al-Qaida in the Arabian Peninsula (QE.A.129.10.) operating in Yemen and Saudi Arabia. Associated with senior Al-Qaida (QE.A.4.01.) leadership. Was in custody of the United States of America between 2001-2007, detainee number 372. Fugitive in Saudi Arabia among the 85 most wanted persons. Located in Yemen as at Jan. 2010.

QI.A.253.08. Name: 1: KHALIFA 2: MUHAMMAD 3: TURKI 4: AL-SUBAIY

خليفة محمدتركي السبيعي: Name (original script) Title: na Designation: na DOB: 1 Jan. 1965 POB: Doha. Qatar Good quality a.k.a.: a) Khalifa

Mohd Turki Alsubaie b) Khalifa Mohd Turki al-Subaie c) Khalifa Al-Subavi d) Khalifa Turki bin Muhammad bin al-Suaiy Low quality a.k.a.: na Nationality: Qatari Passport no.: Qatari passport number 00685868 issued in Doha on 5 Feb. 2006 and expiring on 4 Feb. 2011 National identification no.: Qatari identity card number 26563400140 Address: Doha, Qatar Listed on: 10 Oct. 2008 (amended on 25 Jan. 2010, 15 Nov. 2012) Other information: Qatar-based terrorist financier and facilitator who has provided financial support to, and acted on behalf of, the senior leadership of Al-Qaida (QE.A.4.01.), including moving recruits to Al-Qaida training camps in South Asia. In Jan. 2008, convicted in absentia by the Bahraini High Criminal Court for financing terrorism, undergoing terrorist training, facilitating the travel of others to receive terrorist training abroad, and for membership in a terrorist organization. Arrested in Qatar in Mar. 2008. Served his sentence in Qatar and has been released from detention. Mother's name is Hamdah Ahmad Haidoos.

QI.A.234.07. Name: 1: ABDUL RAHIM 2: na 3: na 4: AL-TALHI ع بد الرح يم حماد أحمد الطلحي :(Name (original script

Title: na Designation: na DOB: 8 Dec. 1961 POB: Al-Shefa, Al-Taif, Saudi Arabia Good quality a.k.a.: a) 'Abdul-Rahim Hammad al-Talhi b) Abd' Al-Rahim Hamad al-Tahi c) Abdulrheem Hammad A Altalhi d) Abe Al-Rahim al-Talahi e) Abd Al-Rahim Al Tahli f) 'Abd al-Rahim al-Talhi g) Abdulrahim Al Tahi h) Abdulrahim al-Talji i) 'Abd-Al-Rahim al Talji j) Abdul Rahim Hammad Ahmad Al-Talhi Low quality a.k.a.: a) Abdul Rahim b) Abu Al Bara'a Al Naji c) Shuwayb Junayd Nationality: Saudi Arabian Passport no.: Saudi Arabian passport number F275043, issued on 29 May 2004, expired 5 Apr. 2009 National identification no.: na Address: Buraydah, Saudi Arabia Listed on: 9 Oct. 2007 (amended on 20 Feb. 2008, 13 Dec. 2011) Other information: Involved in the financing of, arms supply to and otherwise provided assistance to the Abu Sayvaf Group (QE.A.1.01.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

QI.A.77.02. Name: 1: AL-AZHAR 2: BEN MOHAMMED 3: BEN EL-ABED 4: AL-TLILI Name (original script): الأزهر بن محمد بن العابد الدالد تا

Title: na Designation: na DOB: 26 Mar. 1969 POB: Feriana, Al-Kasrain, Tunisia Good quality a.k.a.: Lazar Ben Mohammed Tlili Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number M 351140, expired on 16 Jun. 2005 National identification no.: na Address: Via Carlo Porta n. 97, Legnano, Italy Listed on: 3 Sep. 2002 (amended on 20 Dec. 2005, 31 Jul. 2006, 7 Jun. 2007, 28 Jul. 2008, 23 Dec. 2010) Other information: Italian Fiscal Code: TLLLHR69C26Z352G. Extradited from France to Italy on 6 Sep. 2006. Released from prison in Italy on 15 Jan. 2007. Sentenced in absentia in Tunisia to twenty years of imprisonment. Mother's name is Essayda Bint Salih Al-Tlili. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Apr. 2010.

QI.A.151.03. Name: 1: MOURAD 2: BEN ALI 3: BEN AL-BASHEER 4: AL-TRABELSI

Name (original script): مراد ب ن ع لي ب ن ال بشرير ال طراب ل سي Title: na Designation: na DOB: 20 May 1969 POB: Manzil Tmim, Tunisia Good quality a.k.a.: a) Aboue Chiba Brahim, born 2 Sep. 1966 in Libya b) Arouri Taoufik, born 2 Sep. 1964 in Tunisia c) Ben Salah Adnan, born 2 Apr. 1966 in Tunisia d) Sassi Adel, born 2 Sep. 1966 in Tunisia e) Salam Kamel, born 2 Feb. 1963 in Tunisia f) Salah Adnan, born 4 Feb. 1965 in Algeria g) Arouri Faisel, born 2 Mar. 1965 in Tunisia h) Bentaib Amour, born 9 Feb. 1965 in Morocco i) Adnan Salah, born 1 Apr. 1966 in Tunisia j) Hasnaoui Mellit, born in 1972 in Morocco k) Arouri Taoufik ben Taieb, born 9 Feb. 1964 in Tunisia I) Abouechiba Brahim, born 2 Sep. 1966 in Lebanon m) Farid Arouri, born 2 Jun. 1964 in

Tunisia n) Ben Magid, born 2 Jun. 1966 in Lebanon o) Maci Ssassi, born 2 Jun. 1972 in Libya p) Salah ben Anan, born 2 Apr. 1966 in Tunisia q) Hasnaui Mellit, born in 1972 in Morocco Low quality a.k.a.: Abou Djarrah Nationality: Tunisian Passport no.: Tunisian passport number G827238, issued on 1 Jun. 1996, expired on 31 May 2001 National identification no.: na Address: Libya Street Number 9, Manzil Tmim, Nabeul, Tunisia Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 10 Aug. 2009, 16 May 2011) Other information: Extradited from Italy to Tunisia on 13 Dec. 2008. Inadmissible to the Schengen area. Mother's name is Mabrukah al-Yazidi. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.172.04. Name: 1: HASSAN 2: ABDULLAH 3: HERSI 4: AL-TURKI

Name (original script): حسن عبد الله حرسي ال ترکي Title: a) Sheikh b) Colonel Designation: na DOB: Approximately 1944 POB: Region V, Ethiopia, (the Ogaden Region in eastern Ethiopia) Good quality a.k.a.: a) Hassan Turki b) Hassen Abdelle Fihiye c) Sheikh Hassan Abdullah Fahaih d) Hassan Al-Turki e) Hassan Abdillahi Hersi Turki f) Sheikh Hassan Turki g) Xasan Cabdilaahi Xirsi h) Xasan Cabdulle Xirsi Low quality a.k.a.: na Nationality: Somali Passport no.: na National identification no.: na Address: Reported to be active in Southern Somalia, lower Juba near Kismayo, mainly in Jilibe and Burgabo as of Nov. 2012 Listed on: 6 Jul. 2004 (amended on 25 Jul. 2006, 21 Dec. 2007, 12 Apr. 2010, 11 May 2010, 13 Dec. 2011, 18 Mar. 2013) Other information: Family Background: From the Ogaden clan, Reer -Abdille subclan. Part of the Al-Itihaad Al-Islamiya (AIAI) (QE.A.2.01.) leadership. Believed to have been involved in the attacks on the United States embassies in Nairobi and Dar es Salaam in August 1998. Also subject to the sanctions measures set out in Security Council resolution 1844 (2008) concerning Somalia and Eritrea (see www.un.org/sc/committees/751/index.shtml). Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.A.274.10. Name: 1: NASIR 2: 'ABD-AL-KARIM 3: 'ABDULLAH 4: AL-WAHISHI

ناصر ع بدال كريم ع بدالله الوح يشي :Name (original script)

Title: na Designation: na DOB: a) 1 Oct. 1976 b) 08/10/1396 (Hijri Calendar) POB: Yemen Good quality a.k.a.: a) Nasir al-Wahishi b) Abu Basir Nasir al-Wahishi c) Naser Abdel Karim al-Wahishi d) Nasir Abd al-Karim al-Wuhayshi e) Abu Basir Nasir Al-Wuhayshi f) Nasser Abdul-karim Abdullah al-Wouhichi g) Abu Baser al-Wehaishi h) Abu Basir Nasser al-Wuhishi i) Abdul Kareem Abdullah Al-Woohaishi j) Nasser Abdelkarim Saleh Al Wahichi Low quality a.k.a.: a) Abu Basir b) Abu Bashir Nationality: Yemeni Passport no.: Yemeni passport number 40483, issued on 5 Jan. 1997 National identification no.: na Address: na Listed on: 19 Jan. 2010 (amended on 15 Apr. 2014) Other information: Since 2007, leader of Al-Qaida in Yemen (AQY), Since Jan. 2009, leader of Al-Qaida in the Arabian Peninsula (QE.A.129.10.) operating in Yemen and Saudi Arabia. His deputy is Said Ali al-Shihri (QI.A.275.10.). Associated with senior Al-Qaida (QE.A.4.01.) leadership, claims he was secretary to Usama Bin Laden (QI.B.8.01.) prior to 2003. Arrested in Iran and extradited to Yemen in 2003, where he escaped from prison in 2006 and remains fugitive as at Jan. 2010.

QI.A.15.01. Name: 1: MAHFOUZ 2: OULD 3: AL-WALID 4: na

مح فوظ ولد الول يد : Name (original script)

Title: na Designation: na DOB: 1 Jan. 1975 POB: Mauritania Good quality a.k.a.: a) Abu Hafs the Mauritanian b) Khalid Al-Shanqiti c) Mafouz Walad Al-Walid Low quality a.k.a.: na Nationality: Mauritanian Passport no.: na National identification no.: na Address: na Listed on: 6 Oct. 2001 (amended on 1 Jun. 2007, 10 Jun. 2011) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.104.03. Name: 1: NAJIB 2: BEN MOHAMED 3: BEN SALEM 4: AL-WAZ

نج بب بن محمد بن سالم الواز :(Name (original script

Title: na Designation: na DOB: 12 Apr. 1960 POB: Al Haka'imah, Governorate of Mahdia, Tunisia Good quality a.k.a.: a) Ouaz Najib b) Ouaz Nagib Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number K815205, issued on 17 Sep. 1994, expired on 16 Sep. 1999 National identification no.: na Address: Via Tovaglie Number 26, Bologna, Italy Listed on: 25 Jun. 2003 (amended on 20 Dec. 2005, 17 Oct. 2007, 16 Sep. 2008, 16 May 2011) Other

**information:** Mother's name is Salihah Amir. Inadmissible to the Schengen area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.329.14. Name: 1: AHMED 2: ABDULLAH 3: SALEH AL-KHAZMARI 4: AL-ZAHRANI

Title: na Designation: na DOB: 15 Sep. 1978 POB: Dammam, Saudi Arabia Good quality a.k.a.:
a) Abu Maryam al-Zahrani b) Abu Maryam al-Saudi c) Ahmed Abdullah S al-Zahrani d) Ahmad
Abdullah Salih al-Zahrani e) Abu Maryam al-Azadi f) Ahmed bin Abdullah Saleh bin al-Zahrani g)
Ahmed Abdullah Saleh al-Zahrani al-Khozmri Low quality a.k.a.: na Nationality: Saudi
Arabian Passport no.: Saudi Arabian passport number E126785, issued on 27 May 2002 expired on 3 Apr. 2007 National identification no.: na Address: Located in Syria Listed on: 23 Sep.
2014 Other information: Senior member of Al-Qaida (QE.A.4.01). Wanted by the Saudi Arabian Government for terrorism. Father's name is Abdullah Saleh al Zahrani. Physical description: eye colour: dark; hair colour: dark; complexion: olive. Speaks Arabic. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice.

QI.A.6.01. Name: 1: AIMAN 2: MUHAMMED 3: RABI 4: AL-ZAWAHIRI

أيه من محمد ربيع الخطواهري: Name (original script)

Title: a) Doctor b) Dr. Designation: na DOB: 19 Jun. 1951 POB: Giza, Egypt Good quality a.k.a.: a) Ayman Al-Zawahari b) Ahmed Fuad Salim c) Al Zawahry Aiman Mohamed Rabi Abdel Muaz d) Al Zawahiri Ayman e) Abdul Qader Abdul Aziz Abdul Moez Al Doctor f) Al Zawahry Aiman Mohamed Rabi g) Al Zawahry Aiman Mohamed Rabie h) Al Zawahry Aiman Mohamed Robi i) Dhawahri Ayman j) Eddaouahiri Ayman k) Nur Al Deen Abu Mohammed I) Ayman Al Zawahari m) Ahmad Fuad Salim Low quality a.k.a.: a) Abu Fatma b) Abu Mohammed Nationality: Egyptian Passport no.: a) Egyptian Passport number 1084010 b) Passport number 19820215 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 2 Jul. 2007, 18 Jul. 2007, 13 Aug. 2007, 16 Dec. 2010) Other information: Former operational and military leader of Egyptian Islamic Jihad (QE.A.3.01), now a close associate of Usama Bin Laden (QI.B.8.01). Believed to be in the Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.A.156.04. Name: 1: ABD-AL-MAJID 2: AZIZ 3: AL-ZINDANI 4: na

ع بد المج يد عزي ز الزنداني :Name (original script)

Title: Sheikh Designation: na DOB: 1950 POB: Yemen Good quality a.k.a.: a) Abdelmajid Al-Zindani b) Shaykh 'Abd Al-Majid Al-Zindani c) Sheikh Abd Al-Meguid Al-Zandani Low quality a.k.a.: na Nationality: Yemeni Passport no.: Yemeni passport number A005487, issued on 13 Aug. 1995 National identification no.: na Address: P.O. Box 8096, Sana'a, Yemen Listed on: 27 Feb. 2004 (amended on 25 Jul. 2006, 10 Jun. 2011) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 2 Jun. 2010.

QI.A.152.03. Name: 1: SAIFI 2: AMMARI 3: na 4: na

سد یہ فی عمار ی :Name (original script)

Title: na Designation: na DOB: a) 1 Jan. 1968 b) 24 Apr. 1968 POB: a) Kef Rih, Algeria b) Guelma, Algeria Good quality a.k.a.: a) Abdalarak b) El Para (combat name) c) Abderrezak Le Para d) Abou Haidara e) El Ourassi f) Abderrezak Zaimeche g) Abdul Rasak ammane Abu Haidra Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 4 Dec. 2003 (amended on 7 Apr. 2008, 16 May 2011) Other information: In detention in Algeria since Oct. 2004. Former member of the GSPC listed as The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.A.216.06. Name: 1: ABDULLAH 2: ANSHORI 3: na 4: na

**Title:** na **Designation:** na **DOB:** 1958 **POB:** Pacitan, East Java, Indonesia **Good quality a.k.a.: a)** Abu Fatih **b)** Thoyib, Ibnu **c)** Toyib, Ibnu **d)** Abu Fathi **Low quality a.k.a.:** na **Nationality:** Indonesian **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 21 Apr. 2006 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.B.62.02. Name: 1: MOHAMED 2: AOUANI 3: na 4: na

محمد عواذ ي :(Name (original script

Title: na Designation: na DOB: 5 Feb. 1970 POB: Tunis, Tunisia Good quality a.k.a.: a) Lased Ben Heni, born 5 Feb. 1969 in Tripoli, Libyan Arab Jamahiriya b) Al-As'ad Ben Hani, born 5 Feb. 1969 in Tripoli, Libyan Arab Jamahiriya c) Mohamed Ben Belgacem Awani Low quality a.k.a.: a) Mohamed Abu Abda b) Abu Obeida Nationality: Tunisian Passport no.: na National identification no.: na Address: na Listed on: 24 Apr. 2002 (amended on 26 Nov. 2004, 9 Sep. 2005, 31 Jul. 2006, 23 Dec. 2010) Other information: Professor of Chemistry. Deported from Italy to Tunisia on 27 Aug. 2006. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.A.323.14. Name: 1: SAID 2: ARIF 3: na 4: na

Title: na Designation: na DOB: a) 25 Jun. 1964 b) 5 Dec. 1965 POB: Oran, Algeria Good quality a.k.a.: a) Said Mohamed Arif b) Omar Gharib c) Abderahmane d) Abdallah al-Jazairi e) Slimane Chabani f) Souleiman Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 15 Aug. 2014 Other information: A veteran member of the 'Chechen Network' (not listed) and other terrorist groups. He was convicted of his role and membership in the 'Chechen Network' in France in 2006. Joined Jabhat al-Nusrah, listed as Al-Nusrah Front for the People of the Levant (QE.A.137.14) in October 2013.

QI.A.184.05. Name: 1: MUHSIN 2: FADHIL 3: AYED 4: ASHOUR AL-FADHLI

Name (original script): مح سن في عايد د عا شور الله فضد لي عايد د عا شور الله فضد لي عايد د عا شور الله التعالى عايد عا تعالى التعالى 'Ayyid al Fadhli b) Muhsin Fadil Ayid Ashur al Fadhli c) Abu Majid Samiyah d) Abu Samia Low quality a.k.a.: na Nationality: Kuwaiti Passport no.: a) Kuwaiti passport number 106261543 b) Kuwaiti passport number 1420529 issued in Kuwait and expired on 31 Mar. 2006 National identification no.: na Address: Block Four, Street 13, House #179 Kuwait City, Al-Rigga area, Kuwait Listed on: 17 Feb. 2005 (amended on 23 Jul. 2008) Other information: Wanted by the Kuwaiti Security Authorities. Fugitive as of Jul. 2008. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.A.265.08. Name: 1: HAJI 2: MUHAMMAD 3: ASHRAF 4: na

Title: na Designation: na DOB: a) 1 Mar. 1965 b) 1955 POB: Faisalabad, Pakistan Good quality a.k.a.: a) Haji M. Ashraf b) Muhammad Ashraf Manshah c) Muhammad Ashraf Munsha Low quality a.k.a.: na Nationality: Pakistani Passport no.: a) Pakistani passport number AT0712501, issued on 12 Mar. 2008, expired 11 Mar 2013 b) Pakistani passport number A-374184 National identification no.: a) Pakistani national identification number 6110125312507 b) Pakistani national identification number 24492025390 Address: na Listed on: 10 Dec. 2008 (amended on 17 Jul. 2009, 24 Jul. 2013) Other information: Chief of finance of Lashkar-e-Tayyiba (QE.L.118.05.). His father's name is Noor Muhammad.

QI.D.42.01. Name: 1: HASSAN 2: DAHIR 3: AWEYS 4: na

ح سن ظاهر عوب س :Name (original script)

Title: a) Sheikh b) Colonel Designation: na DOB: 1935 POB: Somalia Good quality a.k.a.: a) Ali, Sheikh Hassan Dahir Aweys b) Awes, Shaykh Hassan Dahir c) Hassen Dahir Aweyes d) Ahmed Dahir Aweys e) Mohammed Hassan Ibrahim f) Aweys Hassan Dahir g) Hassan Tahir Oais h) Hassan Tahir Uways i) Hassan Dahir Awes Low quality a.k.a.: a) Sheikh Aweys b) Sheikh Hassan c) Sheikh Hassan Dahir Aweys Nationality: Somali Passport no.: na National identification no.: na Address: a) Active in Southern Somalia as of Nov. 2012 b) Also reported to be in Eritrea as of Nov. 2007 Listed on: 9 Nov. 2001 (amended on 21 Dec. 2007, 11 May 2010, 16 May 2011, 18 Mar. 2013) Other information: Family background: from the Hawiye's Habergidir, Ayr clan. Senior leader of Al-Itihaad Al-Islamiya (AIAI) (QE.A.2.01.) and Hizbul Islam in Somalia. Since 12 April 2010, also subject to the sanctions measures set out in Security Council resolution 1844 (2008) concerning Somalia and Eritrea (see www.un.org/sc/committees/751/index.shtml). Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

QI.A.248.08. Name: 1: RICARDO 2: PEREZ 3: AYERAS 4: na

**Title:** na **Designation:** na **DOB:** 15 Sep. 1973 **POB:** 24 Paraiso Street, Barangay Poblacion, Mandaluyong City, Philippines **Good quality a.k.a.:** a) Abdul Kareem Ayeras b) Abdul Karim Ayeras **Low quality a.k.a.:** a) Ricky Ayeras b) Jimboy c) Isaac Jay Galang Perez d) Abdul Mujib **Nationality:** Filipino **Passport no.:** na **National identification no.:** na **Address:** a) Barangay Mangayao, Tagkawayan, Quezon, Philippines b) Barangay Tigib, Ayungon, Negros Oriental, Philippines **Listed on:** 4 Jun. 2008 (amended on 13 Dec. 2011) **Other information:** Member of the Rajah Solaiman Movement (QE.R.128.08.). Arrested by the Philippines authorities on 14 Mar. 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

#### QI.B.305.12. Name: 1: ABDUL 2: ROSYID 3: RIDHO 4: BA'ASYIR

Title: na Designation: na DOB: 31 Jan. 1974 POB: Sukoharjo, Indonesia Good quality a.k.a.: a) Abdul Rosyid Ridho Bashir b) Rashid Rida Ba'aysir c) Rashid Rida Bashir Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: Indonesian National Identity Card number 1127083101740003 under name Abdul Rosyid Ridho Ba'asyir Address: Podok Pesantren AL Wayain Ngrandu, Sumber Agung Magetan, East Java, Indonesia Listed on: 12 Mar. 2012 Other information: Father's name is Abu Bakar Ba'asyir (QI.B.217.06.). Brother of Abdul Rahim Ba'aysir (QI.B.293.11). Belongs to the leadership of and is involved in recruitment and fundraising for Jemmah Anshorut Tauhid (JAT) (QE.J.133.12.) Associated with Jemaah Islamiyah (QE.J.92.02.).

QI.B.217.06. Name: 1: ABU BAKAR 2: BA'ASYIR 3: na 4: na

Title: na Designation: na DOB: 17 Aug. 1938 POB: Jombang, East Java, Indonesia Good quality a.k.a.: a) Baasyir, Abu Bakar b) Bashir, Abu Bakar c) Abdus Samad d) Abdus Somad Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: na Address: na Listed on: 21 Apr. 2006 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.B.293.11. Name: 1: ABDUL RAHIM 2: BA'AYSIR 3: na 4: na

Title: na Designation: na DOB: a) 16 Nov. 1977 b) 16 Nov. 1974 POB: a) Solo, Indonesia b) Sukoharjo, Central Java, Indonesia Good quality a.k.a.: a) Abdul Rahim Bashir b) 'Abd Al-Rahim Ba'asyir c) 'Abd Al-Rahim Bashir d) Abdurrahim Ba'asyir e) Abdul Rachim Bashir f) Abdul Rachim Ba'asyir g) Abdul Rachim Bashir h) Abdul Rochim Ba'asyir i) Abdul Rochim Bashir j) Abdurrochim Ba'asyir k) Abdurrochim Bashir l) Abdurrochim Ba'asyir m) Abdurrochim Bashir n) Abdurrahman Ba'asyir o) Abdurrahman Bashir Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: na Address: Indonesia Listed on: 19 Jul. 2011 Other information: Senior Jemaah Islamiyah (QE.J.92.02.) leader. Father's name is Abu Bakar Ba'asyir (QI.B.217.06.).

QI.B.80.02. Name: 1: SAID 2: BAHAJI 3: na 4: na

Name (original script): سع يد بالطجى

**Title:** na **Designation:** na **DOB:** 15 Jul. 1975 **POB:** Haselünne, Lower Saxony, Germany **Good quality a.k.a.:** Zouheir Al Maghribi **Low quality a.k.a.:** a) Mohamed Abbattay b) Abderrahmane Al Maghribi **Nationality:** a) German b) Moroccan **Passport no.:** a) Provisional German Passport No.: 28642163 (issued by the city of Hamburg) b) Moroccan passport number 954242 issued on 28 June 1995 in Meknas, Morocco (expired) **National identification no.:** BPA Nr. 1336597587 **Address:** Formerly resident at: Bunatwiete 23, 21073 Hamburg, Germany **Listed on:** 30 Sep. 2002 (amended on 26 Nov. 2004, 9 Sep. 2005, 2 Jul. 2007, 23 Dec. 2010) **Other information:** Deputy Head of the Media Committee of Al-Qaida (QE.A.4.01) as at Apr. 2010. German authorities issued an arrest warrant for him on 21 Sep. 2001. Believed to be in the Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QI.B.266.08. Name: 1: MAHMOUD 2: MOHAMMAD 3: AHMED 4: BAHAZIQ

Title: na Designation: na DOB: a) 17 Aug. 1943 b) 1943 c) 1944 POB: India Good quality
a.k.a.: a) Bahaziq Mahmoud b) Abu Abd al-'Aziz c) Abu Abdul Aziz d) Shaykh Sahib Low quality

a.k.a.: na Nationality: Saudi Arabian Passport no.: na National identification no.: Saudi Arabian national identification number 4-6032-0048-1 Address: na Listed on: 10 Dec. 2008 Other information: Financier of Lashkar-e-Tayyiba (listed under permanent reference number QE.L.118.05.). Has served as the leader of Lashkar-e-Tayyiba in Saudi Arabia.

QI.B.311.12. Name: 1: AYYUB 2: BASHIR 3: na 4: na

ای وب ب شدیر :(Name (original script

Title: a) Qari b) Alhaj Designation: na DOB: a) 1966 b) 1964 c) 1969 d) 1971 POB: na Good quality a.k.a.: a) Alhaj Qari Ayub Bashar b) Qari Muhammad Ayub Low quality a.k.a.: na Nationality: a) Uzbek b) Afghan Passport no.: na National identification no.: na Address: Mir Ali, North Waziristan Agency, Federal Administered Tribal Area, Pakistan Listed on: 18 Oct. 2012 Other information: Member of leadership council as of early 2010 and head of finance for the Islamic Movement of Uzbekistan (QE.I.10.01.). Coordinated financial and logistical support for the Islamic Movement of Uzbekistan in Afghanistan and Pakistan between 2009-2012. Transferred and delivered funds to Fazal Rahim (QI.R.303.12).

QI.B.55.01. Name: 1: MAHMOOD 2: SULTAN 3: BASHIR-UD-DIN 4: na

Title: na Designation: na DOB: a) 1937 b) 1938 c) 1939 d) 1940 e) 1941 f) 1942 g) 1943 h)
1944 i) 1945 POB: na Good quality a.k.a.: a) Mahmood, Sultan Bashiruddin b) Mehmood, Dr.
Bashir Uddin c) Mekmud, Sultan Baishiruddin Low quality a.k.a.: na Nationality:
Pakistani Passport no.: na National identification no.: na Address: Street 13, Wazir Akbar Khan, Kabul, Afghanistan Listed on: 24 Dec. 2001 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.B.279.10. Name: 1: MOHAMED 2: BELKALEM 3: na 4: na

Name (original script): محمد بالكلام

Title: na Designation: na DOB: 19 Dec. 1969 POB: Hussein Dey, Algiers, Algeria Good quality a.k.a.: na Low quality a.k.a.: a) Abdelali Abou Dher (פיל פיל שלושלו b) El Harrachi (שלו אלונים) Nationality: Algerian Passport no.: na National identification no.: na Address: Mali Listed on: 22 Apr. 2010 (amended on 15 Apr. 2014) Other information: Convicted in absentia by Algerian tribunal on 28 Mar. 1996. Algerian international arrest warrant number 03/09 of 6 Jun. 2009 issued by the Tribunal of Sidi Mhamed, Algiers, Algeria. Algerian extradition request number 2307/09 of 3 Sep. 2009, presented to Malian authorities. Father's name is Ali Belkalem. Mother's name is Fatma Saadoudi. Member of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.)

QI.B.136.03. Name: 1: MOKHTAR 2: BELMOKHTAR 3: na 4: na

مخ تار بالمخ تار : Name (original script)

Title: na Designation: na DOB: 1 Jun. 1972 POB: Ghardaia, Algeria Good quality a.k.a.: a) Abou Abbes Khaled b) Belaouar Khaled Abou El Abass c) Belaouer Khaled Abou El Abass d) Belmokhtar Khaled Abou El Abes e) Khaled Abou El Abass f) Khaled Abou El Abbes g) Khaled Abou El Abes h) Khaled Abulabbas Na Oor i) Mukhtar Belmukhtar Low quality a.k.a.: a) Belaoua b) Belaour Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 11 Nov. 2003 (amended on 12 Apr. 2006, 2 Jul. 2007, 7 Apr. 2008, 25 Jan. 2010, 16 May 2011, 9 Sep. 2014) Other information: Father's name is Mohamed. Mother's name is Zohra Chemkha. Member of the Council of the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) (AQIM). Head of Al Mouakaoune Biddam (QE.M.139.14), Al Moulathamoun (QE.M.140.14) and Al Mourabitoun (QE.M.141.14). Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.B.333.14. Name: 1: SEIFALLAH 2: BEN HASSINE 3: na 4: na

Title: na Designation: na DOB: 8 Nov. 1965 POB: na Good quality a.k.a.: a) Seif Allah ben Hocine b) Saifallah ben Hassine c) Sayf Allah 'Umar bin Hassayn d) Sayf Allah bin Hussayn Low quality a.k.a.: a) Abou Aayadh b) Abou Iyadh c) Abu Ayyad al-Tunisi d) Abu Iyyadh al-Tunisi e) Abou Iyadh el-Tounsi Nationality: Tunisian Passport no.: na National identification no.: na Address: na Listed on: 23 Sep. 2014 Other information: Founder of the Tunisian Combatant Group

(QE.T.90.02) and leader of Ansar al-Shari'a in Tunisia (QE.A.143.14). Arrest warrant issued by Tunisian Court of First Instance on 23 Aug. 2013.

QI.B.68.02. Name: 1: ADEL 2: BEN AL-AZHAR 3: BEN YOUSSEF 4: BEN SOLTANE

عادل بن الأزهر بن يوسف بن سلطان: (Name (original script

Title: na Designation: na DOB: 14 Jul. 1970 POB: Tunis, Tunisia Good quality a.k.a.: na Low quality a.k.a.: Zakariya Nationality: Tunisian Passport no.: Tunisian passport number M408665, issued on 4 Oct. 2000, expired 3 Oct. 2005 National identification no.: na Address: Tunisia Listed on: 3 Sep. 2002 (amended on 20 Dec. 2005, 7 Jun. 2007, 23 Dec. 2010) Other information: Italian Fiscal Code: BNSDLA70L14Z352B. Deported from Italy to Tunisia on 28 February 2004. Serving a 12-year prison sentence in Tunisia for membership in a terrorist organization abroad as at Jan. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.B.307.12. Name: 1: HAFIZ 2: ABDUL SALAM 3: BHUTTAVI 4: na

**Title: a)** Maulavi **b)** Mullah **Designation:** na **DOB:** 1940 **POB:** Gujranwala, Punjab Province, Pakistan **Good quality a.k.a.: a)** Hafiz Abdul Salam Bhattvi **b)** Hafiz Abdusalam Budvi **c)** Hafiz Abdussalaam Bhutvi **d)** Abdul Salam Budvi **e)** Abdul Salam Bhattwi **f)** Abdul Salam Bhutvi **g)** Mullah Abdul Salaam Bhattvi **h)** Molvi Abdursalam Bhattvi **Low quality a.k.a.:** na **Nationality:** Pakistani **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 14 Mar. 2012 **Other information:** Founding member of Lashkar-e-Tayyiba (QE.L.118.05.) and deputy to Lashkar-e-Tayyiba leader Hafiz Muhammad Saeed (QI.S.263.08.).

QI.B.81.02. Name: 1: RAMZI 2: MOHAMED 3: ABDULLAH 4: BINALSHIBH

رمزى محمد ع بد الله بن الشديبة :(Name (original script

Title: na Designation: na DOB: a) 1 May 1972 b) 16 Sep. 1973 POB: a) Gheil Bawazir, Hadramawt, Yemen b) Khartoum, Sudan Good quality a.k.a.: a) Binalsheidah, Ramzi Mohamed Abdullah b) Bin Al Shibh, Ramzi c) Omar, Ramzi Mohamed Abdellah d) Mohamed Ali Abdullah Bawazir e) Binalshibh Ramzi Mohammed Abdullah f) Ramzi Binalshib g) Ramzi Mohamed Abdellah Omar Hassan Alassiri h) Binalshibh Ramsi Mohamed Abdullah i) Abu Ubaydah j) 'Umar Muhammad 'Abdallah Ba' Amar Low quality a.k.a.: Ramzi Omar Nationality: Yemeni Passport no.: 00085243 issued in Sanaa, Yemen, issued on 17 Nov. 1997 National identification no.: na Address: na Listed on: 30 Sep. 2002 (amended on 26 Nov. 2004, 25 Jul. 2006, 2 Jul. 2007, 27 Jul. 2007, 23 Dec. 2010) Other information: Arrested in Karachi, Pakistan, 30 Sep. 2002. In custody of the United States of America, as of May 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.B.9.01. Name: 1: BILAL 2: BIN MARWAN 3: na 4: na

ب لال بان مروان :Name (original script)

Title: na Designation: na DOB: 1947 POB: na Good quality a.k.a.: na Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 Other information: Senior lieutenant of UBL. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.B.63.02. Name: 1: AL-MOKHTAR 2: BEN MOHAMED 3: BEN AL-MOKHTAR 4: BOUCHOUCHA Name (original script): الأمذ تار بان محمد بان الأمذ تار بان محمد الأمد الأم

Title: na Designation: na DOB: 13 Oct. 1969 POB: Tunis, Tunisia Good quality a.k.a.: Bushusha, Mokhtar Low quality a.k.a.: na Nationality: Tunisian Passport no.: Tunisian passport number K754050, issued on 26 May 1999, expired on 25 May 2004 National identification no.: 04756904, issued on 14 Sep. 1984 Address: Via Milano Number 38, Spinadesco, (CR), Italy Listed on: 24 Apr. 2002 (amended on 10 Apr. 2003, 26 Nov. 2004, 20 Dec. 2005, 7 Jun. 2007, 23 Dec. 2010) Other information: Italian Fiscal Code: BCHMHT69R13Z352T. Mother's name is Hedia Bannour. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.B.188.05. Name: 1: FAYCAL 2: BOUGHANEMI 3: na 4: na

ف برصل به وغاذ می :Name (original script)

Title: na Designation: na DOB: 28 Oct. 1966 POB: Tunis, Tunisia Good quality a.k.a.: a) Faical Boughanmi b) Faysal al-Bughanimi Low quality a.k.a.: na Nationality: Tunisian Passport no.: na National identification no.: na Address: Number 5/B viale Cambonino, Cremona, Italy Listed on: 29 Jul. 2005 (amended on 7 Jun. 2007, 10 Aug. 2009, 1 Sep. 2009, 13 Dec. 2011) Other information: Italian Fiscal code: BGHFCL66R28Z352G. Sentenced to 7 years imprisonment in Italy on 29 Jun. 2007 by the Brescia Second Appeals Court. In detention in Italy as at Jun. 2009. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 Jul. 2009.

QI.B.143.03. Name: 1: HAMADI 2: BEN ABDUL AZIZ 3: BEN ALI 4: BOUYEHIA

Name (original script): حمادي بن عبد العزيز بن علي بويدي عبد العزيز بن علي بويد

Title: na Designation: na DOB: 29 May 1966 POB: Tunis, Tunisia Good quality a.k.a.: a) Gamel Mohamed, born 25 May 1966 in Morocco b) Abd el Wanis Abd Gawwad Abd el Latif Bahaa, born 9 May 1986 in Egypt Low quality a.k.a.: Mahmoud Hamid Nationality: Tunisian Passport no.: Tunisian passport number L723315, issued on 5 May 1998, expired on 4 May 2003 National identification no.: na Address: Corso XXII Marzo Number 39, Milan, Italy Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 31 Jul. 2006, 30 Jan. 2009, 16 May 2011) Other information: In prison in Italy until 28 Jul. 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.C.312.12. Name: 1: AAMIR 2: ALI 3: CHAUDHRY 4: na

اعامر ع لی جوہدری: Name (original script)

**Title:** na **Designation:** na **DOB:** 3 Aug. 1986 **POB:** na **Good quality a.k.a.:** a) Aamir Ali Chaudary b) Aamir Ali Choudry c) Amir Ali Chaudry Low quality a.k.a.: Huzaifa **Nationality:** Pakistani **Passport no.:** Pakistani passport number BN 4196361, issued on 28 Oct. 2008 expiring 27 Oct. 2013 **National identification no.:** Pakistani national identification number 33202-7126636-9 **Address:** na **Listed on:** 18 Oct. 2012 **Other information:** Electronics and explosives expert for Tehrik-e Taliban Pakistan (TTP) (QE.T.132.11). Involved in attack planning for TTP. Provided financial and logistical support for TTP and participated in TTP-sponsored militant training.

QI.C.70.02. Name: 1: YASSINE 2: CHEKKOURI 3: na 4: na

یا سدین شکوری:(Name (original script

Title: na Designation: na DOB: 6 Oct. 1966 POB: Safi, Morocco Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Moroccan Passport no.: Moroccan passport number F46947 National identification no.: Moroccan national identity card H-135467 Address: 7th Street, Number 7, Hay Anas Safi, Morocco Listed on: 3 Sep. 2002 (amended on 7 Jun. 2007, 23 Dec. 2010) Other information: Mother's name is Feue Hlima Bent Barka and father's name is Abderrahmane Mohammed Ben Azzouz. Deported from Italy to Morocco on 26 Feb. 2004. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.C.300.12. Name: 1: MONIR 2: CHOUKA 3: na 4: na

Title: na Designation: na DOB: 30 Jul. 1981 POB: Bonn, Germany Good quality a.k.a.: na Low quality a.k.a.: Abu Adam Nationality: a) German b) Moroccan Passport no.: German passport number 5208323009 issued in Stadt Bonn, Germany, issued on 2 Feb. 2007, expires on 1 Feb. 2012 National identification no.: German national identity card number 5209530116 issued in Stadt Bonn, Germany, issued on 21 Jun. 2006, expired on 20 Jun. 2011 Address: Ungartenstraße 6, Bonn, 53229, Germany, (previous) Listed on: 25 Jan. 2012 Other information: Associated with Islamic Movement of Uzbekistan (QE.I.10.01.). Brother of Yassin Chouka (QI.C.301.12.) Arrest warrant issued by the investigating judge of the German Federal Court of Justice on 5 Oct. 2010.

QI.C.301.12. Name: 1: YASSIN 2: CHOUKA 3: na 4: na

**Title:** na **Designation:** na **DOB:** 11 Dec. 1984 **POB:** Bonn, Germany **Good quality a.k.a.:** na **Low quality a.k.a.:** Abu Ibraheem **Nationality: a)** German **b)** Moroccan **Passport no.:** German passport number 5204893014 issued in Stadt Bonn, Germany, issued on 5 Oct. 2000, expired on 5 Oct. 2005 **National identification no.:** German national identity card number 5209445304 issued in Stadt

Bonn, Germany, issued on 5 Sep. 2005, expired on 4 Sep. 2010 Address: Karl-Barth-Straße 14, Bonn, 53129, Germany, (previous) Listed on: 25 Jan. 2012 Other information: Associated with Islamic Movement of Uzbekistan (QE.I.10.01.). Brother of Monir Chouka (QI.C.300.12.). Arrest warrant issued by the investigating judge of the German Federal Court of Justice on 5 Oct. 2010.

QI.C.141.03. Name: 1: MAXAMED 2: CABDULLAAH 3: CIISE 4: na

Title: na Designation: na DOB: 8 Oct. 1974 POB: Kismaayo, Somalia Good quality a.k.a.: a) Maxamed Cabdullaahi Ciise b) Maxammed Cabdullaahi c) Cabdullah Mayamed Ciise Low quality a.k.a.: na Nationality: Somali Passport no.: na National identification no.: United Kingdom identification number PX910063D Address: Somalia Listed on: 12 Nov. 2003 (amended on 9 Sep. 2005, 30 Jan. 2009, 20 Apr. 2009, 21 Oct. 2010) Other information: Present in Somalia as of Apr. 2009 following transfer from United Kingdom. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.D.331.14. Name: 1: ANDERS 2: CAMEROON 3: OSTENSVIG 4: DALE Title: na Designation: na DOB: 19 Oct. 1978 POB: Oslo, Norway Good quality a.k.a.: na Low quality a.k.a.: a) Muslim Abu Abdurrahman b) Abu Abdurrahman the Norwegian c) Abu Abdurrahman the Moroccan Nationality: Norwegian Passport no.: na National identification no.: na Address: na Listed on: 23 Sep. 2014 Other information: Member of Al-Qaida in the Arabian Peninsula (AQAP) (QE.A.129.10). Physical description: eye colour: brown; hair colour: brown; height: 185 cm.

QI.D.252.08. Name: 1: AHMED 2: DEGHDEGH 3: na 4: na

Name (original script): أحمد دغداغ Title: na Designation: na DOB: 17 Jan. 1967 POB: Anser, Wilaya (province) of Jijel, Algeria Good quality a.k.a.: a) Abd El Illah b) Abdellillah dit Abdellah Ahmed dit Said Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 3 Jul. 2008 (amended on 24 Mar. 2009, 15 Nov. 2012) Other information: Belongs to the leadership and is the finance chief of the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Mother's name is Zakia Chebira. Father's name is Lakhdar.

QI.D.246.08. Name: 1: REDENDO 2: CAIN 3: DELLOSA 4: na

Title: na Designation: na DOB: 15 May 1972 POB: Punta, Santa Ana, Manila, Philippines Good quality a.k.a.: a) Abu llonggo b) Brandon Berusa c) Abu Muadz d) Arnulfo Alvarado e) Habil Ahmad Dellosa Low quality a.k.a.: a) Dodong b) Troy c) Uthman Nationality: Filipino Passport no.: na National identification no.: na Address: 3111, Ma. Bautista, Punta, Santa Ana, Manila, Philippines Listed on: 4 Jun. 2008 (amended on 3 Jun. 2009, 13 Dec. 2011) Other information: Member of the Rajah Solaiman Movement (QE.R.128.08.) and linked to the Abu Sayyaf Group (QE.A.1.01.). Father's name is Fernando Rafael Dellosa. Mother's name is Editha Parado Cain. In detention in the Philippines as of Jan. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.D.243.08. Name: 1: FELICIANO 2: SEMBORIO 3: DELOS REYES JR. 4: na Title: Ustadz Designation: na DOB: 4 Nov. 1963 POB: Arco, Lamitan, Basilan, Philippines Good quality a.k.a.: a) Abubakar Abdillah b) Abdul Abdillah Low quality a.k.a.: na Nationality: Filipino Passport no.: na National identification no.: na Address: Philippines Listed on: 4 Jun. 2008 (amended on 3 Jun. 2009, 13 Dec. 2011) Other information: Member of the Rajah Solaiman Movement (QE.R.128.08.). Father's name is Feliciano Delos Reyes Sr. Mother's name is Aurea Semborio. In detention in the Philippines as of May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.D.164.04. Name: 1: OTHMAN 2: DERAMCHI 3: na 4: na

ع ثمان در مشی :Name (original script

Title: na Designation: na DOB: 7 Jun. 1954 POB: Tighennif, Algeria Good quality a.k.a.: na Low quality a.k.a.: Abou Youssef Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 17 Mar. 2004 (amended on 26 Nov. 2004, 21 Dec. 2007, 2 Dec.

2008, 3 Jun. 2009, 25 Jan. 2010, 16 May 2011) **Other information:** Italian Fiscal Code DRMTMN54H07Z301T. Deported from Italy to Algeria on 22 Aug. 2008. Father in law of Djamel Lounici (QI.L.155.04). Review pursuant to Security Council resolution 1822 (2008) was concluded on 28 Sep. 2009.

QI.D.245.08. Name: 1: PIO 2: ABOGNE 3: DE VERA 4: na

Title: na Designation: na DOB: 19 Dec. 1969 POB: Bagac, Bagamanok, Catanduanes, Philippines Good quality a.k.a.: Ismael De Vera Low quality a.k.a.: a) Khalid b) Ismael c) Ismail d) Manex e) Tito Art f) Dave g) Leo Nationality: Filipino Passport no.: na National identification no.: na Address: Concepcion, Zaragosa, Nueva Ecija, Philippines Listed on: 4 Jun. 2008 (amended on 3 Jun. 2009, 13 Dec. 2011) Other information: Member of the Rajah Solaiman Movement (QE.R.128.08.), Abu Sayyaf Group (QE.A.1.01.) and Jemaah Islamiyah (QE.J.92.02.). Father's name is Honorio Devera. Mother's name is Fausta Abogne. In detention in the Philippines as of May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.D.342.14. Name: 1: OUMAR 2: DIABY 3: na 4: na

**Title:** na **Designation:** na **DOB:** 5 Aug. 1975 **POB:** Dakar, Senegal **Good quality a.k.a.:** na **Low quality a.k.a.:** a) Omsen **b)** Oumar Omsen **Nationality:** Senegalese **Passport no.:** na **National identification no.:** na **Address:** Syrian Arab Republic, (located in) **Listed on:** 23 Sep. 2014 **Other information:** A leader of an armed group linked to Al-Nusrah Front for the People of the Levant (QE.A.137.14) and a key facilitator for a Syrian foreign terrorist fighter network. Active in terrorist propaganda through the Internet.

QI.D.167.04. Name: 1: KAMEL 2: DJERMANE 3: na 4: na

كمال جرمان :(Name (original script

Title: na Designation: na DOB: 12 Oct. 1965 POB: Oum el Bouaghi, Algeria Good quality a.k.a.: a) Bilal b) Adel c) Fodhil d) Abou Abdeljalil Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 3 May 2004 (amended on 7 Apr. 2008, 13 Dec. 2011) Other information: In detention in Algeria as at April 2010. Arrest warrant issued by the German authorities on 9 Oct. 2003 for involvement in kidnapping. Former member of the Katibat Tarek Ibn Ziad of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.D.249.08. Name: 1: YAHIA 2: DJOUADI 3: na 4: na

ي حی جوادي :Name (original script)

**Title:** na **Designation:** na **DOB:** 1 Jan. 1967 **POB:** M'Hamid, Wilaya (province) of Sidi Bel Abbes, Algeria **Good quality a.k.a.:** a) Yahia Abou Ammar b) Abou Ala **Low quality a.k.a.:** na **Nationality:** Algerian **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 3 Jul. 2008 (amended on 15 Nov. 2012) **Other information:** Belongs to the leadership of the Organization of Al-Qaida in the Islamic Maghreb (listed under permanent reference number QE.T.14.01.). Located in Northern Mali as of Jun. 2008. Mother's name is Zohra Fares. Father's name is Mohamed.

QI.D.232.07. Name: 1: ABDELMALEK 2: DROUKDEL 3: na 4: na

ع بد ال مال ك دروك دال :Name (original script)

Title: na Designation: na DOB: 20 Apr. 1970 POB: Meftah, Wilaya of Blida, Algeria Good quality a.k.a.: Abou Mossaab Abdelouadoud Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 27 Aug. 2007 (amended on 7 Apr. 2008, 13 Dec. 2011) Other information: Head of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Sentenced in absentia to life imprisonment in Algeria on 21 March 2007. Father's name is Rabah Droukdel. Mother's name is Z'hour Zdigha. Review pursuant to Security Council resolution 1822 (2008) was concluded on 4 May 2009.

QI.D.95.03. Name: 1: LIONEL 2: DUMONT 3: na 4: na

Title: na Designation: na DOB: 21 Jan. 1971 POB: Roubaix, France Good quality a.k.a.: a) Jacques Brougere b) Abu Hamza c) Di Karlo Antonio d) Merlin Oliver Christian Rene e) Arfauni Imad

Ben Yousset Hamza f) Imam Ben Yussuf Arfaj g) Abou Hamza h) Arfauni Imad Low quality a.k.a.: a) Bilal b) Hamza c) Koumkal d) Kumkal e) Merlin f) Tinet g) Brugere h) Dimon Nationality: French Passport no.: na National identification no.: na Address: France Listed on: 25 Jun. 2003 (amended on 22 Nov. 2004, 26 Nov. 2004, 2 Jul. 2007, 17 Oct. 2007, 24 Mar. 2009, 6 Aug. 2010) Other information: In custody in France as of May 2004. Sentenced to 25 years imprisonment in France in 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.D.111.03. Name: 1: AGUS 2: DWIKARNA 3: na 4: na

Title: na Designation: na DOB: 11 Aug. 1964 POB: Makassar, South Sulawesi, Indonesia Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Indonesian Passport no.: Indonesian travel document number XD253038 National identification no.: na Address: Indonesia Listed on: 9 Sep. 2003 (amended on 26 Nov. 2004, 14 May 2014) Other information: Arrested 13 Mar. 2002, sentenced 12 July 2002 in the Philippines. Released from custody in the Philippines on 1 Jan. 2014 and subsequently deported to Indonesia. Physical description: height 165 cm. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice. Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.E.169.04. Name: 1: DHOU 2: EL-AICH 3: na 4: na

ذو اله ع يش :Name (original script

Title: na Designation: na DOB: 5 Aug. 1964 POB: Blida, Algeria Good quality a.k.a.: Abdel Hak Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 3 May 2004 (amended on 12 Apr. 2006, 7 Apr. 2008, 13 Dec. 2011) Other information: Confirmed to have died in Chad on 8 Mar. 2004. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.E.19.01. Name: 1: ABDULLAH 2: AHMED 3: ABDULLAH 4: EL ALFI

ع بد الله احمد ع بدالله الأل في :(Name (original script

Title: na Designation: na DOB: 6 Jun. 1963 POB: Gharbia, Egypt Good quality a.k.a.: na Low quality a.k.a.: a) Abu Mariam b) Al-Masri, Abu Mohamed c) Saleh Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 17 Oct. 2001 (amended on 26 Nov. 2004) Other information: Afghanistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.E.142.03. Name: 1: RADI 2: ABD EL SAMIE 3: ABOU EL YAZID 4: EL AYASHI

Name (original script): را ضىي ع بد ال سم يع أب وال يزيد د ال ع يا شي ع بد ال سم يع أب وال يزيد د ال ع يا شي Title: na Designation: na DOB: 2 Jan. 1972 POB: El Gharbia, Egypt Good quality a.k.a.: na Low quality a.k.a.: Mera'i Nationality: na Passport no.: na National identification no.: na Address: Via Cilea 40, Milan, Italy (Domicile) Listed on: 12 Nov. 2003 (amended on 9 Sep. 2005, 21 Dec. 2007, 16 May 2011) Other information: Sentenced to ten years of imprisonment by the Court of first instance of Milan on 21 Sep. 2006. In custody in Italy. Due for release on 6 Jan. 2012. Subject to expulsion from Italy after serving the sentence. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.E.262.08. Name: 1: REDOUANE 2: EL HABHAB 3: na 4: na

Title: na Designation: na DOB: 20 Dec. 1969 POB: Casablanca, Morocco Good quality a.k.a.: Abdelrahman Low quality a.k.a.: na Nationality: a) German b) Moroccan Passport no.: German passport number 1005552350, issued on 27 Mar. 2001 by Municipality of Kiel, Germany, expired on 26 Mar. 2011 National identification no.: German federal identity card number 1007850441, issued on 27 Mar. 2001 by Municipality of Kiel, Germany, expired on 26 Mar. 2011 Address: Iltisstrasse 58. 24143 Kiel, Germany (previous address) Listed on: 12 Nov. 2008 (amended on 30 Jan. 2009, 24 Mar. 2009, 15 Nov. 2012) Other information: Released from custody in Germany in Apr. 2012.

QI.E.82.02. Name: 1: MOUNIR 2: EL MOTASSADEQ 3: na 4: na

مذير الم تصدق: Name (original script)

Title: na Designation: na DOB: 3 Apr. 1974 POB: Marrakesh, Morocco Good quality a.k.a.: Mounir el Moutassadeq Low quality a.k.a.: na Nationality: Moroccan Passport no.: Moroccan Passport H 236483 National identification no.: Moroccan national identity card E-491591 Address: In prison in Germany Listed on: 30 Sep. 2002 (amended on 26 Nov. 2004, 7 Sep. 2007, 23 Dec. 2010) Other information: Arrested on 28 Nov. 2001 and found guilty in Germany of being an accessory to murder and of membership in a terrorist organization and sentenced to 15 years of imprisonment on 8 Jan. 2007. Father's name is Brahim Brik. Mother's name is Habiba Abbes. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QI.E.65.02. Name: 1: ABD EL KADER 2: MAHMOUD 3: MOHAMED 4: EL SAYED

ع بد ال قادر محمود محمد ال سد بد . Name (original script)

Title: na Designation: na DOB: 26 Dec. 1962 POB: Egypt Good quality a.k.a.: a) Es Sayed, Kader b) Abdel Khader Mahmoud Mohamed el Sayed Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 24 Apr. 2002 (amended on 26 Nov. 2004, 7 Jun. 2007, 16 May 2011) Other information: Italian Fiscal Code: SSYBLK62T26Z336L. Sentenced to 8 years imprisonment in Italy on 2 February 2004. Considered a fugitive from justice by the Italian authorities. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.E.64.02. Name: 1: SAMI 2: BEN KHAMIS 3: BEN SALEH 4: ELSSEID

Name (original script): سامي بـ ن خم يس بـ ن صالـ ح الـ صد يد Title: na Designation: na DOB: 10 Feb. 1968 POB: Menzel Jemil, Bizerte, Tunisia Good quality a.k.a.: Omar El Mouhajer Low quality a.k.a.: Saber Nationality: Tunisian Passport no.: Tunisian passport number K929139, issued on 14 Feb. 1995, expired on 13 Feb. 2000 National identification no.: 00319547 issued on 8 Dec. 1994 Address: Ibn Al-Haythman Street, Number 6, Manubah, Tunis, Tunisia Listed on: 24 Apr. 2002 (amended on 10 Apr. 2003, 26 Nov. 2004, 9 Sep. 2005, 20 Dec. 2005, 7 Jun. 2007, 21 Dec. 2007, 10 Aug. 2009, 23 Dec. 2010) Other information: Italian Fiscal Code: SSDSBN68B10Z352F. Mother's name is Beya Al-Saidani. Deported from Italy to Tunisia on 2 Jun. 2008. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.E.96.03. Name: 1: MOUSSA 2: BEN OMAR 3: BEN ALI 4: ESSAADI

مو سى ب ن عمر ب ن ع لى ال سعدي :(Name (original script

Title: na Designation: na DOB: 4 Dec. 1964 POB: Tabarka, Tunisia Good quality a.k.a.: na Low quality a.k.a.: a) Dah Dah b) Abdelrahmman c) Bechir Nationality: Tunisian Passport no.: Tunisian passport number L335915, issued in Milan, Italy on 8 Nov. 1996, expired on 7 Nov. 2001 National identification no.: na Address: Tunisia Listed on: 25 Jun. 2003 (amended on 20 Dec. 2005, 17 Oct. 2007, 10 Aug. 2009, 16 May 2011, 20 Jul. 2012) Other information: Considered a fugitive from justice by the Italian authorities (as of Nov. 2009). Left Sudan to Tunisia in 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.E.83.02. Name: 1: ZAKARYA 2: ESSABAR 3: na 4: na

زكريا الصد بار: Name (original script)

Title: na Designation: na DOB: 3 Apr. 1977 POB: Essaouria, Morocco Good quality a.k.a.: Zakariya Essabar Low quality a.k.a.: na Nationality: Moroccan Passport no.: a) Moroccan passport number M 271351 issued on 24 Oct. 2000 by the Embassy of Morocco in Berlin b) Moroccan passport number K-348486 National identification no.: a) Moroccan National Identity number E-189935 b) Moroccan National Identity Card number G-0343089 Address: na Listed on: 30 Sep. 2002 (amended on 26 Nov. 2004, 10 Jun. 2011) Other information: Father's name is Mohamed ben Ahmed. Mother's name is Sfia bent Toubali. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QI.F.27.01. Name: 1: MUSTAFA 2: MOHAMED 3: FADHIL 4: na

مصط في محمد في اضل :(Name (original script

Title: na Designation: na DOB: a) 23 Jun. 1976 b) 1 Jan. 1976 POB: Cairo, Egypt Good quality a.k.a.: a) Al Masri, Abd Al Wakil b) Ali, Hassan c) Anis, Abu; d) Elbishy, Moustafa Ali e) Fadil, Mustafa Muhamad f) Fazul, Mustafa g) Mohammed, Mustafa h) Mustafa Ali Elbishy Low quality a.k.a.: a) Hussein b) Jihad, Abu c) Khalid d) Man, Nu e) Yussrr, Abu f) Al-Nubi, Abu Nationality: Kenyan Passport no.: na National identification no.: Kenyan ID number 12773667; Serial number 201735161 Address: na Listed on: 17 Oct. 2001 (amended on 2 Jul. 2007, 16 Dec. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.G.251.08. Name: 1: SALAH EDDINE 2: GASMI 3: na 4: na

Name (original script): صال ح ق ا سمي Title: na Designation: na DOB: 13 Apr. 1971 POB: Zeribet El Oued, Wilaya (province) of Biskra, Algeria Good quality a.k.a.: Abou Mohamed Salah Low quality a.k.a.: Bounouadher Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 3 Jul. 2008 (amended on 24 Mar. 2009, 15 Nov. 2012, 14 Mar. 2013) Other information: Belongs to the leadership and is in charge of information committee of the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Mother's name is Yamina Soltane. Father's name is Abdelaziz. Associated with Abdelmalek Droukdel (QI.D.232.07). Arrested in Algeria on 16 Dec. 2012.

QI.G.259.08. Name: 1: FRITZ 2: MARTIN 3: GELOWICZ 4: na

Title: na Designation: na DOB: 1 Sep. 1979 POB: Munich, Germany Good quality a.k.a.: a) Robert Konars, born 10 Apr. 1979 in Liege, Belgium b) Markus Gebert Low quality a.k.a.; a) Malik b) Benzl c) Bentley Nationality: German Passport no.: German passport number 7020069907 issued in Ulm, Germany, expired on 11 May 2010. National identification no.: German Federal Identity Card number 7020783883 issued in Ulm, Germany, expired on 10 Jun. 2008. Address: a) In prison in Germany (since Sep. 2007). b) Böfinger Weg 20, 89075 Ulm, Germany (previous address) Listed on: 27 Oct. 2008 (amended on 13 Dec. 2011) Other information: Associated with the Islamic Jihad Union (IJU), also known as the Islamic Jihad Group (QE.I.119.05.). Associated with Daniel Martin Schneider (QI.S.260.08.) and Adem Yilmaz (QI.Y.261.08.). In detention in Germany as of Jun. 2010.

QI.G.28.01. Name: 1: AHMED 2: KHALFAN 3: GHAILANI 4: na

Title: na Designation: na DOB: a) 14 Mar. 1974 b) 13 Apr. 1974 c) 14 Apr. 1974 d) 1 Aug. 1970 POB: Zanzibar, Tanzania Good quality a.k.a.; a) Ahmad, Abu Bakr b) Ahmed, Abubakar c) Ahmed, Abubakar K. d) Ahmed, Abubakar Khalfan e) Ahmed, Abubakary K. f) Ahmed, Ahmed Khalfan g) Ali, Ahmed Khalfan h) Ghailani, Abubakary Khalfan Ahmed i) Ghailani, Ahmed j) Ghilani, Ahmad Khalafan k) Hussein, Mahafudh Abubakar Ahmed Abdallah I) Khalfan, Ahmed m) Mohammed, Shariff Omar n) Haythem al-Kini Low quality a.k.a.: a) Ahmed The Tanzanian b) Foopie c) Fupi d) Ahmed, A e) Al Tanzani, Ahmad f) Bakr, Abu g) Khabar, Abu Nationality: Tanzanian Passport no.: na National identification no.: na Address: United States of America Listed on: 17 Oct. 2001 (amended on 27 Jul. 2007, 21 Oct. 2010) Other information: Apprehended in July 2004 and in custody for trial in the United States of America, as at October 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.H.250.08. Name: 1: AMOR 2: MOHAMED 3: GHEDEIR 4: na

عمر محمد ق دير ر :Name (original script)

Title: na Designation: na DOB: Approximately 1958 POB: Deb-Deb, Amenas, Wilaya (province) of Illizi, Algeria Good quality a.k.a.: a) Abdelhamid Abou Zeid b) Youcef Adel c) Abou Abdellah d) Abid Hammadou, born 12 Dec. 1965 in Touggourt, Wilaya (province) of Ouargla, Algeria, (previously listed as) Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 3 Jul. 2008 (amended on 10 May 2012, 15 Nov. 2012) Other information: Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Located in Northern Mali as of Jun. 2008. Mother's name is Benarouba Bachira. Father's name is Mabrouk. He usurped the identity of Abid Hammadou, who allegedly died in Chad in 2004.

QI.G.341.14 Name: 1: KEVIN 2: GUIAVARCH 3: na 4: na

Title: na Designation: na DOB: 12 Mar. 1993 POB: Paris, France Good quality a.k.a.: na Low

quality a.k.a.: na Nationality: French Passport no.: na National identification no.: na Address: Syrian Arab Republic, (located in since 2012) Listed on: 23 Sep. 2014 Other information: French terrorist fighter who travelled to Syria and joined Al-Nusrah Front for the People of the Levant (QE.A.137.14). Facilitator of foreign terrorist fighters from France to Syria. Activist in violent propaganda through the Internet.

QI.G.218.06. Name: 1: GUN GUN 2: RUSMAN 3: GUNAWAN 4: na

**Title:** na **Designation:** na **DOB:** 6 Jul. 1977 **POB:** Cianjur, West Java, Indonesia **Good quality a.k.a.:** a) Gunawan, Rusman b) Abd Al-Hadi c) Abdul Hadi d) Abdul Karim e) Bukhori f) Bukhory **Low quality a.k.a.:** na **Nationality:** Indonesian **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 21 Apr. 2006 (amended on 13 Dec. 2011) **Other information:** Brother of Nurjaman Riduan Isamuddin (QI.I.87.03). Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.H.3.01. Name: 1: SALIM 2: AHMAD 3: SALIM 4: HAMDAN

سال م أحمد سال م حمدان: Name (original script)

Title: na Designation: na DOB: 1965 POB: a) Al-Mukalla, Yemen b) Al-Mukala, Yemen Good quality a.k.a.: a) Saqr Al-Jaddawi (ປລຸບານ ຄຸກ b) Saqar Al Jadawi c) Saqar Aljawadi d) Salem Ahmed Salem Hamdan Low quality a.k.a.: na Nationality: Yemeni Passport no.: Yemeni passport number 00385937 National identification no.: na Address: a) Shari Tunis, Sana'a, Yemen, (previous address) b) Located in Yemen since Nov. 2008 Listed on: 25 Jan. 2001 (amended on 25 Jul. 2006, 23 Apr. 2007, 30 Jan. 2009, 17 Jul. 2009, 25 Jan. 2010) Other information: Driver and private bodyguard to Usama bin Laden (QI.B.8.01) from 1996 until 2001. Transferred from United States custody to Yemen in Nov. 2008. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jul. 2010.

QI.H.144.03. Name: 1: MOHAMMAD 2: TAHIR 3: HAMMID 4: na

Name (original script): محمد طاهر حامد

**Title:** Imam **Designation:** na **DOB:** 1 Nov. 1975 **POB:** Poshok, Iraq **Good quality a.k.a.:** Abdelhamid Al Kurdi **Low quality a.k.a.:** na **Nationality:** na **Passport no.:** na **Nationalidentification no.:** na **Address:** na **Listed on:** 12 Nov. 2003 (amended on 9 Sep. 2005, 21 Dec. 2007, 16 May 2011) **Other information:** A deportation order was issued by the Italian authorities on 18 Oct. 2004. Considered a fugitive from justice by the Italian authorities as of Sep. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.H.204.05. Name: 1: ISNILON 2: TOTONI 3: HAPILON 4: na

**Title:** na **Designation:** na **DOB:** a) 18 Mar. 1966 b) 10 Mar. 1967 **POB:** Bulanza, Lantawan, Basilan, the Philippines **Good quality a.k.a.:** a) Isnilon Hapilun b) Isnilon Hapilun c) Abu Musab d) Salahudin e) Tuan Isnilon **Low quality a.k.a.:** na **Nationality:** Filipino **Passport no.:** na **Nationalidentification no.:** na **Address:** na **Listed on:** 6 Dec. 2005 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.H.268.09. Name: 1: ABDUL 2: HAQ 3: na 4: na

Title: na Designation: na DOB: 10 Oct. 1971 POB: Chele County, Khuttan Area, Xinjiang Uighur Autonomous Region, China Good quality a.k.a.: a) Maimaitiming Maimaiti b) Abdul Heq c) Abuduhake d) Abdulheq Jundullah e) 'Abd Al-Haq f) Memetiming Memeti g) Memetiming Aximu h) Memetiming Qekeman i) Maiumaitimin Maimaiti j) Abdul Saimaiti k) Muhammad Ahmed Khaliq Low quality a.k.a.: a) Maimaiti Iman b) Muhelisi c) Qerman d) Saifuding Nationality: Chinese Passport no.: na National identification no.: Chinese national identity card number 653225197110100533 Address: na Listed on: 15 Apr. 2009 (amended on 13 Dec. 2011) Other information: Location (as at Apr. 2009): Pakistan. Overall leader and commander of the Eastern Turkistan Islamic Movement (QE.E.88.02.). Involved in fundraising and recruitment for this organization. Reportedly deceased in Pakistan in February 2010.

QI.H.88.03. Name: 1: GULBUDDIN 2: HEKMATYAR 3: na 4: na

گ ل بدیان حکم تا پار :Name (original script)

**Title:** na **Designation:** na **DOB:** 1 Aug. 1949 **POB:** Kunduz Province, Afghanistan **Good quality a.k.a.:** a) Gulabudin Hekmatyar b) Golboddin Hikmetyar c) Gulbuddin Khekmatiyar d) Gulbuddin Hekmatiar e) Gulbuddin Hekmatyar f) Gulbudin Hekmetyar **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 20 Feb. 2003 (amended on 16 May 2011) **Other information:** Belongs to the Kharoti tribe. Believed to be in the Afghanistan/Pakistan border area as at Jan. 2011. Father's name is Ghulam Qader. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.H.29.01. Name: 1: RI'AD 2: MUHAMMAD HASAN 3: MUHAMMAD 4: HIJAZI

رياض محمد حسن محمد الحجازي: Name (original script):

Title: na Designation: na DOB: 30 Dec. 1968 POB: California, United States of America Good quality a.k.a.: a) Hijazi, Raed M. b) Al-Hawen, Abu-Ahmad c) Al-Shahid, Abu-Ahmad d) Raed Muhammad Hasan Muhammad Hijazi Low quality a.k.a.: a) Al-Maghribi, Rashid (The Moroccan) b) Al-Amriki, Abu-Ahmad (The American) Nationality: Jordanian Passport no.: na National identification no.: a) United States Social Security Number: 548-91-5411 b) National number 9681029476 Address: na Listed on: 17 Oct. 2001 (amended on 10 Apr. 2003, 16 May 2011) Other information: In custody in Jordan as at Mar. 2010. Father's name is Mohammad Hijazi. Mother's name is Sakina. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.H.221.06. Name: 1: JAMAL 2: HOUSNI 3: na 4: na

Name (original script): جمال حسد ني

**Title:** na **Designation:** na **DOB:** 22 Feb. 1983 **POB:** Morocco **Good quality a.k.a.:** a) Djamel II marocchino b) Jamal Al Maghrebi c) Hicham **Low quality a.k.a.:** na **Nationality:** na **Passport no.:** na **National identification no.:** na **Address:** a) Via Uccelli di Nemi n. 33, Milan b) via F. De Lemene n. 50, Milan **Listed on:** 2 Aug. 2006 (amended on 1 Sep. 2009) **Other information:** He is subject to Tribunale de Milano Custody Order n. 5236/02 R.G.N.R of 25 Nov. 2003 1511/02 R.G.GIP. Convicted and sentenced on 21 Sep. 2006 to seven years of detention by the Milan Assizes Court, Italy, for belonging to a criminal association with terrorist aims and receiving stolen goods. The sentence was confirmed on 17 Jul. 2007 by the Milan Assizes Appeal Court. In custody as at 16 Jun. 2009. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 Jul. 2009.

QI.H.10.01. Name: 1: ZAYN 2: AL-ABIDIN 3: MUHAMMAD 4: HUSSEIN

Name (original script): زين ال عاب دين محمد حسدين

Title: na Designation: na DOB: 12 Mar. 1971 POB: Riyadh, Saudi Arabia Good quality a.k.a.: a) Abd Al-Hadi Al-Wahab b) Zain Al-Abidin Muhammad Husain c) Zayn Al-Abidin Muhammad Husayn d) Zeinulabideen Muhammed Husein Abu Zubeidah Low quality a.k.a.: a) Abu Zubaydah b) Abu Zubaida c) Tariq Hani Nationality: Palestinian Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 10 Apr. 2003, 25 Jul. 2006, 23 Apr. 2007, 18 Jul. 2007, 27 Jul. 2007, 17 Jul. 2009, 16 Dec. 2010) Other information: Close associate of Usama bin Laden (QI.B.8.01) and facilitator of terrorist travel. In custody of the United States of America as at Jul. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.H.195.05. Name: 1: AL SAYYID 2: AHMED 3: FATHI 4: HUSSEIN ELIWAH

ال سد يد احمد ف تحي حسدين علي يوة :(Name (original script

Title: na Designation: na DOB: a) 30 Jul. 1964 b) 30 Jan. 1964 POB: Suez, Egypt Good quality a.k.a.: a) Al Sayyid Ahmed Fathi Hussein Eliwa b) Al Sayyid Ahmed Fathi Hussein Alaiwah c) Al Sayyid Ahmed Fathi Hussein Elaiwa d) Al Sayyid Ahmed Fathi Hussein Ilewah e) Al Sayyid Ahmed Fathi Hussein Alaywah f) El Sayed Ahmad Fathi Hussein Elaiwa g) Hatim h) Hisham i) Abu Umar j) El-Sayed Ilawah born on 3 Jul.1954 Low quality a.k.a.: na Nationality: Egyptian Passport no.: United Kingdom passport number RP0185179 issued on 11 Sep. 2001, expires on 11 Sep. 2011 (in the name of Al-Sayyid Ilewah) National identification no.: na Address: United Kingdom Listed on: 29 Sep. 2005 (amended on 6 Oct. 2005, 18 Aug. 2006, 13 Dec. 2011) Other information: Sentenced to 15 years imprisonment in Egypt in 1999. Father's name is Fathi Hussein Elaiwa. Member of Egyptian Islamic Jihad (QE.A.3.01). Review pursuant to Security Council resolution 1822

(2008) was concluded on 29 Jul. 2010.

QI.I.67.02. Name: 1: MOSTAFA 2: KAMEL 3: MOSTAFA 4: IBRAHIM Name (original script): مصط في كمال مصط في ابر راهيم

**Title:** na **Designation:** na **DOB:** 15 Apr. 1958 **POB:** Alexandria, Egypt **Good quality a.k.a.: a)** Mustafa Kamel Mustafa **b)** Adam Ramsey Eaman **c)** Kamel Mustapha Mustapha **d)** Mustapha Kamel Mustapha **e)** Abu Hamza **f)** Mostafa Kamel Mostafa **Low quality a.k.a.: a)** Abu Hamza Al-Masri **b)** Abu Hamza **c)** Abu Hamza Al-Misri **Nationality:** British **Passport no.:** na **National identification no.:** na **Address:** United States of America **Listed on:** 24 Apr. 2002 (amended on 26 Nov. 2004, 25 Jul. 2006, 14 Mar. 2008, 21 Oct. 2010, 4 Aug. 2014) **Other information:** Extradited from the United Kingdom to the United States of America on 5 Oct. 2012. Convicted on terrorism charges by a court in the United States of America in May 2014. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Apr. 2010.

QI.I.308.12. Name: 1: ZAFAR 2: IQBAL 3: na 4: na

**Title:** na **Designation:** na **DOB:** 4 Oct. 1953 **POB:** na **Good quality a.k.a.:** a) Zaffer Iqbal **b)** Malik Zafar Iqbal Shehbaz **c)** Malik Zafar Iqbal Shahbaz **d)** Malik Zafar Iqbal **Low quality a.k.a.:** a) Zafar Iqbal Chaudhry **b)** Muhammad Zafar Iqbal **Nationality:** Pakistani **Passport no.:** Passport number DG5149481, issued on 22 Aug. 2006, expired on 21 Aug. 2011, passport booklet number A2815665 **National identification no.:** National identification number 35202- 4135948-7 b) Alternate national identification number 29553654234 **Address:** Masjid al-Qadesia, 4 Lake Road, Lahore, Pakistan **Listed on:** 14 Mar. 2012 **Other information:** Senior leader and co-founder of Lashkar-e-Tayyiba (QE.L.118.05.) (LeT) who has held various senior leader positions in LeT and its front organization, Jamaat-ud-Dawa (JUD) (listed as an alias of LeT). As of 2010, in charge of LeT/JUD finance department, director of its education department and president of its medical wing. Other title: Professor.

QI.I.87.03. Name: 1: NURJAMAN 2: RIDUAN 3: ISAMUDDIN 4: na

Title: na Designation: na DOB: 4 Apr. 1964 POB: Cianjur, West Java, Indonesia Good quality a.k.a.: a) Hambali b) Nurjaman c) Isomuddin, Nurjaman Riduan d) Hambali Bin Ending e) Encep Nurjaman (birth name) f) Hambali Ending Hambali g) Isamuddin Riduan h) Isamudin Ridwan Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: na Address: na Listed on: 28 Jan. 2003 (amended on 2 Jul. 2007, 27 Jul. 2007, 16 May 2011) Other information: Senior leader of Jemaah Islamiyah (QE.J.92.02.). Brother of Gun Gun Rusman Gunawan (QI.G.218.06.). In custody of the United States of America, as of July 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 Apr. 2010.

QI.I.321.14. Name: 1: MALIK 2: MUHAMMAD 3: ISHAQ 4: na

مالک محمد ا سحاق :Name (original script)

Title: na Designation: na DOB: Approximately 1959 POB: Rahim Yar Khan, Punjab Province, Pakistan Good quality a.k.a.: Malik Ishaq Low quality a.k.a.: na Nationality: Pakistani Passport no.: na National identification no.: na Address: Pakistan Listed on: 14 Mar. 2014 Other information: One of the founders and a current leader of Lashkar i Jhangvi (LJ) (QE.L.96.03). Physical description: heavy build with black eye colour, black hair colour and medium brown complexion with a heavy black beard. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice.

QI.J.180.04. Name: 1: KHADAFI 2: ABUBAKAR 3: JANJALANI 4: na

Title: na Designation: na DOB: 3 Mar. 1975 POB: Isabela, Basilan, Philippines Good quality
a.k.a.: a) Khadafy Janjalani b) Khaddafy Abubakar Janjalani c) Abu Muktar Low quality a.k.a.:
na Nationality: Filipino Passport no.: na National identification no.: na Address: na Listed on:
22 Dec. 2004 (amended on 23 Feb. 2009) Other information: Reportedly deceased in 2006. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

QI.J.99.03. Name: 1: KHALIL 2: BEN AHMED 3: BEN MOHAMED 4: JARRAYA Name (original script): خ ل يل بـ ن احمد بـ ن محمد جرايـ ة

**Title:** na **Designation:** na **DOB:** 8 Feb. 1969 **POB:** Sfax, Tunisia **Good quality a.k.a.: a)** Khalil Yarraya **b)** Ben Narvan Abdel Aziz, born 15 Aug. 1970 in Sereka, former Yugoslavia **c)** Abdel Aziz Ben Narvan, born 15 Aug. 1970 in Sereka, former Yugoslavia **Low quality a.k.a.: a)** Amro **b)** Omar **c)** Amrou **d)** Amr **Nationality:** Tunisian **Passport no.:** Tunisian passport number K989895, issued on 26 Jul. 1995 in Genoa, Italy, expired on 25 Jul. 2000 **National identification no.:** na **Address:** Nuoro, Italy **Listed on:** 25 Jun. 2003 (amended on 26 Nov. 2004, 20 Dec. 2005, 17 Oct. 2007, 16 Sep. 2008, 24 Mar. 2009, 10 Aug. 2009, 6 Aug. 2010) **Other information:** Detained in Italy since 9 Aug. 2008 for his implication in a case related to terrorism. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.J.114.03. Name: 1: SALIM Y SALAMUDDIN 2: JULKIPLI 3: na 4: na
Title: na Designation: na DOB: 20 Jun. 1967 POB: Tulay, Jolo Sulu, Philippines Good quality
a.k.a.: a) Kipli Sali b) Julkipli Salim Low quality a.k.a.: na Nationality: Filipino Passport no.:
na National identification no.: na Address: na Listed on: 9 Sep. 2003 (amended on 23 Feb.
2009, 13 Dec. 2011) Other information: In detention in the Philippines as at May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.K.72.02. Name: 1: MEHDI 2: BEN MOHAMED 3: BEN MOHAMED 4: KAMMOUN Name (original script): الْمهدى بـ ن محمد كـ مون

Title: na Designation: na DOB: 3 Apr. 1968 POB: Tunis, Tunisia Good quality a.k.a.: na Low quality a.k.a.: Salmane Nationality: Tunisian Passport no.: Tunisian passport number M307707, issued on 12 Apr. 2000, expired on 11 Apr. 2005 National identification no.: na Address: Via Masina Number 7, Milan, Italy Listed on: 3 Sep. 2002 (amended on 20 Dec. 2005, 7 Jun. 2007, 23 Dec. 2010) Other information: Italian Fiscal Code: KMMMHD68D03Z352N. Deported from Italy to Tunisia on 22 July 2005. Serving an eight-year prison term in Tunisia for membership of a terrorist organization abroad as at Jan. 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.K.302.12. Name: 1: MEVLÜT 2: KAR 3: na 4: na

QI.K.135.03. Name: 1: DAWOOD 2: IBRAHIM 3: KASKAR 4: na

Title: na Designation: na DOB: 25 Dec. 1978 POB: Ludwigshafen, Germany Good quality a.k.a.: Mevluet Kar Low quality a.k.a.: a) Abu Obaidah b) Obeidah Al Turki c) Al-Turki d) Al Turki Kyosev e) Yanal Yusov f) Abu Udejf el-Turki g) Abu Obejd el-Turki h) Abdurrahman Almanci Nationality: Turkish Passport no.: Turkish passport number TR-M842033 issued in Mainz, Germany by the Turkish Consulate General, issued on 2 May 2002, expired on 24 Jul. 2007 National identification no.: na Address: Güngören Merkez Mahallesi Toros Sokak 6/5, Istanbul, Turkey, (previous as at Aug. 2009) Listed on: 25 Jan. 2012 Other information: Associated with Islamic Jihad Group (QE.I.119.05.). Arrest warrant issued by the investigating judge of the German Federal Court of Justice on 17 Aug. 2009.

Title: Sheikh Designation: na DOB: 26 Dec. 1955 POB: a) Bombai b) Ratnagiri, India Good quality a.k.a.: a) Dawood Ebrahim b) Sheikh Dawood Hassan c) Abdul Hamid Abdul Aziz d) Anis Ibrahim e) Aziz Dilip f) Daud Hasan Shaikh Ibrahim Kaskar g) Daud Ibrahim Memon Kaskar h) Dawood Hasan Ibrahim Kaskar i) Dawood Ibrahim Memon j) Dawood Sabri k) Kaskar Dawood Hasan I) Shaikh Mohd Ismail Abdul Rehman m) Dowood Hassan Shaikh Ibrahim Low quality a.k.a.: a) Ibrahim Shaikh Mohd Anis b) Shaikh Ismail Abdul c) Hizrat Nationality: Indian Passport no.: a) Indian passport number A-333602 issued in Bombay, India, issued on 4 Jun. 1985 (passport subsequently revoked by the Government of India) b) Indian passport number M110522 issued in Bombay, issued on 13 Nov. 1978 c) Indian passport number R841697 issued in Bombay, issued on 26 Nov. 1981 d) Indian passport number F823692 (JEDDAH) issued by CGI in Jeddah, issued on 2 Sep. 1989 e) Indian passport number A501801 (BOMBAY), issued on 26 Jul. 1985 f) Indian passport number K560098 (BOMBAY), issued on 30 Jul. 1975 g) Passport number V57865 (BOMBAY), issued on 3 Oct. 1983 h) Passport number P537849 (BOMBAY), issued on 30 Jul. 1979 i) Passport number A717288 (MISUSE) issued in Dubai, issued on 18 Aug. 1985 j) Pakistani passport number G866537 (MISUSE) issued in Rawalpindi, issued on 12 Aug. 1991 k) Passport number C-267185 issued in Karachi in Jul.1996 I) Passport number H-123259 issued in Rawalpindi in Jul. 2001 m) Passport number G-869537 issued in Rawalpindi n) Passport number KC-

285901 National identification no.: na Address: a) Karachi/Pakistan, White House, Near Saudi

Mosque, Clifton **b)** House Nu 37 - 30th Street - defence, Housing Authority Karachi Pakistan **c)** Palatial bungalow in the hilly area of Noorabad in Karachi **d)** Property at Margalla Raod F 6/2 Street no. 22, House number 29 in Karachi **Listed on:** 3 Nov. 2003 (amended on 21 Mar. 2006, 25 Jul. 2006, 2 Jul. 2007, 11 Mar. 2010) **Other information:** International arrest warrant issued by the Government of India. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QI.K.306.12. Name: 1: MUSTAFA 2: HAJJI 3: MUHAMMAD 4: KHAN

مصط في حجي محمد خان :Name (original script)

QI.A.336.14. Name: 1: ANAS 2: HASAN 3: KHATTAB 4: na

**Title:** Amir **Designation:** na **DOB:** 7 Apr. 1986 **POB:** Damascus, Syrian Arab Republic **Good quality a.k.a.:** Samir Ahmed al-Khayat **Low quality a.k.a.:** a) Hani b) Abu Hamzah c) Abu-Ahmad Hadud **Nationality:** na **Passport no.:** na **National identification no.:** 00351762055 **Address:** na **Listed on:** 23 Sep. 2014 **Other information:** Administrative amir of Al-Nusrah Front for the People of the Levant (QE.A.137.14.)

QI.K.73.02. Name: 1: SAMIR 2: ABD EL LATIF 3: EL SAYED 4: KISHK

Name (original script): سم ير ع بد اللط يف السيد ك شك

Title: na Designation: na DOB: 14 May 1955 POB: Gharbia, Egypt Good quality a.k.a.: Samir Abdellatif el Sayed Keshk Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 3 Sep. 2002 (amended on 26 Nov. 2004, 7 Jun. 2007, 16 May 2011) Other information: Deported from Italy to Egypt on 2 July 2003. Review pursuant to Security Council resolution 1822 (2008) was concluded on 16 Jul. 2010.

QI.K.340.14 Name: 1: EMILIE 2: KONIG 3: na 4: na

**Title:** na **Designation:** na **DOB:** 9 Dec. 1984 **POB:** Ploemeur, France **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** French **Passport no.:** na **National identification no.:** na **Address:** Syrian Arab Republic, (located in since 2013) **Listed on:** 23 Sep. 2014 **Other information:** French terrorist fighter who travelled to Syria and joined Islamic State in Iraq and the Levant, listed as Al-Qaida in Iraq (AQI) (QE.J.115.04). Active in radicalizing and propagating Al-Qaida's (QE.A.4.01) ideology through the Internet. Incites violent activities against France.

QI.L.190.05. Name: 1: ABDELKADER 2: LAAGOUB 3: na 4: na

ع بد ال قادر لاغوب: Name (original script)

Title: na Designation: na DOB: 23 Apr. 1966 POB: Casablanca, Morocco Good quality a.k.a.: na Low quality a.k.a.: Rachid Nationality: Moroccan Passport no.: Moroccan passport number D-379312 National identification no.: Moroccan national identity card DE- 473900 Address: Number 4, Via Europa, Paderno Ponchielli, Cremona, Italy Listed on: 29 Jul. 2005 (amended on 21 Dec. 2007, 13 Dec. 2011) Other information: Italian Fiscal code: LGBBLK66D23Z330U. Father's name is Mamoune Mohamed. Mother's name is Fatna Ahmed. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.L.319.13. Name: 1: MOHAMED 2: LAHBOUS 3: na 4: na

Name (original script): محمد ل ح بوس

Title: na Designation: na DOB: 1978 POB: Mali Good quality a.k.a.: a) Mohamed Ennouini b) Hassan c) Hocine Low quality a.k.a.: na Nationality: Malian Passport no.: na National identification no.: na Address: Mali Listed on: 24 Oct. 2013 Other information: Member of the

Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12).

QI.L.264.08. Name: 1: ZAKI-UR-REHMAN 2: LAKHVI 3: na 4: na

Title: na Designation: na DOB: 30 Dec. 1960 POB: Okara, Pakistan Good quality a.k.a.: a) Zakir Rehman Lakvi b) Zaki Ur-Rehman Lakvi c) Kaki Ur-Rehman d) Zakir Rehman e) Abu Waheed Irshad Ahmad Arshad Low quality a.k.a.: Chachajee Nationality: Pakistani Passport no.: na National identification no.: Pakistani national identification number 61101-9618232-1 Address: a) Barahkoh, P.O. DO, Tehsil and District Islamabad, Pakistan, (location as at May 2008) b) Chak No. 18/IL, Rinala Khurd, Tehsil Rinala Khurd, District Okara, Pakistan, (previous location) Listed on: 10 Dec. 2008 Other information: Chief of operations of Lashkar-e-Tayyiba (listed under permanent reference number QE.L.118.05.).

QI.L.247.08. Name: 1: RUBEN 2: PESTANO 3: LAVILLA, JR 4: na

Title: Sheik Designation: na DOB: 4 Oct. 1972 POB: Sitio Banga Maiti, Barangay Tranghawan, Lambunao, Iloilo, Philippines Good quality a.k.a.: a) Reuben Lavilla b) Sheik Omar c) Mile D Lavilla d) Reymund Lavilla e) Ramo Lavilla f) Mike de Lavilla g) Abdullah Muddaris h) Ali Omar i) Omar Lavilla j) Omar Labella Low quality a.k.a.: a) So b) Eso c) Junjun Nationality: Filipino Passport no.: a) Filipino passport number MM611523 (2004) b) Filipino passport number EE947317 (2000-2001) c) Filipino passport number P421967 (1995-1997) National identification no.: na Address: 10th Avenue, Caloocan City, Philippines Listed on: 4 Jun. 2008 (amended on 16 Sep. 2008, 13 Dec. 2011) Other information: Spiritual leader of the Rajah Solaiman Movement (QE.R.128.08.). Associated with Khadafi Abubakar Janjalani (QI.J.180.04.) and the International Islamic Relief Organization, Philippines, branch offices (QE.I.126.06.). In detention in the Philippines as of May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.L.155.04. Name: 1: DJAMEL 2: LOUNICI 3: na 4: na

جمال لـ و نـ يـ سي :Name (original script)

Title: na Designation: na DOB: 1 Feb. 1962 POB: Algiers, Algeria Good quality a.k.a.: Jamal Lounici Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 16 Jan. 2004 (amended on 7 Apr. 2008, 2 Dec. 2008, 30 Jan. 2009, 16 May 2011) Other information: Father's name is Abdelkader. Mother's name is Johra Birouh. Returned from Italy to Algeria where he resides since Nov. 2008. Son in law of Othman Deramchi (QI.D.164.04). Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.M.286.10. Name: 1: HAKIMULLAH 2: MEHSUD 3: na 4: na

ح کے یم اللہ مد سود :Name (original script)

Title: na Designation: na DOB: Approximately 1979 POB: Pakistan Good quality a.k.a.: Hakeemullah Mehsud Low quality a.k.a.: Zulfiqar Nationality: Pakistani Passport no.: na National identification no.: na Address: na Listed on: 21 Oct. 2010 (amended on 29 Jul. 2011) Other information: Reportedly born in South Waziristan, Pakistan, and believed to be residing in Pakistan. Leader of Tehrik-e Taliban Pakistan (TTP) (QE.T.132.11.), an organization based in the tribal areas along the Afghanistan/Pakistan border.

QI.M.206.05. Name: 1: IBRAHIM 2: MOHAMED KHALIL 3: na 4: na

اب راهیم محمد خلیا: Name (original script)

**Title:** na **Designation:** na **DOB:** 2 Jul. 1975 **POB:** Day Az-Zawr, Syria **Good quality a.k.a.:** a) Khalil Ibrahim Jassem, born 2 May 1972 in Baghdad, Iraq b) Khalil Ibrahim Mohammad, born 3 Jul. 1975 in Mosul, Iraq c) Khalil Ibrahim Al Zafiri, born 1972 d) Khalil, born 2 May 1975 **Low quality a.k.a.:** na **Nationality:** Syrian **Passport no.:** Temporary suspension of deportation No. T04338017 issued by Alien's Office of the City of Mainz, expired on 8 May 2013 **National identification no.:** na **Address:** Refugee shelter Alte Ziegelei, 55128 Mainz, Germany **Listed on:** 6 Dec. 2005 (amended on 25 Jan. 2010, 13 Dec. 2011, 6 Aug. 2013) **Other information:** Sentenced to 7 years of imprisonment in Germany on 6 Dec. 2007. Released on 30 December 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 5 Oct. 2009.

QI.A.202.05. Name: 1: MAZEN 2: SALAH 3: MOHAMMED 4: na

مازن صدلاح محمد :Name (original script)

Title: na Designation: na DOB: 18 May 1981 POB: Arbil, Iraq Good quality a.k.a.: a) Mazen Ali Hussein, born 1 Jan. 1982 in Baghdad, Iraq b) Issa Salah Muhamad, born 1 Jan. 1980 Low quality a.k.a.: na Nationality: Iraqi Passport no.: German travel document ("Reiseausweis") A 0144378 (revoked as at Sep. 2012) National identification no.: na Address: 94051 Hauzenberg, Germany Listed on: 6 Dec. 2005 (amended on 21 Oct. 2008, 13 Dec. 2011, 15 Nov. 2012) Other information: Member of Ansar Al-Islam (QE.A.98.03). Released from custody in Germany on 18 May 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.Y.126.03. Name: 1: YUNOS 2: UMPARA 3: MOKLIS 4: na

**Title:** na **Designation:** na **DOB:** 7 Jul. 1966 **POB:** Lanao del Sur, Philippines **Good quality a.k.a.:** a) Muklis Yunos b) Mukhlis Yunos (previously listed as) c) Saifullah Mukhlis Yunos d) Saifulla Moklis Yunos **Low quality a.k.a.:** Hadji Onos **Nationality:** Filipino **Passport no.:** na **Nationalidentification no.:** na **Address:** Philippines **Listed on:** 9 Sep. 2003 (amended on 9 Sep. 2005, 23 Feb. 2009, 3 Jun. 2009, 16 May 2011) **Other information:** Sentenced to life without parole in the Philippines on 23 Jan. 2009 for his involvement in the bombings of 30 Dec. 2000 in Manila, the Philippines. Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.M.147.03. Name: 1: MOHAMED 2: AMIN 3: MOSTAFA 4: na

Name (original script): محمد أمين مصط

Title: na Designation: na DOB: 11 Oct. 1975 POB: Kirkuk, Iraq Good quality a.k.a.: na Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: Via della Martinella 132, Parma, Italy (Domicile) Listed on: 12 Nov. 2003 (amended on 9 Sep. 2005, 7 Jun. 2007, 16 May 2011) Other information: Under administrative control measure in Italy scheduled to expire on 15 Jan. 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.M.129.03. Name: 1: DJAMEL 2: MOUSTFA 3: na 4: na

Rame (original script): جمال مصط في

Title: na Designation: na DOB: 28 Sep. 1973 POB: Tiaret, Algeria Good quality a.k.a.: a) Ali Barkani, born 22 Aug. 1973 in Morocco b) Kalad Belkasam, born 31 Dec. 1979 c) Mostafa Djamel, born 31 Dec. 1979 in Maskara, Algeria d) Mostefa Djamel, born 26 Sep. 1973 in Mahdia, Algeria e) Mustafa Djamel, born 31 Dec. 1979 in Mascara, Algeria f) Balkasam Kalad, born 26 Aug. 1973 in Algiers, Algeria g) Bekasam Kalad, born 26 Aug. 1973 in Algiers, Algeria h) Belkasam Kalad, born 26 Aug. 1973 in Algiers, Algeria i) Damel Mostafa, born 31 Dec. 1979 in Algiers, Algeria i) Djamal Mostafa, born 31 Dec. 1979 in Maskara, Algeria k) Djamal Mostafa, born 10 Jun. 1982 I) Djamel Mostafa, born 31 Dec. 1979 in Maskara, Algeria m) Diamel Mostafa, born 31 Dec. 1979 in Algiers, Algeria n) Fjamel Moustfa, born 28 Sep. 1973 in Tiaret, Algeria o) Djamel Mustafa, born 31 Dec. 1979 p) Djamel Mustafa, born 31 Dec. 1979 in Mascara, Algeria Low quality a.k.a.: Mustafa Nationality: Algerian Passport no.: a) Counterfeit Danish driving licence no. 20645897, made out to Ali Barkani, born on 22 Aug. 1973 in Morocco b) Algerian birth certificate, issued for Djamel Mostefa, born on 25 Sep. 1973 in Mehdia, Tiaret province, Algeria National identification no.: na Address: Algeria Listed on: 23 Sep. 2003 (amended on 7 Sep. 2007, 7 Apr. 2008, 25 Jan. 2010, 16 May 2011) Other information: Father's name is Djelalli Moustfa. Mother's name is Kadeja Mansore. Associated with Ismail Abdallah Sbaitan Shalabi (QI.S.128.03), Mohamed Abu Dhess (QI.A.130.03) and Aschraf Al-Dagma (QI.A.132.03). Deported from Germany to Algeria in Sep. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Oct. 2009.

QI.A.238.08. Name: 1: MUBARAK 2: MUSHAKHAS 3: SANAD 4: MUBARAK AL-BATHALI Name (original script): م بارك م شخص سند م بارك ال

Title: na Designation: na DOB: 1 Oct. 1961 POB: Kuwait Good quality a.k.a.: a) Mubarak Mishkhis Sanad Al-Bathali b) Mubarak Mishkhis Sanad Al-Badhali c) Mubarak Al-Bathali d) Mubarak Mishkhas Sanad Al-Bathali f) Mobarak Meshkhas Me

Bthaly Low quality a.k.a.: Abu Abdulrahman Nationality: Kuwaiti Passport no.: a) Kuwaiti passport number 101856740, issued on 12 May 2005 and expired on 11 May 2007 b) Kuwaiti passport number 002955916 National identification no.: Kuwaiti national identification number 261122400761 Address: Al-Salibekhat area, Kuwait, (residence as at Mar. 2009) Listed on: 16 Jan. 2008 (amended on 1 Jul. 2008, 23 Jul. 2008, 25 Jan. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

QI.M.272.09. Name: 1: MOHAMMED 2: YAHYA 3: MUJAHID 4: na

**Title:** na **Designation:** na **DOB:** 12 Mar. 1961 **POB:** Lahore, Punjab Province, Pakistan **Good quality a.k.a.:** Mohammad Yahya Aziz **Low quality a.k.a.:** na **Nationality:** Pakistani **Passport no.:** na **National identification no.:** Pakistani national identification number 35404-1577309-9 **Address:** na **Listed on:** 29 Jun. 2009 **Other information:** Associated with Lashkar-e-Tayyiba (QE.L.118.05.). In detention as at June 2009.

QI.M.119.03. Name: 1: ARIS 2: MUNANDAR 3: na 4: na

**Title:** na **Designation:** na **DOB:** a) 1 Jan. 1971 b) Between 1962 and 1968 **POB:** Sambi, Boyolali, Java, Indonesia **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** na **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 9 Sep. 2003 (amended on 9 Sep. 2005, 4 Oct. 2006) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.M.120.03. Name: 1: ABDUL HAKIM 2: MURAD 3: na 4: na

ع بد الدك يم مراد :Name (original script)

Title: na Designation: na DOB: 11 Apr. 1968 POB: Kuwait Good quality a.k.a.: a) Murad, Abdul Hakim Hasim b) Murad, Abdul Hakim Ali Hashim c) Murad, Abdul Hakim al Hashim d) Saeed Akman e) Saeed Ahmed f) Abdul Hakim Ali al-Hashem Murad Low quality a.k.a.: na Nationality: Pakistani Passport no.: a) Pakistani passport number 665334 issued in Kuwait b) Pakistani passport number 917739 issued in Pakistan on 8 Aug. 1991, expired on 7 Aug. 1996 National identification no.: na Address: na Listed on: 9 Sep. 2003 (amended on 16 May 2011) Other information: Mother's name is Aminah Ahmad Sher al-Baloushi. In custody of the United States. Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.M.196.05. Name: 1: ALI 2: SAYYID 3: MUHAMED 4: MUSTAFA BAKRI

ع لي السيد محمد مصط في بكري :(Name (original script

Title: na Designation: na DOB: 18 Apr. 1966 POB: Beni-Suef, Egypt Good quality a.k.a.: a) Ali Salim b) Abd Al-Aziz al-Masri Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 29 Sep. 2005 (amended on 13 Dec. 2011) Other information: Member of the Shura Council of Al-Qaida (QE.A.4.01.) and Egyptian Islamic Jihad (QE.A.3.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.N.280.10. Name: 1: TAYEB 2: NAIL 3: na 4: na

Name (original script): ال ط يب ذ اير ال

Title: na Designation: na DOB: Approximately 1972 POB: Faidh El Batma, Djelfa, Algeria Good quality a.k.a.: a) Djaafar Abou Mohamed (בשלים שלים) b) Abou Mouhadjir (בשלים שלים) c) Mohamed Ould Ahmed Ould Ali, born in 1976 Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Mali Listed on: 22 Apr. 2010 (amended on 15 Apr. 2014) Other information: Convicted in absentia by Algerian tribunal on 28 Mar. 1996. Algerian international arrest warrant number 04/09 of 6 Jun. 2009 issued by the Tribunal of Sidi Mhamed, Algiers, Algeria. Algerian extradition request number 2307/09 of 3 Sep. 2009, presented to Malian authorities. Father's name was Benazouz Nail. Mother's name is Belkheiri Oum El Kheir. Member of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.)

QI.O.314.13. Name: 1: ABDERRAHMANE 2: OULD EL AMAR 3: na 4: na

ع بد الرحمن ولد العامر .(Name (original script

**Title:** na **Designation:** na **DOB:** Between 1977 and 1982 **POB:** Tabankort, Mali **Good quality a.k.a.:** a) Ahmed el Tilemsi b) Abderrahmane Ould el Amar Ould Sidahmed Loukbeiti c) Ahmad Ould Amar **Low quality a.k.a.:** na **Nationality:** Malian **Passport no.:** na **National identification no.:** na **Address:** a) Gao, Mali b) Tabankort, Mali c) In Khalil, Mali d) Al Moustarat, Mali **Listed on:** 22 Feb. 2013 **Other information:** Leader of the Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12.). Member of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Arrested in April 2005 in Mauritania, escaped from Nouakchott jail on 26 Apr. 2006. Re-arrested in Sep. 2008 in Mali and released on 15 Apr. 2009. Associated with Mokhtar Belmokhtar (QI.B.136.03.). Father's name is Leewemere.

QI.O.315.13. Name: 1: HAMADA 2: OULD MOHAMED EL KHAIRY 3: na 4: na

حماده ولد د محمد الخبري: (Name (original script

Title: na Designation: na DOB: 1970 POB: Nouakchott, Mauritania Good quality a.k.a.: a) Hamada Ould Mohamed Lemine Ould Mohamed el Khairy b) Ould Kheirou c) Hamad el Khairy Low quality a.k.a.: Abou QumQum Nationality: a) Mauritanian b) Malian Passport no.: Malian passport number A1447120, expired on 19 Oct. 2011 National identification no.: na Address: Gao, Mali Listed on: 22 Feb. 2013 Other information: Leader of the Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12.). Has provided logistical support to the Sahelian group Al Moulathamine, linked with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). International arrest warrant issued by Mauritania. Mother's name is Tijal Bint Mohamed Dadda.

**QI.O.298.11. Name:** 1: ABD AL-RAHMAN 2: OULD MUHAMMAD AL-HUSAYN 3: OULD MUHAMMAD SALIM 4: na

ع بد الرحمن ولد محمد الحسين ولد محمد سليم: Name (original script)

Title: na Designation: na DOB: Approximately 1981 POB: Saudi Arabia Good quality a.k.a.: a) Abdarrahmane ould Mohamed el Houcein ould Mohamed Salem b) la sinuY) من الموري تاذي, (عن الموري تاذي, (عن الموري تاذي, (عن الموري تاذي) الموري تاذي, (عن الموري تاذي, (عن الموري تاذي) الموري تاذي, (عن الموري تاذي, (عن الموري تاذي) الموري تاذي, (عن الموري

QI.P.242.08. Name: 1: DINNO AMOR 2: ROSALEJOS 3: PAREJA 4: na

Title: na Designation: na DOB: 19 Jul. 1981 POB: Cebu City, Philippines Good quality a.k.a.: a)

Johnny Pareja b) Khalil Pareja Low quality a.k.a.: a) Mohammad b) Akmad c) Mighty d)

Rash Nationality: Filipino Passport no.: na National identification no.: na Address: Atimonana,

Quezon Province, Philippines Listed on: 4 Jun. 2008 (amended on 3 Jun. 2009, 13 Dec.

2011) Other information: Member of the Rajah Solaiman Movement (QE.R.128.08.). Father's name is Amorsolo Jarabata Pareja. Mother's name is Leonila Cambaya Rosalejos. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.P.294.11. Name: 1: UMAR 2: PATEK 3: na 4: na

Title: na Designation: na DOB: 20 Jul. 1966 POB: Central Java, Indonesia Good quality a.k.a.: a) Omar Patek b) Mike Arsalan c) Hisyam Bin Zein d) Anis Alawi Jafar Low quality a.k.a.: a) Pa'tek b) Pak Taek c) Umar Kecil d) Al Abu Syekh Al Zacky e) Umangis Mike Nationality: Indonesian Passport no.: na National identification no.: na Address: Indonesia Listed on: 19 Jul. 2011 (amended on 23 Feb. 2012) Other information: Senior member of Jemaah Islamiyah (QE.J.92.02.) involved in planning and funding multiple terrorist attacks in the Philippines and Indonesia. Provided training to Abu Sayyaf Group (QE.A.1.01.). In custody in Indonesia as at Feb. 2012.

QI.Q.271.09. Name: 1: ARIF 2: QASMANI 3: na 4: na

Title: na Designation: na DOB: Approximately 1944 POB: Pakistan Good quality a.k.a.: a)
Muhammad Arif Qasmani b) Muhammad 'Arif Qasmani c) Mohammad Arif Qasmani d) Arif Umer e)

Qasmani Baba f) Memon Baba g) Baba Ji Low quality a.k.a.: na Nationality: Pakistani Passport no.: na National identification no.: na Address: House Number 136, KDA Scheme No. 1, Tipu Sultan Road, Karachi, Pakistan Listed on: 29 Jun. 2009 Other information: Associated with Lashkar-e-Tayyiba (QE.L.118.05.) and Al-Qaida (QE.A.4.01.). In detention as at June 2009.

QI.Q.297.11. Name: 1: HASSAN 2: MUHAMMAD 3: ABU BAKR 4: QAYED

حسن محمد أبو بكر قايد : Name (original script)

QI.R.303.12. Name: 1: FAZAL 2: RAHIM 3: na 4: na

ف ضل رح یم :Name (original script)

**Title:** na **Designation:** na **DOB:** a) 5 Jan. 1974 b) 1977 c) 1975 d) 24 Jan. 1973 **POB:** Kabul, Afghanistan **Good quality a.k.a.:** a) Fazel Rahim; Fazil Rahim b) Fazil Rahman **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** Afghan passport number R512768 **National identification no.:** na **Address:** a) Afghanistan/Pakistan border region (previous address) b) A2, City Computer Plaza, Shar-e-Now, Kabul, Afghanistan (previous address) c) Microrayan 3rd, Apt. 45, block 21, Kabul, Afghanistan (previous address) **Listed on:** 6 Mar. 2012 **Other information:** Was a financial facilitator for the Islamic Movement of Uzbekistan (QE.I.10.01.) and Al-Qaida (QE.A.4.01.). Was associated with Tohir Abdulkhalilovich Yuldashev. As of late 2010, in custody of Pakistani authorities. Father's name is Fazal Ahmad.

QI.R.103.03. Name: 1: AHMED 2: HOSNI 3: RARRBO 4: na

Name (original script): احمد حسد ني راربو

Title: na Designation: na DOB: 12 Sep. 1974 POB: Bologhine, Algeria Good quality a.k.a.: a) Rarrbo Abdallah b) Rarrbo Abdullah c) Rarrbo Ahmed Hosni, born 12 Sep. 1974 in France Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: Algeria Listed on: 25 Jun. 2003 (amended on 17 Oct. 2007, 7 Apr. 2008, 21 Oct. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.199.05. Name: 1: ATA 2: ABDOULAZIZ 3: RASHID 4: na

شيدعطا عبد العزيزر ر Name (original script): شيدعطا

Title: na Designation: na DOB: 1 Dec. 1973 POB: Sulaimaniya, Iraq Good quality a.k.a.: a) Abdoulaziz Ata Rashid, born 1 Dec. 1973 b) Ata Abdoul Aziz Barzingy Low quality a.k.a.: na Nationality: Iraqi Passport no.: None National identification no.: na Address: In prison in Germany Listed on: 6 Dec. 2005 (amended on 21 Oct. 2008, 13 Dec. 2011, 6 Aug. 2013) Other information: Member of Ansar Al-Islam (QE.A.98.03.). Sentenced on 15 Jul. 2008 to 10 years imprisonment in Germany. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.R.75.02. Name: 1: ABDELHALIM 2: HAFED 3: ABDELFATTAH 4: REMADNA

ع بدال حل يم حافظ ع بدال ف تاح رمادنا :(Name (original script

**Title:** na **Designation:** na **DOB:** 2 Apr. 1966 **POB:** Biskra, Algeria **Good quality a.k.a.:** Abdelhalim Remadna **Low quality a.k.a.:** Jalloul **Nationality:** Algerian **Passport no.:** na **Nationalidentification no.:** na **Address:** Algeria **Listed on:** 3 Sep. 2002 (amended on 12 Apr. 2006, 7 Apr. 2008, 3 Jun. 2009, 25 Jan. 2010, 23 Dec. 2010) **Other information:** Deported from Italy to Algeria on 12 Aug. 2006. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Dec. 2009.

QI.R.219.06. Name: 1: TAUFIK 2: RIFKI 3: na 4: na

Title: na Designation: na DOB: 19 Aug. 1974 POB: Dacusuman Surakarta, Central Java, Indonesia Good quality a.k.a.: a) Refke, Taufek b) Rifqi, Taufik c) Rifqi, Tawfiq d) Ami Iraq e) Ami Irza f) Amy Erja g) Ammy Erza h) Ammy Izza i) Ami Kusoman j) Abu Obaida k) Abu Obaidah I) Abu Obeida m) Abu Ubaidah n) Obaidah o) Abu Obayda p) Izza Kusoman q) Yacub, Eric Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: na Address: Philippines Listed on: 21 Apr. 2006 (amended on 13 Dec. 2011) Other information: In detention in the Philippines as at May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.R.150.03. Name: 1: AL-AZHAR 2: BEN KHALIFA 3: BEN AHMED 4: ROUINE

Name (original script): الأزهر بن خليفة بن احمد رويان

Title: na Designation: na DOB: 20 Nov. 1975 POB: Sfax, Tunisia Good quality a.k.a.: na Low quality a.k.a.: a) Salmane b) Lazhar Nationality: Tunisian Passport no.: Tunisian passport number P182583, issued on 13 Sep. 2003, expired on 12 Sep. 2007 National identification no.: na Address: Tunisia Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 21 Dec. 2007, 30 Jan. 2009, 16 May 2011) Other information: Sentenced to six years and ten months of imprisonment for membership of a terrorist association by the Appeal Court of Milan, Italy, on 7 Feb. 2008. Considered a fugitive from justice by the Italian authorities as at Jul. 2008. Under administrative control measure in Tunisia as at 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.R.186.05. Name: 1: ABU 2: RUSDAN 3: na 4: na

Title: na Designation: na DOB: 16 Aug. 1960 POB: Kudus, Central Java, Indonesia Good quality a.k.a.: a) Abu Thoriq b) Rusdjan c) Rusjan d) Rusydan e) Thoriquidin f) Thoriquiddin g) Thoriquidin h) Toriquiddin Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 16 May 2005 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.A.2.01. Name: 1: AMIN 2: MUHAMMAD 3: UL HAQ 4: SAAM KHAN

**Title:** na **Designation:** na **DOB:** 1960 **POB:** Nangarhar Province, Afghanistan **Good quality a.k.a.:** a) Al-Haq, Amin b) Amin, Muhammad **Low quality a.k.a.:** a) Dr. Amin b) Ul-Haq, Dr. Amin **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 18 Jul. 2007, 16 Dec. 2010) **Other information:** Security coordinator for Usama bin Laden (Ql.B.8.01). Repatriated to Afghanistan in February 2006. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.A.20.01. Name: 1: MOHAMMAD 2: HAMDI 3: MOHAMMAD 4: SADIQ AL-AHDAL

محمد حمدي محمد صادق الأهدل :Name (original script)

Title: na Designation: na DOB: 19 Nov. 1971 POB: Medina, Saudi Arabia Good quality a.k.a.: a) Al-Hamati, Muhammad b) Muhammad Muhammad Abdullah Al-Ahdal c) Mohamed Mohamed Abdullah Al-Ahdal Low quality a.k.a.: a) Abu Asim Al-Makki b) Ahmed Nationality: Yemeni Passport no.: Yemeni passport number 541939 issued in Al-Hudaydah, Yemen, issued on 31 Jul. 2000 in the name of Muhammad Muhammad Abdullah Al-Ahdal National identification no.: Yemeni identity card number 216040 Address: Jamal street, Al-Dahima alley, Al-Hudaydah, Yemen Listed on: 17 Oct. 2001 (amended on 30 Jan. 2009, 25 Jan. 2010) Other information: Responsible for the finances of Al-Qa'ida (QE.A.4.01) in Yemen. Accused of involvement in the attack on the USS Cole in 2000. Arrested in Yemen in Nov. 2003. Sentenced to three years and one month of imprisonment by the specialized criminal court of first instance in Yemen. Released on 25 Dec. 2006 after the completion of his sentence. Review pursuant to Security Council resolution 1822

QI.S.263.08. Name: 1: HAFIZ 2: MUHAMMAD 3: SAEED 4: na

**Title:** na **Designation:** na **DOB:** 5 Jun. 1950 **POB:** Sargodha, Punjab, Pakistan **Good quality a.k.a.:** a) Hafiz Mohammad Sahib b) Hafiz Mohammad Sayid c) Hafiz Muhammad d) Hafiz Saeed e) Hafez Mohammad Saeed f) Hafiz Mohammad Sayeed g) Tata Mohammad Syeed h) Mohammad Sayed i) Muhammad Saeed **Low quality a.k.a.:** Hafiz Ji **Nationality:** Pakistani **Passport no.:** na **National identification no.:** Pakistani national identification number 3520025509842-7 **Address:** House No. 116E, Mohalla Johar, Lahore, Tehsil, Lahore City, Lahore District, Pakistan, (location as at May 2008) **Listed on:** 10 Dec. 2008 (amended on 17 Jul. 2009) **Other information:** Muhammad Saeed is the leader of Lashkar-e-Tayyiba (QE.L.118.05.).

QI.S.208.05. Name: 1: RADULAN 2: SAHIRON 3: na 4: na

**Title:** na **Designation:** na **DOB:** a) 1955 b) Approximately 1952 **POB:** Kaunayan, Patikul, Jolo Island, the Philippines **Good quality a.k.a.:** a) Radullan Sahiron b) Radulan Sahirun c) Radulan Sajirun d) Commander Putol **Low quality a.k.a.:** na **Nationality:** Filipino **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 6 Dec. 2005 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.S.222.06. Name: 1: NESSIM 2: BEN ROMDHANE 3: SAHRAOUI 4: na

نه به به ن رمضان صحراوی :(Name (original script

Title: na Designation: na DOB: 3 Aug. 1973 POB: Bizerta, Tunisia Good quality a.k.a.: a) Dass b) Nasim al-Sahrawi Low quality a.k.a.: na Nationality: Tunisian Passport no.: na National identification no.: na Address: Tunisia Listed on: 2 Aug. 2006 (amended on 1 Sep. 2009, 25 Jan. 2010, 13 Dec. 2011) Other information: Considered a fugitive from justice by the Italian authorities and sentenced in absentia to 6 years detention on 20 Nov. 2008. Sentenced in Tunisia to 4 years imprisonment for terrorist activity and in detention in Tunisia as at Jun. 2009. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 Jul. 2009.

QI.S.148.03. Name: 1: NESSIM 2: BEN MOHAMED 3: AL-CHERIF BEN MOHAMED 4: SALEH AL-SAADI

Name (original script): 

ב עני מבמנ ול שני של איני מבמנ ול שני מבמנ ול של איני מבמנ ול של מבמנ ול של איני מבמנ ול מבמנ ול של איני מבמנ ול מב

QI.S.244.08. Name: 1: HILARION 2: DEL ROSARIO 3: SANTOS III 4: na

Title: Amir Designation: na DOB: 12 Mar. 1966 POB: 686 A. Mabini Street, Sangandaan, Caloocan
City, Philippines Good quality a.k.a.: a) Akmad Santos b) Ahmed Islam c) Ahmad Islam Santos d)
Abu Hamsa e) Hilarion Santos III f) Abu Abdullah Santos g) Faisal Santos Low quality a.k.a.: a)
Lakay b) Aki c) Aqi Nationality: Filipino Passport no.: Filipino passport number
AA780554 National identification no.: na Address: 50, Purdue Street, Cubao, Quezon City,
Philippines Listed on: 4 Jun. 2008 (amended on 13 Dec. 2011) Other information: Founder and
leader of the Rajah Solaiman Movement (QE.R.128.08.) and linked to the Abu Sayyaf Group
(QE.A.1.01.). In detention in the Philippines as of May 2011. Review pursuant to Security Council
resolution 1822 (2008) was concluded on 13 May 2010.

QI.S.1.01. Name: 1: SAYF-AL ADL 2: na 3: na 4: na

سد يف الحدل :Name (original script)

Title: na Designation: na DOB: a) 1963 b) 11 Apr. 1963 c) 11 Apr. 1960 POB: Egypt Good quality a.k.a.: a) Saif Al-'Adil b) Seif al Adel c) Muhamad Ibrahim Makkawi Low quality a.k.a.: Ibrahim al-Madani Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 16 Dec. 2010, 24 Jul. 2013) Other information: Responsible for Usama bin Laden's (QI.B.8.01) security. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.S.260.08. Name: 1: DANIEL 2: MARTIN 3: SCHNEIDER 4: na

**Title:** na **Designation:** na **DOB:** 9 Sep. 1985 **POB:** Neunkirchen (Saar), Germany **Good quality a.k.a.:** na **Low quality a.k.a.:** Abdullah **Nationality:** German **Passport no.:** German passport number 2318047793 issued in Friedrichsthal, Germany, issued on 17 May 2006, expired on 16 May 2011. **National identification no.:** German Federal Identity Card number 2318229333 issued in Friedrichsthal, Germany, issued on 17 May 2006, expired on 16 May 2011 (reported lost). **Address: a)** In prison in Germany (since Sep. 2007). **b)** Petrusstrasse 32, 66125 Herrensohr, Dudweiler, Saarbrücken, Germany (previous address) **Listed on:** 27 Oct. 2008 (amended on 13 Dec. 2011) **Other information:** Associated with the Islamic Jihad Union (IJU), also known as the Islamic Jihad Group (QE.I.119.05.). Associated with Fritz Martin Gelowicz (QI.G.259.08.) and Adem Yilmaz (QI.Y.261.08.). In detention in Germany as of Jun. 2010.

QI.S.128.03. Name: 1: ISMAIL 2: ABDALLAH 3: SBAITAN 4: SHALABI Name (original script): ا سماء یل ع بد الله سر بدان شرا بیدان ما

Title: na Designation: na DOB: 30 Apr. 1973 POB: Beckum, Germany Good quality a.k.a.: a) Ismain Shalabe, born 30 Apr. 1973 in Beckum b) Ismail Abdallah Sbaitan Shalabi, born 30 Apr. 1973 in Beckum Low quality a.k.a.: na Nationality: Jordanian of Palestinian origin Passport no.: a) Passport of the Hashemite Kingdom of Jordan no. E778675, issued in Rusaifah on 23 Jun. 1996, valid until 23 Jun. 2001 b) Passport of the Hashemite Kingdom of Jordan no. H401056, JOR 9731050433, issued on 11 Apr. 2001, valid until 10 Apr. 2006 National identification no.: na Address: Germany Listed on: 23 Sep. 2003 (amended on 10 Jun. 2011) Other information: Father's name is Abdullah Shalabi. Mother's name is Ammnih Shalabi. Associated with Djamel Moustfa (QI.M.129.03.), Mohamed Abu Dhess (QI.A.130.03.) and Aschraf al-Dagma (QI.A.132.03.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.S.322.14. Name: 1: ABUBAKAR 2: MOHAMMED 3: SHEKAU 4: na

أبوب كر محمد ال شدكوى :(Name (original script

Title: Imam Designation: na DOB: 1969 POB: Shekau Village, Yobe State, Nigeria Good quality a.k.a.: Abubakar Shekau Low quality a.k.a.: a) Abu Mohammed Abubakar bin Mohammed b) Abu Muhammed Abubakar bi Mohammed c) Shekau d) Shehu e) Shayku f) Imam Darul Tauhid g) Imam Darul Tawheed Nationality: Nigerian Passport no.: na National identification no.: na Address: Nigeria Listed on: 26 Jun. 2014 Other information: Member of the Kanuri tribe. Physical description: eye colour: black; hair colour: black. Photo available for inclusion in the INTERPOL-UN Security Council Special Notice. Leader of Jama'atu Ahlis Sunna Lidda'Awati Wal-Jihad (Boko Haram) (QE.B.138.14). Under Shekau's leadership, Boko Haram has been responsible for a series of major terrorist attacks.

QI.A.17.01. Name: 1: THARWAT 2: SALAH 3: SHIHATA 4: na

ثروت صالح شحاتة : Name (original script)

Title: na Designation: na DOB: 29 Jun. 1960 POB: Egypt Good quality a.k.a.: a) Tarwat Salah Abdallah b) Salah Shihata Thirwat c) Shahata Thirwat d) Tharwat Salah Shihata Ali (previously listed as) Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: na Listed on: 6 Oct. 2001 (amended on 26 Nov. 2004, 16 Dec. 2010) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

QI.S.122.03. Name: 1: PARLINDUNGAN 2: SIREGAR 3: na 4: na

Title: na Designation: na DOB: a) 25 Apr. 1957 b) 25 Apr. 1967 POB: Indonesia Good quality a.k.a.: a) Siregar, Parlin b) Siregar, Saleh Parlindungan Low quality a.k.a.: na Nationality: Indonesian Passport no.: na National identification no.: na Address: na Listed on: 9 Sep. 2003 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.S.124.03. Name: 1: YAZID 2: SUFAAT 3: na 4: na

Title: na Designation: na DOB: 20 Jan. 1964 POB: Johor, Malaysia Good quality a.k.a.: na Low quality a.k.a.: a) Joe b) Abu Zufar Nationality: Malaysian Passport no.: A 10472263 National identification no.: 640120-01-5529 Address: Taman Bukit Ampang, State of Selangor, Malaysia (as at Apr. 2009) Listed on: 9 Sep. 2003 (amended on 3 May 2004, 1 Feb. 2008, 10 Aug. 2009, 25 Jan. 2010, 16 May 2011) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Jun. 2009.

QI.S.123.03. Name: 1: YASSIN 2: SYWAL 3: na 4: na

Title: na Designation: na DOB: Approximately 1972 POB: na Good quality a.k.a.: a) Salim Yasin b) Mochtar Yasin Mahmud c) Abdul Hadi Yasin d) Muhamad Mubarok e) Muhammad Syawal Low quality a.k.a.: a) Abu Seta b) Mahmud c) Abu Muamar Nationality: Indonesian Passport no.: na National identification no.: na Address: na Listed on: 9 Sep. 2003 Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

QI.T.57.02. Name: 1: IBRAHIM 2: ALI 3: ABU BAKR 4: TANTOUSH

Name (original script): ابراهیم علي أبوب كرت نوش Title: na Designation: na DOB: 1966 POB: al Aziziyya, Libyan Arab Jamahiriya Good quality a.k.a.: a) Abd al-Muhsin b) Ibrahim Ali Muhammad Abu Bakr c) Abdul Rahman d) Abu Anas e) Ibrahim Abubaker Tantouche f) Ibrahim Abubaker Tantoush g) 'Abd al-Muhsi h) 'Abd al-Rahman Low quality a.k.a.: Al-Libi Nationality: Libyan Passport no.: Libyan passport number 203037 issued in Tripoli National identification no.: na Address: Johannesburg, South Africa Listed on: 11 Jan. 2002 (amended on 31 Jul. 2006, 4 Oct. 2006, 16 May 2011) Other information: Associated with Afghan Support Committee (ASC) (QE.A.69.02.), Revival of Islamic Heritage Society (RIHS)(QE.R.70.02.) and the Libyan Islamic Fighting Group (LIFG) (QE.L.11.01.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

QI.T.241.08. Name: 1: ANGELO 2: RAMIREZ 3: TRINIDAD 4: na

Title: na Designation: na DOB: 20 Mar. 1978 POB: Gattaran, Cagayan Province, Philippines Good quality a.k.a.: a) Calib Trinidad b) Kalib Trinidad Low quality a.k.a.: a) Abdul Khalil b) Abdukahlil c) Abu Khalil d) Anis Nationality: Filipino Passport no.: na National identification no.: na Address: 3111 Ma. Bautista, Punta, Santa Ana, Manila, Philippines Listed on: 4 Jun. 2008 (amended on 13 Dec. 2011) Other information: Distinguishing marks include scars on both legs. Member of the Rajah Solaiman Movement (QE.R.128.08.), and associated with the Abu Sayyaf Group (QE.A.1.01.) and the Jemaah Islamiyah (QE.J.92.02.). In detention in the Philippines as of May 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

QI.T.56.01. Name: 1: MOHAMMED 2: TUFAIL 3: na 4: na

Title: na Designation: na DOB: 5 May 1930 POB: na Good quality a.k.a.: a) Tufail, S.M. b) Tuffail, Sheik Mohammed Low quality a.k.a.: na Nationality: Pakistani Passport no.: na National identification no.: na Address: na Listed on: 24 Dec. 2001 (amended on 19 Jan. 2011) Other information: Served as a director of Ummah Tameer e-Nau (UTN) (QE.U.68.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

QI.U.290.11. Name: 1: DOKU 2: KHAMATOVICH 3: UMAROV 4: na

Name (original script): Умаров Доку Хаматович

Title: na Designation: na DOB: 12 May 1964 POB: Kharsenoy Village, Shatoyskiy (Sovetskiy) District, Chechenskaya Respublika, Russian Federation Good quality a.k.a.: na Low quality a.k.a.: na Nationality: a) Russian b) USSR (until 1991) Passport no.: na National identification no.:

na **Address**: na **Listed on**: 10 Mar. 2011 (amended on 2 Jun. 2014) **Other information**: Resides in the Russian Federation as at Nov. 2010. International arrest warrant issued in the year 2000. Reportedly deceased as of April 2014.

QI.M.31.01. Name: 1: OMAR 2: MAHMOUD 3: UTHMAN 4: na

عمر محمود ع ثمان :Name (original script)

**Title:** na **Designation:** na **DOB:** a) 30 Dec. 1960 b) 13 Dec. 1960 **POB:** Bethlehem, West Bank, Palestinian Territories **Good quality a.k.a.:** a) Al-Samman Uthman b) Umar Uthman c) Omar Mohammed Othman **Low quality a.k.a.:** a) Abu Qatada Al-Filistini b) Abu Umr Takfiri c) Abu Omar Abu Umar d) Abu Umar Umar e) Abu Ismail **Nationality:** Jordanian **Passport no.:** na **Nationalidentification no.:** na **Address:** Jordan (since July 2013) **Listed on:** 17 Oct. 2001 (amended on 14 Mar. 2008, 24 Mar. 2009, 25 Jan. 2010, 22 Jul. 2013) **Other information:** Associated with Al-Qaidarelated groups in the United Kingdom and other countries. Convicted in absentia in Jordan for involvement in terrorist acts in 1998. Arrested in Feb. 2001 in the United Kingdom, was further detained between Oct. 2002 and Mar. 2005 and between Aug. 2005 and Jun. 2008. In custody since Dec. 2008. Deported to Jordan from the United Kingdom on 7 July 2013 to face terrorism charges. Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Oct. 2009.

QI.Y.37.01. Name: 1: ABDUL RAHMAN 2: YASIN 3: na 4: na

ع بد ال رحمن يا سدين :Name (original script)

**Title:** na **Designation:** na **DOB:** 10 Apr. 1960 **POB:** Bloomington, Indiana, United States of America **Good quality a.k.a.:** a) Taha, Abdul Rahman S. b) Taher, Abdul Rahman S. c) Yasin, Abdul Rahman Said d) Yasin, Aboud **Low quality a.k.a.:** na **Nationality:** United States of America **Passport no.:** 27082171 (United States of America, issued on 21 Jun. 1992 in Amman, Jordan) **National identification no.:** SSN 156-92-9858 (United States of America) **Address:** na **Listed on:** 17 Oct. 2001 (amended on 10 Apr. 2003) **Other information:** Abdul Rahman Yasin is in Iraq. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QI.Y.261.08. Name: 1: ADEM 2: YILMAZ 3: na 4: na

**Title:** na **Designation:** na **DOB:** 4 Nov. 1978 **POB:** Bayburt, Turkey **Good quality a.k.a.:** na **Low quality a.k.a.:** Talha **Nationality:** Turkish **Passport no.:** Turkish passport number TR-P 614 166, issued by the Turkish Consulate General in Frankfurt/M. on 22 Mar. 2006, expired on 15 Sep. 2009. **National identification no.:** na **Address: a)** In prison in Germany (since Sep. 2007). **b)** Südliche Ringstrasse 133, 63225 Langen, Germany (previous address) **Listed on:** 27 Oct. 2008 (amended on 13 Dec. 2011) **Other information:** Associated with the Islamic Jihad Union (IJU), also known as the Islamic Jihad Group (QE.I.119.05.). Associated with Fritz Martin Gelowicz (QI.G.259.08.) and Daniel Martin Schneider (QI.S.260.08.). In detention in Germany as of Jun. 2010.

QI.M.205.05. Name: 1: RAFIK 2: MOHAMAD 3: YOUSEF 4: na

رف یق محمد یو سف :Name (original script

Title: na Designation: na DOB: 27 Aug. 1974 POB: Baghdad, Iraq Good quality a.k.a.: Mohamad Raific Kairadin Low quality a.k.a.: na Nationality: Iraqi Passport no.: German travel document ("Reiseausweis") A 0092301 National identification no.: na Address: In prison in Germany Listed on: 6 Dec. 2005 (amended on 21 Oct. 2008, 13 Dec. 2011) Other information: Member of Ansar Allslam (QE.A.98.03). Sentenced on 15 Jul. 2008 to 8 years imprisonment in Germany. Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QI.A.198.05. Name: 1: HANI 2: AL-SAYYID 3: AL-SEBAI 4: YUSIF

هاند ي الديد الديد الديد العلى يوسف :Name (original script)

Title: na Designation: na DOB: a) 1 Mar. 1961 b) 16 Jun. 1960 POB: Qaylubiyah, Egypt Good quality a.k.a.: a) Hani Yousef Al-Sebai b) Hani Yousef c) Hany Youseff d) Hani Yusef e) Hani al-Sayyid Al-Sabai f) Hani al-Sayyid El Sebai g) Hani al-Sayyid Al Siba'i h) Hani al-Sayyid El Sabaay i) El-Sababt j) Abu Tusnin k) Abu Akram I) Hani El Sayyed Elsebai Yusef m) Abu Karim n) Hany Elsayed Youssef Low quality a.k.a.: na Nationality: Egyptian Passport no.: na National identification no.: na Address: London, United Kingdom Listed on: 29 Sep. 2005 (amended on 6 Oct. 2005, 18 Aug. 2006, 25 Jan. 2012) Other information: Father's name is Mohamed Elsayed

Elsebai. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

QI.A.139.03. Name: 1: IMED 2: BEN MEKKI 3: ZARKAOUI 4: na

عماد بن مکی زرق اوي :Name (original script)

Title: na Designation: na DOB: 15 Jan. 1973 POB: Tunis, Tunisia Good quality a.k.a.: a) Dour Nadre, born 15 Jan. 1974 in Morocco b) Dour Nadre, born 15 Jan. 1973 in Morocco c) Daour Nadre, born 31 Mar. 1975 in Algeria d) Imad ben al-Mekki ben al-Akhdar al-Zarkaoui (previously listed as) Low quality a.k.a.: a) Zarga b) Nadra Nationality: Tunisian Passport no.: Tunisian passport number M174950, issued on 27 Apr. 1999, expired on 26 Apr. 2004 National identification no.: na Address: 41-45, Rue Estienne d'Orves, Pré Saint Gervais, France Listed on: 12 Nov. 2003 (amended on 20 Dec. 2005, 31 Jul. 2006, 10 Aug. 2009, 16 May 2011) Other information: Mother's name is Zina al-Zarkaoui. Imprisoned in France since 1 Feb. 2010 on charges of criminal conspiracy in relation to a terrorist organization. Review pursuant to Security Council resolution 1822 (2008) was concluded on 6 May 2010.

QI.Z.168.04. Name: 1: AHMAD 2: ZERFAOUI 3: na 4: na

احمد زرف اوی :Name (original script)

Title: na Designation: na DOB: 15 Jul. 1963 POB: Chréa, Algeria Good quality a.k.a.: a) Abdullah b) Abdalla c) Smail d) Abu Khaoula e) Abu Cholder f) Nuhr Low quality a.k.a.: na Nationality: Algerian Passport no.: na National identification no.: na Address: na Listed on: 3 May 2004 (amended on 12 Apr. 2006, 7 Apr. 2008, 13 Dec. 2011) Other information: Former member of The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.). Confirmed to have died in northern Mali on 19 Sep. 2006. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

QI.Z.223.06. Name: 1: MERAI 2: ZOGHBAI 3: na 4: na

Name (original script): مرعی زغ بی

Title: na Designation: na DOB: a) 4 Apr. 1969 b) 4 Apr. 1960 c) 4 Jun. 1960 POB: Bengasi, Libyan Arab Jamahiriya Good quality a.k.a.: a) Mohamed Lebachir, born 14 Jan. 1968 in Morocco b) Meri Albdelfattah Zgbye, born 4 Jun. 1960 in Bendasi, Libyan Arab Jamahiriya c) Zoghbai Merai Abdul Fattah d) Lazrag Faraj, born 13 Nov. 1960 in Libyan Arab Jamahiriya e) Larzg Ben Ila, born 11 Aug. 1960 in Libyan Arab Jamahiriya f) Muhammed El Besir Low quality a.k.a.: a) F'raji di Singapore b) F'raji il Libico c) Farag d) Fredj, born 13 Nov. 1960 in Libyan Arab Jamahiriya Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 2 Aug. 2006 (amended on 3 Jun. 2009, 1 Sep. 2009, 13 Dec. 2011) Other information: Considered a fugitive from justice by the Italian authorities and sentenced in absentia to 6 years imprisonment on 20 Nov. 2008. Member of Libyan Islamic Fighting Group (QE.L.11.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 Jul. 2009.

QI.Z.187.05. Name: 1: ZULKARNAEN 2: na 3: na 4: na

**Title:** na **Designation:** na **DOB:** 1963 **POB:** Gebang village, Masaran, Sragen, Central Java, Indonesia **Good quality a.k.a.:** a) Zulkarnan b) Zulkarnain c) Zulkarnin d) Arif Sunarso e) Aris Sumarsono f) Aris Sunarso g) Ustad Daud Zulkarnaen h) Murshid **Low quality a.k.a.:** na **Nationality:** Indonesian **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 16 May 2005 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

## B. Entities and other groups and undertakings associated with Al-Qaida

#### QE.A.144.14. Name: ABDALLAH AZZAM BRIGADES (AAB)

**A.k.a.: a)** Abdullah Azzam Brigades **b)** Ziyad al-Jarrah Battalions of the Abdallah Azzam Brigades **c)** Yusuf al-'Uyayri Battalions of the Abdallah Azzam Brigades **F.k.a.:** na **Address:** Operates in Lebanon, Syria and the Arabian Peninsula **Listed on:** 23 Sep. 2014 **Other information:** An armed group that has carried out joint attacks with Al-Nusrah Front for the People of the Levant (QE.A.137.14.).

#### QE.A.1.01. Name: ABU SAYYAF GROUP

**A.k.a.:** Al Harakat Al Islamiyya **F.k.a.:** na **Address:** Philippines **Listed on:** 6 Oct. 2001 (amended on 13 Dec. 2011) **Other information:** Associated with Jemaah Islamiyah (JI) (QE.J.92.02). Current leader is Radulan Sahiron (QI.S.208.05). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

## QE.A.69.02. Name: AFGHAN SUPPORT COMMITTEE (ASC)

**A.k.a.:** a) Lajnat ul Masa Eidatul Afghania b) Jamiat Ayat-ur-Rhas al Islamiac c) Jamiat Ihya ul Turath al Islamia d) Ahya ul Turas **F.k.a.:** na **Address:** a) Headquarters – G.T. Road (probably Grand Trunk Road), near Pushtoon Garhi Pabbi, Peshawar, Pakistan b) Cheprahar Hadda, Mia Omar Sabaqah School, Jalabad, Afghanistan **Listed on:** 11 Jan. 2002 (amended on 13 Dec. 2011) **Other information:** Associated with the Revival of Islamic Heritage Society (QE.R.70.02). Abu Bakr al-Jaziri (QI.A.58.02) served as finance chief of ASC. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

# QE.A.121.05. Name: AL-AKHTAR TRUST INTERNATIONAL

A.k.a.: a) Al Akhtar Trust b) Al-Akhtar Medical Centre c) Akhtarabad Medical Camp d) Pakistan Relief Foundation e) Pakistani Relief Foundation f) Azmat-e-Pakistan Trust g) Azmat Pakistan Trust F.k.a.: na Address: a) ST-1/A, Gulsahn-e-Iqbal, Block 2, Karachi, 25300, Pakistan b) Gulistan-e-Jauhar, Block 12, Karachi, Pakistan Listed on: 17 Aug. 2005 (amended on 10 Dec. 2008, 13 Dec. 2011) Other information: Regional offices in Pakistan: Bahawalpur, Bawalnagar, Gilgit, Islamabad, Mirpur Khas, Tando-Jan-Muhammad. Akhtarabad Medical Camp is in Spin Boldak, Afghanistan. Registered by members of Jaish-i-Mohammed (QE.J.19.01). Associated with Harakat ul-Mujahidin/HUM (QE.H.8.01), Lashkar I Jhanghvi (LJ) (QE.L.96.03) and Lashkar-e-Tayyiba (QE.L.118.05). Banned in Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 14 Sep. 2009.

## QE.A.107.04. Name: AL FURQAN

A.k.a.: a) Dzemilijati Furkan b) Dzem'ijjetul Furqan c) Association for Citizens Rights and Resistance to Lies d) Dzemijetul Furkan e) Association of Citizens for the Support of Truth and Supression of Lies f) Sirat g) Association for Education, Culture and Building Society-Sirat h) Association for Education, Cultural, and to Create Society -Sirat i) Istikamet j) In Siratel k) Citizens' Association for Support and Prevention of lies – Furqan F.k.a.: na Address: a) 30a Put Mladih Muslimana (ex Pavla Lukaca Street), 71 000 Sarajevo, Bosnia and Herzegovina b) 72 ul. Strossmajerova, Zenica, Bosnia and Herzegovina c) 42 Muhameda Hadzijahica, Sarajevo, Bosnia and Herzegovina d) 70 and 53 Strosmajerova Street, Zenica, Bosnia and Herzegovina e) Zlatnih Ljiljana Street, Zavidovici, Bosnia and Herzegovina Listed on: 11 May 2004 (amended on 26 Nov. 2004, 24 Mar. 2009) Other information: Registered in Bosnia and Herzegovina as a citizens' association under the name of "Citizens' Association for Support and Prevention of lies – Furqan" on 26 Sep. 1997. Al Furqan ceased its work by decision of the Ministry of Justice of the Bosnia and Herzegovina Federation (decision number 03-054-286/97 dated 8 Nov. 2002). Al Furqan was no longer in existence as at Dec. 2008. Review pursuant to Security Council resolution 1822 (2008) was concluded on 15 Jun. 2010.

# QE.A.110.04. Name: AL-HARAMAIN: AFGHANISTAN BRANCH

**A.k.a.:** na **F.k.a.:** na **Address:** Afghanistan, (at time of listing) **Listed on:** 6 Jul. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

## QE.A.111.04. Name: AL-HARAMAIN: ALBANIA BRANCH

**A.k.a.:** na **F.k.a.:** na **Address:** Irfan Tomini Street, #58, Tirana, Albania (at time of listing) **Listed on:** 6 Jul. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

**QE.A.109.04.** Name: AL-HARAMAIN & AL MASJED AL-AQSA CHARITY FOUNDATION **A.k.a.: a)** Al Haramain Al Masjed Al Aqsa **b)** Al Haramayn Al Masjid Al Aqsa **c)** Al-Haramayn and Al Masjid Al Aqsa Charitable Foundation **d)** Al Harammein Al Masjed Al-Aqsa Charity Foundation **F.k.a.:** na **Address: a)** Branch Address: 2A Hasiba Brankovica, Sarajevo, Bosnia and

Herzegovina **b)** 14 Bihacka Street, Sarajevo, Bosnia and Herzegovina **c)** 64 Potur mahala Street, Travnik, Bosnia and Herzegovina **d)** Zenica, Bosnia and Herzegovina **Listed on:** 28 Jun. 2004 (amended on 26 Nov. 2004, 16 Sep. 2008, 24 Mar. 2009) **Other information:** Used to be officially registered in Bosnia and Herzegovina under registry number 24. Al-Haramain & Al Masjed Al-Aqsa Charity Foundation ceased its work by decision of the Ministry of Justice of the Bosnia and Herzegovina Federation (decision on cessation of operation number 03-05-2-203/04). It was no longer in existence as at Dec. 2008. Its premises and humanitarian activities were transferred under Government supervision to a new entity called Sretna Buducnost. Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

## QE.A.112.04. Name: AL-HARAMAIN: BANGLADESH BRANCH

**A.k.a.:** na **F.k.a.:** na **Address:** House 1, Road 1, S-6, Uttara, Dhaka, Bangladesh (at time of listing) **Listed on:** 6 Jul. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# QE.A.113.04. Name: AL-HARAMAIN: ETHIOPIA BRANCH

**A.k.a.:** na **F.k.a.:** na **Address:** Woreda District 24 Kebele Section 13, Addis Ababa, Ethiopia (at time of listing) **Listed on:** 6 Jul. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

## QE.A.103.04. Name: AL-HARAMAIN FOUNDATION (INDONESIA)

**A.k.a.:** Yayasan Al-Manahil-Indonesia **F.k.a.:** na **Address:** Jalan Laut Sulawesi Blok DII/4, Kavling Angkatan Laut Duren Sawit, Jakarta Timur 13440 Indonesia (at time of listing); Tel.: 021-86611265 and 021-86611266; Fax.: 021-8620174 **Listed on:** 26 Jan. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# QE.A.104.04. Name: AL-HARAMAIN FOUNDATION (PAKISTAN)

A.k.a.: na F.k.a.: na Address: House #279, Nazimuddin Road, F-10/1, Islamabad, Pakistan (at time of listing) Listed on: 26 Jan. 2004 (amended on 21 Mar. 2012) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Oct. 2009.

## QE.A.116.04. Name: AL-HARAMAIN FOUNDATION (UNION OF THE COMOROS)

**A.k.a.:** na **F.k.a.:** na **Address:** B/P: 1652 Moroni, Union of the Comoros (at time of listing) **Listed on:** 28 Sep. 2004 (amended on 21 Mar. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# **QE.A.117.04. Name:** AL-HARAMAIN FOUNDATION (UNITED STATES OF AMERICA)

**A.k.a.:** na **F.k.a.:** na **Address:** a) 1257 Siskiyou Blvd., Ashland, OR 97520, United States of America b) 3800 Highway 99 S, Ashland, OR 97520, United States of America c) 2151 E Division St., Springfield, MO 65803, United States of America **Listed on:** 28 Sep. 2004 (amended on 25 Jan. 2010) **Other information:** The United States-based branch of Al-Haramain Foundation was formally established by Suliman Hamd Suleiman al-Buthe (Ql.A.179.04.) and another associate in 1997. Review pursuant to Security Council resolution 1822 (2008) was concluded on 19 Oct. 2009.

# QE.A.71.02. Name: AL-HARAMAIN ISLAMIC FOUNDATION

**A.k.a.:** a) Vazir b) Vezir **F.k.a.:** na **Address:** a) 64 Poturmahala, Travnik, Bosnia and Herzegovina b) Sarajevo, Bosnia and Herzegovina **Listed on:** 13 Mar. 2002 (amended on 26 Dec. 2003, 16 Sep. 2008, 16 Jun. 2011) **Other information:** Under criminal investigation by the authorities of Bosnia and Herzegovina as of Nov. 2007. Employees and associates include Najib Ben Mohamed Ben Salem Al-Waz (listed under permanent reference number QI.A.104.03.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# QE.A.72.02. Name: AL-HARAMAIN ISLAMIC FOUNDATION (SOMALIA)

**A.k.a.:** na **F.k.a.:** na **Address:** Somalia **Listed on:** 13 Mar. 2002 (amended on 13 Dec. 2011) **Other information:** The founder and former leader is Aqeel Abdulaziz Aqeel al-Aqeel

(QI.A.171.04). Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# QE.A.114.04. Name: AL-HARAMAIN: THE NETHERLANDS BRANCH

**A.k.a.:** Stichting Al Haramain Humanitarian Aid **F.k.a.:** na **Address:** Jan Hanzenstraat 114, 1053SV, Amsterdam, The Netherlands (at time of listing) **Listed on:** 6 Jul. 2004 (amended on 13 Apr. 2012) **Other information:** The founder and former leader is Aqeel Abdulaziz Aqeel al-Aqeel (QI.A.171.04) who was also chairman of its board of directors. Review pursuant to Security Council resolution 1822 (2008) was concluded on 28 Jun. 2010.

## QE.A.105.04. Name: AL-HARAMAYN FOUNDATION (KENYA)

A.k.a.: na F.k.a.: na Address: a) Nairobi, Kenya, (at time of listing) b) Garissa, Kenya, (at time of listing) c) Dadaab, Kenya, (at time of listing) Listed on: 26 Jan. 2004 (amended on 21 Mar. 2012) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

# QE.A.106.04. Name: AL-HARAMAYN FOUNDATION (TANZANIA)

A.k.a.: na F.k.a.: na Address: a) P.O. Box 3616, Dar es Salaam, Tanzania (at time of listing) b) Tanga (at time of listing) c) Singida (at time of listing) Listed on: 26 Jan. 2004 (amended on 21 Mar. 2012) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

## QE.A.2.01. Name: AL-ITIHAAD AL-ISLAMIYA / AIAI

Name (original script): الاتحاد الاسلامي

A.k.a.: na F.k.a.: na Address: na Listed on: 6 Oct. 2001 (amended on 21 Dec. 2007, 13 Dec. 2011, 18 Mar. 2013) Other information: Reported to have operated in Somalia and Ethiopia and to have merged with Harakat Al-Shabaab Al-Mujaahidiin (Al-Shabaab), which was accepted as an affiliate of Al-Qaida (QE.A.4.01) by Aiman Muhammed Rabi al-Zawahiri (QI.A.6.01) in Feb. 2012, and is also subject to the sanctions measures set out in Security Council resolution 1844 (2008) concerning Somalia and Eritrea (see www.un.org/sc/committees/751/index.shtml). Leadership included Hassan Abdullah Hersi Al-Turki (QI.A.172.04.) and Hassan Dahir Aweys (QI.D.42.01.). AlAl has received funds through the Al-Haramain Islamic Foundation (Somalia) (QE.A.72.02). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

# QE.M.139.14. Name: AL MOUAKAOUNE BIDDAM

الموقعون بالدم: Name (original script)

**A.k.a.:** a) Les Signataires par le Sang b) Ceux Qui Signent avec le Sang c) Those Who Sign in Blood **F.k.a.:** na **Address:** Mali **Listed on:** 2 Jun. 2014 **Other information:** Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) and led by Mokhtar Belmokhtar (QI.B.136.03). Active in the Sahel/Sahara region.

## QE.M.140.14. Name: AL MOULATHAMOUN

المدل ثمون :(Name (original script

A.k.a.: a) Les Enturbannés b) The Veiled F.k.a.: na Address: a) Mali b) Niger c) Algeria Listed on: 2 Jun. 2014 Other information: Founded in 2012 as a splinter group of the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). On 20 Aug. 2013, Al Moulathamoun merged with the Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12) and established Al Mourabitoun (QE.M. 141.14). Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) and led by Mokhtar Belmokhtar (QI.B.136.03). Active in the Sahel/Sahara region.

# QE.M.141.14. Name: AL MOURABITOUN

المرابطون :(Name (original script

A.k.a.: a) Les Sentinelles b) The Sentinels F.k.a.: na Address: Mali Listed on: 2 Jun. 2014 Other

information: Founded on 20 Aug. 2013 as result of a merger between Al Moulathamoun

(QE.M.140.14) and the Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12). Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) and led by Mokhtar Belmokhtar (QI.B.136.03). Active in the Sahel/Sahara region.

# QE.A.137.14. Name: AL-NUSRAH FRONT FOR THE PEOPLE OF THE LEVANT

ج بهة الد صرة لأهل اله شام: Name (original script)

A.k.a.: a) la tahbaJ ;tnorF yrotciV eht) ج بهة الـ نصرة -Nusrah; Jabhet al-Nusra; Al-Nusrah Front; Al-Nusra Front) b) bus) א יחוד -unit name: Ansar al-Mujahideen Network) c) - יחוד -unit name: Levantine Mujahideen on the Battlefields of Jihad) F.k.a.: na Address: a) Operates in Syria b) Support network in Iraq Listed on: 14 May 2014 Other information: Associated with Al-Qaida (QE.A.4.01) and Ibrahim Awwad Ibrahim Ali al-Badri al-Samarrai (QI.A.299.11), the leader of Al-Qaida in Iraq (QE.J.115.04), since at least Jan. 2012. Brings Syrian and foreign Al-Qaida in Iraq (QE.J.115.04) and Asbat al-Ansar (QE.A.7.01) fighters, along with other foreign Al-Qaida operatives, to join local elements in Syria to carry out terrorist and guerrilla operations there. Previously listed between 30 May 2013 and 13 May 2014 as an aka of Al-Qaida in Iraq (QE.J.115.04.).

# QE.A.4.01. Name: AL-QAIDA Name (original script): قاعدة

**A.k.a.:** a) "The Base" b) Al Qaeda c) Islamic Salvation Foundation d) The Group for the Preservation of the Holy Sites e) The Islamic Army for the Liberation of Holy Places f) The World Islamic Front for Jihad Against Jews and Crusaders g) Usama Bin Laden Network h) Usama Bin Laden Organization i) Al Qa'ida j) Al Qa'ida/Islamic Army (formerly listed as) **F.k.a.**: na **Address**: na **Listed on**: 6 Oct. 2001 (amended on 5 Mar. 2009, 21 Mar. 2012) **Other information**: Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

# QE.J.115.04. Name: AL-QAIDA IN IRAQ Name (original script): عراق على المادة في المادة

A.k.a.: a) AQI b) al-Tawhid c) the Monotheism and Jihad Group d) Qaida of the Jihad in the Land of the Two Rivers e) Al-Qaida of Jihad in the Land of the Two Rivers f) The Organization of Jihad's Base in the Country of the Two Rivers g) The Organization Base of Jihad/Country of the Two Rivers h) The Organization Base of Jihad/Mesopotamia i) Tanzim Qa'idat Al-Jihad fi Bilad al-Rafidayn j) Tanzeem Qa'idat al Jihad/Bilad al Raafidaini k) Jama'at Al-Tawhid Wa'al-Jihad I) JTJ m) Islamic State of Iraq n) ISI o) al-Zarqawi network p) Islamic State in Iraq and the Levant F.k.a.: na Address: na Listed on: 18 Oct. 2004 (amended on 2 Dec. 2004, 5 Mar. 2009, 13 Dec. 2011, 30 May 2013, 13 May 2014, 2 Jun. 2014) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

# QE.A.129.10. Name: AL-QAIDA IN THE ARABIAN PENINSULA (AQAP)

ال قاعدة في جزيرة الحرب: Name (original script)

**A.k.a.:** a) Al-Qaida of Jihad Organization in the Arabian Peninsula b) Tanzim Qa'idat al-Jihad fi Jazirat al-Arab c) Al-Qaida Organization in the Arabian Peninsula (AQAP) d) Al-Qaida in the South Arabian Peninsula e) Ansar al-Shari'a (AAS) **F.k.a.:** Al-Qaida in Yemen (AQY) **Address:** na **Listed on:** 19 Jan. 2010 (amended on 4 Oct. 2012) **Other information:** AQAP is a regional affiliate of Al-Qaida (QE.A.4.01) and an armed group operating primarily in Arabian Peninsula. Location: Yemen. Alternative location: Saudi Arabia (2004 – 2006). Formed in Jan. 2009 when Al-Qaida in Yemen combined with Saudi Arabian Al-Qaida operatives. Leader of AQAP is Nasir 'abd-al-Karim 'Abdullah Al-Wahishi (QI.A.274.10.) and his deputy is Said Ali Al-Shihri (QI.A.275.10.). Ansar al-Shari'a was formed in early 2011 by AQAP and has taken responsibility for multiple attacks in Yemen against both government and civilian targets.

# QE.A.5.01. Name: AL RASHID TRUST

A.k.a.: a) Al-Rasheed Trust b) Al Rasheed Trust c) Al-Rashid Trust d) Aid Organization of the Ulema, Pakistan e) Al Amin Welfare Trust f) Al Amin Trust g) Al Ameen Trust h) Al-Ameen Trust i) Al Madina Trust j) Al-Madina Trust F.k.a.: na Address: a) Kitas Ghar, Nazimabad 4, Dahgel-Iftah, Karachi, Pakistan, Kitas Ghar, Nazimabad 4, Dahgel-Iftah, Karachi, Pakistan b) Jamia Maajid, Sulalman Park,

Melgium Pura, Lahore, Pakistan, Jamia Maajid, Sulalman Park, Melgium Pura, Lahore, Pakistan c) Office Dha'rbi-M'unin, Opposite Khyber Bank, Abbottabad Road, Mansehra, Pakistan d) Office Dha'rbi-M'unin ZR Brothers, Katcherry Road, Chowk Yadgaar, Peshawar, Pakistan e) Office Dha'rbi-M'unin, Rm No. 3, Moti Plaza, Near Liaquat Bagh, Muree Road, Rawalpindi, Pakistan f) Office Dha'rbi-M'unin, Top Floor, Dr. Dawa Khan Dental Clinic Surgeon, Main Baxae, Mingora, Swat, Pakistan g) Kitab Ghar, Darul Ifta Wal Irshad, Nazimabad No. 4, Karachi, Pakistan, Phone 6683301; Phone 0300-8209199; Fax 6623814 h) 302b-40, Good Earth Court, Opposite Pia Planitarium, Block 13a. Gulshan - I Igbal. Karachi. Pakistan: Phone 4979263 i) 617 Clifton Center. Block 5. 6th Floor. Clifton, Karachi, Pakistan; Phone 587-2545 j) j) 605 Landmark Plaza, 11 Chundrigar Road, Opposite Jang Building, Karachi, Pakistan; Phone 2623818-19 k) Jamia Masjid, Sulaiman Park, Begum Pura, Lahore, Pakistan; Phone 042-6812081 Listed on: 6 Oct. 2001 (amended on 21 Oct. 2008, 10 Dec. 2008, 13 Dec. 2011) Other information: Headquarters are in Pakistan. Operations in Afghanistan: Herat Jalalabad, Kabul, Kandahar, Mazar Sherif. Also operations in Kosovo, Chechnya. Involved in the financing of Al-Qaida and the Taliban. Until 21 Oct. 2008, this entity appeared also as "Aid Organization of the Ulema, Pakistan" (QE.A.73.02.), listed on 24 Apr. 2002 and amended on 25 Jul. 2006. The two entries Al Rashid Trust (QE.A.5.01.) and Aid Organization of the Ulema, Pakistan (QE.A.73.02.) were consolidated into this entity on 21 Oct. 2008. Founded by Mufti Rashid Ahmad Ledahyanoy (QI.L.30.01). Associated with Jaish-i-Mohammed (QE.J.19.01). Banned in Pakistan since Oct. 2001. Despite the closure of its offices in Pakistan in February 2007 it has continued its activities. Review pursuant to Security Council resolution 1822 (2008) was concluded on 6 May 2010.

QE.A.98.03. Name: ANSAR AL-ISLAM Name (original script): أذ صار الا سلام

A.k.a.: a) Devotees of Islam b) Jund al-Islam c) Soldiers of Islam d) Kurdistan Supporters of Islam e) Supporters of Islam in Kurdistan f) Followers of Islam in Kurdistan g) Kurdish Taliban h) Soldiers of God i) Ansar al-Sunna Army j) Jaish Ansar al-Sunna k) Ansar al-Sunna F.k.a.: na Address: na Listed on: 24 Feb. 2003 (amended on 31 Mar. 2004, 5 Mar. 2009, 18 Mar. 2009, 21 Oct. 2010, 13 Dec. 2011) Other information: The founder is Najmuddin Faraj Ahmad (QI.A.226.06). Associated with Al-Qaida in Iraq (QE.J.115.04). Located and primarily active in northern Iraq but maintains a presence in western and central Iraq. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

## QE.A.143.14. Name: ANSAR AL-SHARI'A IN TUNISIA (AAS-T)

**A.k.a.:** a) Ansar al-Sharia in Tunisia b) Ansar al-Shari'ah in Tunisia c) Ansar al-Shari'ah d) Ansar al-Sharia e) Supporters of Islamic Law f) Al-Qayrawan Media Foundation **F.k.a.:** na **Address:** Tunisia **Listed on:** 23 Sep. 2014 **Other information:** A Tunisian armed group with links to the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14. .01). The leader is Seifallah ben Hassine (QI.B.333.14.).

QE.A.135.13 Name: ANSAR EDDINE
Name (original script): انا صار الدين

**A.k.a.:** Ansar Dine **F.k.a.:** na **Address:** Mali **Listed on:** 20 Mar. 2013 **Other information:** Was founded in December 2011 by Iyad ag Ghali (QI.A.316.13.). Linked to the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01) and Mouvement pour l'Unification et le Jihad en Afrique de l'Ouest (MUJAO) (QE.M.134.12). Associated with Abdelmalek Droukdel (QI.D.232.07.).

QE.A.142.14. Name: ANSARUL MUSLIMINA FI BILADIS SUDAN

أذ صار المسلمين في بالاد السودان: المسدلمين في بالاد المسلمين

**A.k.a.:** a) Ansaru b) Ansarul Muslimina fi Biladis Sudan c) Jama'atu Ansaril Muslimina fi Biladis Sudan (JAMBS) d) Jama'atu Ansarul Muslimina fi Biladis-Sudan (JAMBS) e) Jamma'atu Ansarul Muslimina fi Biladis-Sudan (JAMBS) f) Vanguards for the Protection of Muslims in Black Africa g) Vanguard for the Protection of Muslims in Black Africa **F.k.a.:** na **Address:** Nigeria **Listed on:** 26 Jun. 2014 **Other information:** Terrorist and paramilitary group established in 2012 and operating in Nigeria. Associated with the Organization of Al-Qaida in the Islamic Maghreb (AQIM) (QE.T.14.01), Jama'atu Ahlis Sunna Lidda'Awati Wal-Jihad (Boko Haram) (QE.B.138.14) and Abubakar Mohammed Shekau (QI.S.322.14).

QE.A.6.01. Name: ARMED ISLAMIC GROUP

ال جماعة الا سلام ية المسلحة :(Name (original script

A.k.a.: a) Al Jamm'ah Al-Islamiah Al- Musallah b) GIA c) Groupe Islamique Armé F.k.a.: na Address: Algeria Listed on: 6 Oct. 2001 (amended on 7 Apr. 2008, 13 Dec. 2011) Other information: Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QE.A.7.01. Name: ASBAT AL-ANSAR Name (original script): عصد بة الأذ صار

A.k.a.: na F.k.a.: na Address: Ein el-Hilweh camp, Lebanon Listed on: 6 Oct. 2001 (amended on 30 Jan. 2009, 13 Dec. 2011) Other information: Active in northern Iraq. Associated with Al-Qaida in Iraq (QE.J.115.04). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QE.B.93.02. Name: BENEVOLENCE INTERNATIONAL FOUNDATION

A.k.a.: a) Al Bir Al Dawalia b) BIF c) BIF-USA d) Mezhdunarodnyj Blagotvoritel'nyl Fond F.k.a.: na Address: a) 8820 Mobile Avenue, IA, Oak Lawn, Illinois, 60453, United States of America b) P.O. Box 548, Worth, Illinois, 60482, United States of America c) (Formerly located at) 9838 S. Roberts Road, Suite 1W, Palos Hills, Illinois, 60465, United States of America d) (Formerly located at) 20-24 Branford Place, Suite 705, Newark, New Jersey, 07102, United States of America e) P.O. Box 1937, Khartoum, Sudan f) Bangladesh g) Gaza Strip h) Yemen Listed on: 21 Nov. 2002 (amended on 24 Jan. 2003, 28 Apr. 2011, 18 May 2012) Other information: Employer Identification Number (United States of America): 36-3823186. Associated with Benevolence International Fund (QE.B.94.02). Review pursuant to Security Council resolution 1822 (2008) was concluded on 22 Jun. 2010.

QE.D.102.03. Name: DJAMAT HOUMAT DAAWA SALAFIA (DHDS)

جماعة حماة الدعوة السلفية السلفية الاماعة عماعة الماعة ال

A.k.a.: Djamaat Houmah Al-Dawah Al-Salafiat F.k.a.: Katibat el Ahouel Address: Algeria Listed on: 11 Nov. 2003 (amended on 26 Nov. 2004, 7 Apr. 2008, 25 Jan. 2010, 13 Dec. 2011) Other information: Associated with the Armed Islamic Group (GIA) (QE.A.6.01) and the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 30 Jul. 2009.

QE.E.88.02. Name: EASTERN TURKISTAN ISLAMIC MOVEMENT (ETIM)

**A.k.a.: a)** The Eastern Turkistan Islamic Party **b)** The Eastern Turkistan Islamic Party of Allah **c)** Islamic Party of Turkestan **d)** Djamaat Turkistan **F.k.a.:** na **Address:** na **Listed on:** 11 Sep. 2002 (amended on 3 Oct. 2008, 13 Dec. 2011) **Other information:** Active in China, South Asia and Central Asia. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

QE.A.3.01. Name: EGYPTIAN ISLAMIC JIHAD

ال جهاد الا سدلامي اله مصري :(Name (original script

**A.k.a.:** a) Egyptian Al-Jihad b) Jihad Group c) New Jihad d) Al-Jihad e) Egyptian Islamic Movement **F.k.a.:** na **Address:** na **Listed on:** 6 Oct. 2001 (amended on 5 Mar. 2009, 13 Dec. 2011) **Other information:** Co-founded by Aiman Muhammed Rabi al-Zawahiri (QI.A.6.01), who was also its military leader. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

**QE.E.131.11. Name:** EMARAT KAVKAZ

Name (original script): ЭМИРАТ Кавказ

**A.k.a.:** na **F.k.a.:** na **Address:** na **Listed on:** 29 Jul. 2011 **Other information:** Mainly active in the Russian Federation, Afghanistan and Pakistan. Led by Doku Khamatovich Umarov (QI.U.290.11.)

# QE.G.91.02. Name: GLOBAL RELIEF FOUNDATION (GRF)

A.k.a.: na F.k.a.: na Address: a) 9935 South 76th Avenue, Unit 1, Bridgeview, Illinois, 60455, United States of America b) P.O. Box 1406, Bridgeview, Illinois, 60455, United States of America Listed on: 22 Oct. 2002 (amended on 26 Nov. 2004, 20 Dec. 2005, 25 Jul. 2006, 24 Mar. 2009, 11 Mar. 2010, 25 Mar. 2010, 28 Apr. 2011, 21 Feb. 2012, 14 Feb. 2014) Other information: Other Foreign Locations: Afghanistan, Bangladesh, Eritrea, Ethiopia, India, Iraq, West Bank and Gaza, Somalia and Syria. Federal Employer Identification Number (United States of America): 36-3804626. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010

# QE.H.130.10. Name: HARAKAT-UL JIHAD ISLAMI Name (original script): حرك ت الم جهاد الاسلامي

A.k.a.: a) HUJI b) Movement of Islamic Holy War c) Harkat-ul-Jihad-al Islami d) Harkat-al-Jihad-ul Islami e) Harkat-ul-Jehad-al-Islami f) Harakat ul Jihad-e-Islami F.k.a.: a) Harakat-ul-Ansar b) HUA Address: na Listed on: 6 Aug. 2010 (amended on 13 Dec. 2011) Other information: Was established in Afghanistan in 1980. In 1993, Harakat-ul Jihad Islami merged with Harakat ul-Mujahidin (QE.H.8.01) to form Harakat ul-Ansar. In 1997, Harakat-ul Jihad Islami split from Harakat ul-Ansar and resumed using its former name. Operations are in India, Pakistan and Afghanistan. Banned in Pakistan.

## QE.H.8.01. Name: HARAKAT UL-MUJAHIDIN / HUM

A.k.a.: a) Al-Faran b) Al-Hadid c) Al-Hadith d) Harakat Ul-Ansar e) HUA f) Harakat Ul-Mujahideen F.k.a.: na Address: Pakistan Listed on: 6 Oct. 2001 (amended on 13 Dec. 2011) Other information: Associated with Jaish-i-Mohammed (QE.J.19.01), Lashkar i Jhangvi (LJ) (QE.L.96.03) and Lashkar-e-Tayyiba (QE.L.118.05). Active in Pakistan and Afghanistan. Banned in Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

## QE.I.9.01. Name: ISLAMIC ARMY OF ADEN

**A.k.a.:** na **F.k.a.:** na **Address:** na **Listed on:** 6 Oct. 2001 **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 9 Jul. 2010.

## QE.I.99.03. Name: ISLAMIC INTERNATIONAL BRIGADE (IIB)

A.k.a.: a) The Islamic Peacekeeping Brigade b) The Islamic Peacekeeping Army c) The International Brigade d) Islamic Peacekeeping Battalion e) International Battalion f) Islamic Peacekeeping International Brigade F.k.a.: na Address: na Listed on: 4 Mar. 2003 (amended on 13 Dec. 2011) Other information: Linked to the Riyadus-Salikhin Reconnaissance and Sabotage Battalion of Chechen Martyrs (RSRSBCM) (QE.R.100.03) and the Special Purpose Islamic Regiment (SPIR) (QE.S.101.03). Review pursuant to Security Council resolution 1822 (2008) was concluded on 17 May 2010.

## QE.I.119.05. Name: ISLAMIC JIHAD GROUP

A.k.a.: a) Jama'at al-Jihad b) Libyan Society c) Kazakh Jama'at d) Jamaat Mojahedin e) Jamiyat f) Jamiat al-Jihad al-Islami g) Dzhamaat Modzhakhedov h) Islamic Jihad Group of Uzbekistan i) al-Djihad al-Islami j) Zamaat Modzhakhedov Tsentralnoy Asii k) Islamic Jihad Union F.k.a.: na Address: na Listed on: 1 Jun. 2005 (amended on 19 Apr. 2006, 20 Feb. 2008, 13 Dec. 2011) Other information: Founded and led by Najmiddin Kamolitdinovich Jalolov (QI.J.240.08) and Suhayl Fatilloevich Buranov (QI.B.239.08). Associated with the Islamic Movement of Uzbekistan (QE.I.10.01) and Emarat Kavkaz (QE.E.131.11). Active in the Afghanistan/Pakistan border area, Central Asia, South Asia region and some European States. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

## QE.I.10.01. Name: ISLAMIC MOVEMENT OF UZBEKISTAN

**A.k.a.:** IMU **F.k.a.:** na **Address:** na **Listed on:** 6 Oct. 2001 (amended on 13 Dec. 2011) **Other information:** Associated with the Eastern Turkistan Islamic Movement (QE.E.88.02), Islamic Jihad Group (QE.I.119.05) and Emarat Kavkaz (QE.E.131.11). Active in the Afghanistan/Pakistan border area, northern Afghanistan and Central Asia. Review pursuant to Security Council resolution 1822

# QE.J.19.01. Name: JAISH-I-MOHAMMED

**A.k.a.:** Army of Mohammed **F.k.a.:** na **Address:** Pakistan **Listed on:** 17 Oct. 2001 (amended on 13 Dec. 2011) **Other information:** Based in Peshawar and Muzaffarabad, Pakistan Associated with Harakat ul-Mujahidin / HUM (QE.H.8.01), Lashkar-e-Tayyiba (QE.L.118.05), Al-Akhtar Trust International (QE.A.121.05), and Harakat-ul Jihad Islami (QE.H.130.10). Banned in Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

#### QE.B.138.14. Name: JAMA'ATU AHLIS SUNNA LIDDA'AWATI WAL-JIHAD

A.k.a.: a) Jama'atu Ahlus-Sunnah Lidda'Awati Wal Jihad b) Jama'atu Ahlus-Sunna Lidda'Awati Wal Jihad c) المجماعة أهل الدينة ل الدعوة والدجهاد d) Boko Haram e) Western Education is a Sin F.k.a.:

na Address: Nigeria Listed on: 22 May 2014 Other information: Affiliate of Al-Qaida (QE.A.4.01), and the Organization of Al-Qaida in the Islamic Maghreb (AQIM) (QE.T.14.01). Associated with Jama'atu Ansarul Muslimina Fi Biladis-Sudan (Ansaru). The leader is Abubakar Shekau.

# QE.J.20.01. Name: JAM'YAH TA'AWUN AL-ISLAMIA

A.k.a.: a) Society of Islamic Cooperation b) Jam'iyat Al Ta'awun Al Islamiyya c) Jit F.k.a.: na Address: Kandahar City, Afghanistan Listed on: 17 Oct. 2001 (amended on 13 Dec. 2011) Other information: Founded by Usama Mohammad Awad bin Laden (QI.B.8.01) in 2001. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

## QE.J.92.02. Name: JEMAAH ISLAMIYAH

A.k.a.: a) Jema'ah Islamiyah b) Jemaah Islamiya c) Jemaah Islamiah d) Jamaah Islamiyah e) Jama'ah Islamiyah F.k.a.: na Address: na Listed on: 25 Oct. 2002 (amended on 13 Dec. 2011) Other information: Operates in Southeast Asia, including Indonesia, Malaysia and the Philippines. Associated with the Abu Sayyaf Group (QE.A.1.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 25 May 2010.

# QE.J.133.12. Name: JEMMAH ANSHORUT TAUHID (JAT)

A.k.a.: a) Jemaah Anshorut Tauhid b) Jemmah Ansharut Tauhid c) Jem'mah Ansharut Tauhid d) Jamaah Ansharut Tauhid e) Jama'ah Ansharut Tauhid f) Laskar 99 F.k.a.: na Address: Jl. Semenromo number 58, 04/XV Ngruki, Cemani, Grogol, Sukoharjo, Jawa Tengah, Indonesia, Telephone: 0271-2167285, Email: info@ansharuttauhid.com Listed on: 12 Mar. 2012 Other information: Founded and led by Abu Bakar Ba'asyir (QI.B.217.06.). Established on 27 Jul. 2008 in Solo, Indonesia. Associated with Jemmah Islamiya (JI) (QE.J.92.02.). Website: http://ansharuttauhid.com/

# QE.L.118.05. Name: LASHKAR-E-TAYYIBA

A.k.a.: a) Lashkar-e-Toiba b) Lashkar-i-Taiba c) al Mansoorian d) al Mansooreen e) Army of the Pure f) Army of the Righteous g) Army of the Pure and Righteous h) Paasban-e-Kashmir i) Paasban-i-Ahle-Hadith j) Pasban-e-Kashmir k) Pasban-e-Ahle-Hadith l) Paasban-e-Ahle-Hadis m) Pashan-e-ahle Hadis n) Lashkar e Tayyaba o) LET p) Jamaat-ud-Dawa q) JUD r) Jama'at al-Dawa s) Jamaat ud-Daawa t) Jamaat ul-Dawah u) Jamaat-ul-Dawa v) Jama'at-i-Dawat w) Jamaiat-ud-Dawa x) Jama'at-ud-Da'awah y) Jama'at-ud-Da'awa z) Jamaati-ud-Dawa aa) Falah-i-Insaniat Foundation (FIF) F.k.a.: na Address: na Listed on: 2 May 2005 (amended on 3 Nov. 2005, 10 Dec. 2008, 14 Mar. 2012) Other information: Associated with Hafiz Muhammad Saeed (QI.S.263.08) who is the leader of Lashkar-e-Tayyiba. Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

## QE.L.96.03. Name: LASHKAR I JHANGVI (LJ)

**A.k.a.:** na **F.k.a.:** na **Address:** na **Listed on:** 3 Feb. 2003 (amended on 13 Dec. 2011) **Other information:** Based primarily in Pakistan's Punjab region and in the city of Karachi. Active in Pakistan although banned as at 2010. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QE.L.11.01. Name: LIBYAN ISLAMIC FIGHTING GROUP

الحماعة الاسلامية المقاتلة الدليبية: Name (original script):

**A.k.a.:** LIFG **F.k.a.:** na **Address:** Libyan Arab Jamahiriya **Listed on:** 6 Oct. 2001 (amended on 5 Mar. 2009, 13 Dec. 2011) **Other information:** Members in Afghanistan merged with Al-Qaida (QE.A.4.01) in Nov. 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QE.M.12.01. Name: MAKHTAB AL-KHIDAMAT

Name (original script): مك تب ال خدمات

**A.k.a.:** a) MAK b) Al Kifah **F.k.a.:** na **Address:** na **Listed on:** 6 Oct. 2001 (amended on 5 Mar. 2009, 13 Dec. 2011) **Other information:** Absorbed into Al-Qaida (QE.A.4.01.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

QE.M.89.02. Name: MOROCCAN ISLAMIC COMBATANT GROUP

الجماعة الاسلامية المغربية المقاتلة :(Name (original script

**A.k.a.:** a) Groupe Islamique Combattant Marocain b) GICM **F.k.a.:** na **Address:** Morocco **Listed on:** 10 Oct. 2002 (amended on 5 Mar. 2009) **Other information:** Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 May 2010.

**QE.M.134.12. Name:** MOUVEMENT POUR L'UNIFICATION ET LE JIHAD EN AFRIQUE DE L'OUEST (MUJAO)

ال توح يد وال جهاد في غرب إف ري قيا حركة :(Name (original script

A.k.a.: na F.k.a.: na Address: a) Mali b) Algeria Listed on: 5 Dec. 2012 Other information: Associated with The Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01.) and Mokhtar Belmokhtar (QI.B.136.03.). Active in the Sahel/Sahara region.

QE.M.136.13 Name: MUHAMMAD JAMAL NETWORK (MJN)

شد بكة محمد جمال: (Name (original script

**A.k.a.:** a) Muhammad Jamal Group b) Jamal Network c) Abu Ahmed Group d) Al-Qaida in Egypt (AQE) **F.k.a.:** na **Address:** Operates in Egypt, Libya and Mali **Listed on:** 21 Oct. 2013 **Other information:** Terrorist and paramilitary group established by Muhammad Jamal al Kashif (Ql.A.318.13) in 2011 and linked to Al-Qaida (QE.A.4.01), Aiman al-Zawahiri (Ql.A.6.01), and the leadership of Al-Qaida in the Arabian Peninsula (AQAP) (QE.A.129.10) and the Organization of Al-Qaida in the Islamic Maghreb (AQIM) (QE.T.14.01). Funded and supported by AQAP. Multiple terrorist training camps in Egypt and Libya. Reportedly acquiring weapons, conducting training and establishing terrorist groups in the Sinai, Egypt. Training suicide bombers, foreign fighters and planning terrorist attacks in Egypt, Libya and elsewhere as of Sep. 2013. MJN members were reported to be involved in the attack on the United States Mission in Benghazi, Libya, on 11 Sep. 2012.

# QE.R.21.01. Name: RABITA TRUST

**A.k.a.:** na **F.k.a.:** na **Address:** a) Room 9a, 2nd Floor, Wahdat Road, Education Town, Lahore, Pakistan b) Wares Colony, Lahore, Pakistan (at time of listing) **Listed on:** 17 Oct. 2001 (amended on 21 Mar. 2012) **Other information:** Wa'el Hamza Abd al-Fatah Julaidan (QI.J.79.02) served as its Director General. Banned in Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

## QE.R.128.08. Name: RAJAH SOLAIMAN MOVEMENT

A.k.a.: a) Rajah Solaiman Islamic Movement b) Rajah Solaiman Revolutionary Movement F.k.a.: na Address: a) Barangay Mal-Ong, Anda, Pangasinan Province, Philippines b) Sitio Dueg, Barangay Maasin, San Clemente, Tarlac Province, Philippines c) Number 50, Purdue Street, Cubao, Quezon City, Philippines Listed on: 4 Jun. 2008 (amended on 13 Dec. 2011) Other information: Founded and headed by Hilarion Del Rosario Santos III (QI.S.244.08). Associated with the Abu Sayyaf Group (QE.A.1.01.) and Jemaah Islamiyah (QE.J.92.02.) the International Islamic Relief

Organization, Philippines, branch offices (QE.I.126.06.) and Khadafi Abubakar Janjalani (QI.J.180.04.). Review pursuant to Security Council resolution 1822 (2008) was concluded on 13 May 2010.

# QE.R.70.02. Name: REVIVAL OF ISLAMIC HERITAGE SOCIETY

Rame (original script): جمع ية احياء ال تراث الا سلامي

A.k.a.: a) Revival of Islamic Society Heritage on the African Continent b) Jamia Ihya ul Turath c) RIHS d) Jamiat Ihia Al-Turath Al-Islamiya F.k.a.: na Address: a) Pakistan b) Afghanistan Listed on: 11 Jan. 2002 (amended on 25 Jul. 2006, 5 Mar. 2009, 13 Dec. 2011) Other information: NOTE: Only the Pakistan and Afghanistan offices of this entity are designated. Associated with Abu Bakr al-Jaziri (QI.A.58.02) and Afghan Support Committee (ASC) (QE.A.69.02). Review pursuant to Security Council resolution 1822 (2008) was concluded on 8 Jun. 2010.

# **QE.R.100.03. Name:** RIYADUS-SALIKHIN RECONNAISSANCE AND SABOTAGE BATTALION OF CHECHEN MARTYRS (RSRSBCM)

**A.k.a.: a)** Riyadus-Salikhin Reconnaissance and Sabotage Battalion **b)** Riyadh-as-Saliheen **c)** The Sabotage and Military Surveillance Group of the Riyadh al-Salihin Martyrs **d)** Firqat al-Takhrib wa allstitla al-Askariyah li Shuhada Riyadh al-Salihin **e)** Riyadus-Salikhin Reconnaissance and Sabotage battalion of Shahids (martyrs) **F.k.a.:** na **Address:** na **Listed on:** 4 Mar. 2003 (amended on 25 Jul. 2006, 13 Dec. 2011) **Other information:** Associated with the Islamic International Brigade (IIB) (QE.I.99.03), the Special Purpose Islamic Regiment (SPIR) (QE.S.101.03) and Emarat Kavkaz (QE.E.131.11). Review pursuant to Security Council resolution 1822 (2008) was concluded on 17 May 2010.

# QE.S.101.03. Name: SPECIAL PURPOSE ISLAMIC REGIMENT (SPIR)

A.k.a.: a) The Islamic Special Purpose Regiment b) The al-Jihad-Fisi-Sabililah Special Islamic Regiment c) Islamic Regiment of Special Meaning F.k.a.: na Address: na Listed on: 4 Mar. 2003 (amended on 25 Jul. 2006, 13 Dec. 2011) Other information: Linked to the Islamic International Brigade (IIB) (QE.I.99.03) and the Riyadus-Salikhin Reconnaissance and Sabotage Battalion of Chechen Martyrs (RSRSBCM) (QE.R.100.03). Review pursuant to Security Council resolution 1822 (2008) was concluded on 17 May 2010.

## QE.T.108.04. Name: TAIBAH INTERNATIONAL-BOSNIA OFFICES

**A.k.a.:** a) Taibah International Aid Agency b) Taibah International Aid Association c) Al Taibah, Intl. d) Taibah International Aide Association F.k.a.: na Address: a) 6 Avde Smajlovica Street, Novo Sarajevo, Bosnia and Herzegovina b) 26 Tabhanska Street, Visoko, Bosnia and Herzegovina c) 3 Velika Cilna Ulica, Visoko, Bosnia and Herzegovina d) 26 Tabhanska Street, Visoko, Bosnia and Herzegovina Listed on: 11 May 2004 (amended on 24 Mar. 2009) Other information: In 2002-2004, Taibah International – Bosnia offices used premises of the Culture Home in Hadzici, Sarajevo, Bosnia and Herzegovina. The organization was officially registered in Bosnia and Herzegovina as a branch of Taibah International Aid Association under registry number 7. Taibah International – Bosnia offices ceased its work by decision of the Ministry of Justice of the Bosnia and Herzegovina Federation (decision on cessation of operation number 03-05-2-70/03). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

# QE.T.132.11. Name: TEHRIK-E TALIBAN PAKISTAN (TTP)

ت حرید ک طالہ بان پہ اک سہ تان: کا Alame (original script):

**A.k.a.: a)** Tehrik-I-Taliban Pakistan **b)** Tehrik-e-Taliban **c)** Pakistani Taliban **d)** Tehreek-e-Taliban **F.k.a.:** na **Address:** na **Listed on:** 29 Jul. 2011 **Other information:** Tehrik-e Taliban is based in the tribal areas along the Afghanistan/Pakistan border. Formed in 2007, its leader is Hakimullah Mehsud (QI.M.286.10.). Wali Ur Rehman (QI.U.287.10.) is the Emir of TTP for South Waziristan.

# QE.T.14.01. Name: THE ORGANIZATION OF AL-QAIDA IN THE ISLAMIC MAGHREB

ت نظيم ال قاعدة ب بلاد المغرب الاسلامي :Name (original script)

A.k.a.: a) AQIM b) Al Qaïda au Maghreb islamique (AQMI) F.k.a.: a) Le Groupe Salafiste pour La

Prédication et le Combat (GSPC) b) Salafist Group For Call and Combat Address: a) Algeria b) Mali c) Mauritania d) Morocco e) Niger f) Tunisia Listed on: 6 Oct. 2001 (amended on 26 Apr. 2007, 7 Apr. 2008, 17 Jul. 2009, 13 Dec. 2011) Other information: Headed by Abdelmalek Droukdel (QI.D.232.07.). Zone of operation includes Algeria and parts of Mali, Mauritania, Niger, Tunisia and Morocco. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

# QE.T.90.02. Name: TUNISIAN COMBATANT GROUP

الحماعة الدود سدية الدمقات لة: Name (original script)

A.k.a.: a) Groupe Combattant Tunisien b) Groupe Islamiste Combattant Tunisien c) GICT F.k.a.: na Address: Tunisia Listed on: 10 Oct. 2002 (amended on 26 Nov. 2004, 5 Mar. 2009, 13 Dec. 2011) Other information: Associated with the Organization of Al-Qaida in the Islamic Maghreb (QE.T.14.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 6 May 2010.

# QE.U.68.01. Name: UMMAH TAMEER E-NAU (UTN)

A.k.a.: na F.k.a.: na Address: a) Street 13, Wazir Akbar Khan, Kabul, Afghanistan b) Pakistan Listed on: 24 Dec. 2001 (amended on 13 Dec. 2011) Other information: Its directors included Mahmood Sultan Bashir-Ud-Din (QI.B.55.01), Majeed Abdul Chaudhry (QI.A.54.01) and Mohammed Tufail (QI.T.56.01). Banned in Pakistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.

#### QE.W.15.01. Name: WAFA HUMANITARIAN ORGANIZATION

A.k.a.: a) Al Wafa b) Al Wafa Organization c) Wafa Al-Igatha Al-Islamia F.k.a.: na Address: a) Jordan House No. 125, Street 54, Phase II Hayatabad, Peshawar, Pakistan (at time of listing) b) Saudi Arabia (at time of listing) c) Kuwait (at time of listing) d) United Arab Emirates (at time of listing) e) Afghanistan (at time of listing) Listed on: 6 Oct. 2001 (amended on 21 Mar. 2012) Other information: Headquarters was in Kandahar, Afghanistan as at 2001. Wafa was a component of Al-Qaida (QE.A.4.01) in 2001. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jun. 2010.



# The List of individuals and entities established pursuant to Security Council Resolution 1988 (2011)

Last updated on: 21 August 2014

## Composition of the List

The list consists of the two sections specified below:

A. Individuals associated with the Taliban

B. Entities and other groups and undertakings associated with the Taliban

A. Individuals associated with the Taliban

TI.A.155.11. Name: 1: ABDUL AZIZ 2: ABBASIN 3: na 4: na

عبد العزيز عباسين: Name (original script)

Title: na Designation: na DOB: 1969 POB: Sheykhan Village, Pirkowti Area, Orgun District, Paktika Province, Afghanistan Good quality a.k.a.: Abdul Aziz Mahsud Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 4 Oct. 2011 (amended on 22 Apr. 2013) Other information: Key commander in the Haqqani Network (TE.H.12.12.) under Sirajuddin Jallaloudine Haqqani (TI.H.144.07.). Taliban Shadow Governor for Orgun District, Paktika Province as of early 2010. Operated a training camp

for non-Afghan fighters in Paktika Province. Has been involved in the transport of weapons to Afghanistan.

TI.A.121.01. Name: 1: AZIZIRAHMAN 2: ABDUL AHAD 3: na 4: na

عزيز الرحمان عبد الاحد :Name (original script)

Title: Mr Designation: Third Secretary, Taliban Embassy, Abu Dhabi, United Arab Emirates DOB: 1972 POB: Shega

District, Kandahar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality:

Afghan Passport no.: na National identification no.: Afghan national identification card (tazkira) number 44323 Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) Other information: Belongs to Hotak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.B.24.01. Name: 1: ABDUL GHANI 2: BARADAR 3: ABDUL AHMAD TURK 4: na

عبدالغنى برادر عبد الاحمد ترك :Name (original script)

Title: Mullah Designation: Deputy Minister of Defence under the Taliban regime DOB: Approximately 1968 POB: Yatimak village, Dehrawood District, Uruzgan Province, Afghanistan Good quality a.k.a.: a) Mullah Baradar Akhund b) Abdul Ghani Baradar, (previously listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012) Other information: Arrested in Feb. 2010 and in custody in Pakistan. Extradition request to Afghanistan pending in Lahore High Court, Pakistan as of June 2011. Belongs to Popalzai tribe. Senior Taliban military commander and member of Taliban Quetta Council as of May 2007. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.A.128.01. Name: 1: ABDUL QADEER 2: BASIR 3: ABDUL BASEER 4: na

عبدالقدير بصير عبد البصير: Name (original script)

Title: a) General b) Maulavi Designation: Military Attache, Taliban Embassy, Islamabad, Pakistan DOB: 1964 POB: a) Surkh Rod District, Nangarhar Province, Afghanistan b) Hisarak District, Nangarhar Province, Afghanistan Good quality a.k.a.: a) Abdul Qadir b) Ahmad Haji c) Abdul Qadir Haqqani d) Abdul Qadir Basir Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number D 000974 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 23 Apr. 2007, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012) Other information: Financial advisor to Taliban Peshawar Military Council and Head of Taliban Peshawar Financial Commission. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.M.100.01. Name: 1: NAZIR MOHAMMAD 2: ABDUL BASIR 3: na 4: na

id محمد عبد البصير :Name (original script)

**Title:** Maulavi **Designation:** a) Mayor of Kunduz City b) Acting, Governor of Kunduz Province under the Taliban regime **DOB:** 1954 **POB:** Malaghi Village, Kunduz District, Kunduz Province, Afghanistan **Good quality a.k.a.:** Nazar Mohammad (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **Nationality:** and a **Sep.** 2003, 21 Sep. 2007, 18 May 2012, 31 Dec. 2013) **Other information:** Alternative title: Sar Muallim. Reconciled after the fall of the Taliban regime, and assumed duties under the new Government on district level in Kunduz Province. Confirmed assassinated by Taliban on 9 November 2008. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.Q.130.01. Name: 1: ABDUL GHAFAR 2: QURISHI 3: ABDUL GHANI 4: na

عبدالغفار قريشي عبد الغني :Name (original script)

Title: Maulavi Designation: Repatriation Attache, Taliban Embassy, Islamabad, Pakistan DOB: a) 1970 b) 1967 POB: Turshut village, Wursaj District, Takhar Province, Afghanistan Good quality a.k.a.: Abdul Ghaffar Qureshi Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number D 000933 issued in Kabul on 13 Sep. 1998 National identification no.: Afghan national identification card (tazkira) number 55130 Address: Khairkhana Section Number 3, Kabul, Afghanistan Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) Other information: Involved in drug trafficking. Belongs to Tajik ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.A.145.10. Name: 1: AMIR 2: ABDULLAH 3: na 4: na

Name (original script): امير عبد الله

Title: na Designation: Former Kandahar Province Deputy Taliban Governor DOB: Approximately 1972 POB: Paktika Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: Amir Abdullah Sahib Nationality: Afghan Passport no.: na National identification no.: na Address: Karachi, Pakistan Listed on: 20 Jul. 2010 (amended on 29 Nov. 2011) Other information: Has travelled to Kuwait, Saudi Arabia, the Libyan Arab Jamahiriya and the United Arab Emirates to raise funds for the Taliban. Treasurer to Abdul Ghani Baradar Abdul Ahmad Turk (TI.B.24.01). Believed to be in Afghanistan/Pakistan border area.

TI.A.162.12. Name: 1: ABDUL SATAR 2: ABDUL MANAN 3: na 4: na

عبد الستار عبد المنان: Name (original script)

**Title:** Haji **Designation:** na **DOB:** 1964 **POB:** a) Mirmandaw village, Nahr-e Saraj District, Helmand Province, Afghanistan b) Mirmadaw village, Gereshk District, Helmand Province, Afghanistan c) Qilla Abdullah, Baluchistan Province, Pakistan **Good quality a.k.a.:** a) Haji Abdul Sattar Barakzai b) Haji Abdul Satar c) Haji Satar Barakzai d) Abdulasattar **Low quality a.k.a.:** na **Nationality:** na **Passport no.:** Pakistan passport number AM5421691 expires on 11 Aug. 2013 **National identification no.:** a) Pakistan National Identification number 5420250161699 b) Afghan National Identification number 585629 **Address:** a) Kachray Road, Pashtunabad, Quetta, Baluchistan Province, Pakistan b) Nasrullah Khan Chowk, Pashtunabad Area, Baluchistan Province, Pakistan c) Chaman, Baluchistan Province, Pakistan d) Abdul Satar Food Shop, Ayno Mina 0093, Kandahar Province, Afghanistan **Listed on:** 29 Jun. 2012 **Other information:** Co-owner of Haji Khairullah Haji Sattar Money Exchange (TE.H.1.12.) and associated also with Khairullah Barakzai (TI.K.163.12.). Belongs to Barakzai tribe. Father's name is Hajji 'Abd-al-Manaf.

TI.H.142.01. Name: 1: ABDUL HAI 2: HAZEM 3: ABDUL QADER 4: na

عبد الحي عظيم عبد القادر :(Name (original script

**Title: a)** Maulavi **b)** Mullah **Designation:** First Secretary, Taliban Consulate General, Quetta, Pakistan **DOB:** 1971 **POB:** Pashawal Yargatoo village, Andar District, Ghazni Province, Afghanistan **Good quality a.k.a.:** Abdul Hai Hazem (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** Afghan passport number D 0001203 **National identification no.:** na **Address: a)** Iltifat village, Shakardara District, Kabul Province, Afghanistan **b)** Puli Charkhi Area, District Number 9, Kabul City, Kabul Province **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 21 Sep. 2007, 29 Nov. 2011, 18 May 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.T.105.01. Name: 1: AHMAD TAHA 2: KHALID 3: ABDUL QADIR 4: na

Name (original script): احمد طه خالد عبد القادر

Title: Maulavi Designation: Governor of Paktia Province under the Taliban regime DOB: Approximately 1963 POB: a) Nangarhar Province, Afghanistan b) Khost Province, Afghanistan c) Siddiq Khel village, Naka District, Paktia Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 13 Aug. 2012) Other information: Taliban member responsible for Nangarhar Province as at 2011. Believed to be in Afghanistan/Pakistan border area. Belongs to Zadran tribe. Close associate of Sirajuddin Jallaloudine Haqqani (TI.H.144.07). Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.A.80.01. Name: 1: SAYED ESMATULLAH 2: ASEM 3: ABDUL QUDDUS 4: na

سيد عصمت الله عاصم عبد القدوس :Name (original script)

**Title:** Maulavi **Designation:** a) Deputy Minister of Preventing Vice and Propagating Virtue under the Taliban regime b) Secretary General of the Afghan Red Crescent Society (ARCS) under the Taliban regime **DOB:** Approximately 1967 **POB:** Qalayi Shaikh, Chaparhar District, Nangarhar Province, Afghanistan **Good quality a.k.a.:** a) Esmatullah Asem b) Asmatullah Asem c) Sayed Esmatullah Asem (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012) **Other information:** Member of the Taliban Supreme Council as of May 2007. Believed to be in Afghanistan/Pakistan border area. Member of the Taliban Peshawar Shura. Responsible for Afghan Taliban activity in Federally Administrated Tribal Areas, Pakistan as at 2008. A leading expert in IED and suicide attacks as of 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.U.8.01. Name: 1: SHAMS 2: UR-RAHMAN 3: ABDUL ZAHIR 4: na

شمس الرحمن عبد الظاهر :(Name (original script

Title: a) Mullah b) Maulavi Designation: Deputy Minister of Agriculture under the Taliban regime DOB: 1969 POB: Waka Uzbin village, Sarobi District, Kabul Province, Afghanistan Good quality a.k.a.: a) Shamsurrahman b) Shamsur-Rahman c) Shamsurrahman Abdurahman Low quality a.k.a.: Shams ur-Rahman Sher Alam Nationality: Afghan Passport no.: na National identification no.: a) Afghan national identification card (tazkira) number 2132370 b) Afghan national identification card (tazkira) number 812673 Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 12 Apr. 2010, 29 Nov. 2011, 18 May 2012) Other information: Believed to be in Afghanistan/Pakistan border area. Involved in drug trafficking. Belongs to Ghilzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.160.12. Name: 1: ABDUL SAMAD 2: ACHEKZAI 3: na 4: na

عبد الصمد اچکزی: Name (original script)

Title: na Designation: na DOB: 1970 POB: Afghanistan Good quality a.k.a.: Abdul Samad Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 2 Mar. 2012 Other information: Senior Taliban member responsible for the manufacturing of improvised explosive devices (IED). Involved in recruiting and deploying suicide bombers to conduct attacks in Afghanistan.

TI.A.167.13. Name: 1: ADAM KHAN 2: ACHEKZAI 3: na 4: na

ادم خان اچکزی :Name (original script)

Title: Maulavi Designation: na DOB: a) 1970 b) 1972 c) 1971 d) 1973 e) 1974 f) 1975 POB: Kandahar Province, Afghanistan Good quality a.k.a.: a) Maulavi Adam Khan b) Maulavi Adam Low quality a.k.a.: na Nationality: Pakistani Passport no.: na National identification no.: na Address: Chaman, Baluchistan Province, Pakistan Listed on: 16 Apr. 2013 Other information: Improvised explosive device manufacturer and facilitator for the Taliban. Taliban member responsible for Badghis Province, Afghanistan, as at mid – 2010. Former Taliban member responsible for Sar-e Pul and Samangan Provinces, Afghanistan. As Taliban military commander in Kandahar Province, Afghanistan, he was involved in organizing suicide attacks in neighboring provinces. Associated with Abdul Samad Achekzai (TI.A.160.12.).

TI.A.114.01. Name: 1: ABDUL RAHMAN 2: AGHA 3: na 4: na

عبدالرحمان أغا :Name (original script)

Title: Maulavi Designation: Chief Justice of Military Court under the Taliban regime DOB: Approximately 1958 POB:

Arghandab District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality: a)**Afghan **b)** Pakistani **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan.
2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.A.156.12. Name: 1: AHMAD 2: ZIA 3: AGHA 4: na

Name (original script): احمد ضيا آغا

Title: Haji Designation: na DOB: 1974 POB: Maiwand District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Zia Agha b) Noor Ahmad c) Noor Ahmed Low quality a.k.a.: Sia Agha Sayeed Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 6 Jan. 2012 Other information: Senior Taliban official with military and financial responsibilities as at 2011. Leader of the Taliban's Military Council as of 2010. In 2008 and 2009, served as a Taliban finance officer and distributed money to Taliban commanders in Afghanistan/Pakistan border area.

TI.A.91.01. Name: 1: JANAN 2: AGHA 3: na 4: na

جانان أغا :(Name (original script

Title: Mullah Designation: Governor of Faryab Province under the Taliban regime DOB: a) Approximately 1958 b) Approximately 1953 POB: Tirin Kot city, Uruzgan Province, Afghanistan Good quality a.k.a.: Abdullah Jan Agha Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) Other information: Member of Taliban Supreme Council and advisor to Mullah Mohammed Omar (TI.O.4.01) as at June 2010. Leads a Taliban "front" (mahaz) as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Sadat ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.57.01. Name: 1: SAYED 2: MOHAMMAD 3: AZIM 4: AGHA

Name (original script): اغلیم آغا

**Title:** Maulavi **Designation:** Director of the Passport and Visa Department in the Ministry of Interior under the Taliban regime **DOB:** a) Approximately 1966 b) Approximately 1969 **POB:** Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** a) Sayed Mohammad Azim Agha b) Agha Saheb **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Directs a Taliban "front" (mahaz) and serves as member of the military commission of the Taliban as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.72.01. Name: 1: SAYYED GHIASSOUDDINE 2: AGHA 3: na 4: na

Name (original script): سيد غياث الدين

**Title:** Maulavi **Designation:** a) Minister of Haj and Religious Affairs under the Taliban regime **b)** Education Minister under the Taliban regime **DOB:** Approximately 1961 **POB:** Kohistan District, Faryab Province, Afghanistan **Good quality a.k.a.:** a) Sayed Ghias b) Sayed Ghiasuddin Sayed Ghousuddin **c)** Sayyed Ghayasudin **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 1 Feb. 2008, 29 Nov. 2011) **Other information:** Taliban member responsible for Faryab, Jawzjan, Sari Pul and Balkh Provinces, Afghanistan as at June 2010. Involved in drug trafficking. Member of Taliban Supreme Council and Taliban Military Council as at December 2009. Believed to be in Afghanistan/Pakistan border area. Belongs to Sadat ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.31.01. Name: 1: MOHAMMAD 2: AHMADI 3: na 4: na

محمد احمدی :(Name (original script

Title: a) Mullah b) Haji Designation: a) President of Central Bank (Da Afghanistan Bank) under the Taliban regime b) Minister of Finance under the Taliban regime DOB: Approximately 1963 POB: a) Daman District, Kandahar Province, Afghanistan b) Pashmul village, Panjwai District, Kandahar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) Other information: Believed to be in Afghanistan/Pakistan border area. Belongs to Kakar tribe. He is a member of the Taliban Supreme Council. Review

pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.81.01. Name: 1: AHMADULLAH 2: na 3: na 4: na

الحمد الله :Name (original script)

Title: Qari Designation: Minister of Security (Intelligence) under the Taliban regime DOB: a) Approximately 1975 b) Approximately 1965 POB: a) Khogyani area, Qarabagh District, Ghazni Province, Afghanistan b) Andar District, Ghazni Province, Afghanistan b) Andar District, Ghazni Province, Afghanistan Good quality a.k.a.: a) Ahmadulla b) Mohammad Ahmadullah Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 12 Apr. 2010, 29 Nov. 2011) Other information: Reportedly deceased in Dec. 2001. Belonged to Khogyani tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 20 Jul. 2010.

TI.W.159.12. Name: 1: AHMED JAN 2: WAZIR 3: AKHTAR MOHAMMAD 4: na

Name (original script): احمد جان وزير اختر محمد

Title: na Designation: Official of the Ministry of Finance during the Taliban regime DOB: 1963 POB: Barlach Village, Qareh Bagh District, Ghazni Province, Afghanistan Good quality a.k.a.: a) Ahmed Jan Kuchi b) Ahmed Jan Zadran Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 6 Jan. 2012 (amended on 31 Dec. 2013, 11 Feb. 2014) Other information: Key commander of the Haqqani Network (TE.H.12.12.), which is based in Afghanistan/Pakistan border area. Acts as deputy, spokesperson and advisor for Haqqani Network senior leader Sirajuddin Jallaloudine Haqqani (TI.H.144.07.). Liaises with the Taliban Supreme Council. Has travelled abroad. Liaises with and provides Taliban commanders in Ghazni Province, Afghanistan, with money, weapons, communications equipment and supplies. Reportedly deceased as of 2013.

TI.K.149.10. Name: 1: SALEH 2: MOHAMMAD 3: KAKAR 4: AKHTAR MUHAMMAD

صالح محمد کاکر اختر محمد :(Name (original script

Title: na Designation: na DOB: a) Approximately 1962 b) 1961 POB: a) Nalghan village, Panjwai District, Kandahar Province, Afghanistan b) Sangesar village, Panjway District, Kandahar Province, Afghanistan Good quality a.k.a.: Saleh Mohammad Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: Daman District, Kandahar Province, Afghanistan Listed on: 4 Nov. 2010 (amended on 29 Nov. 2011, 13 Aug. 2012, 31 Dec. 2013, 16 May 2014) Other information: Has run an organized smuggling network in Kandahar and Helmand provinces, Afghanistan. Previously operated heroin processing laboratories in Band-e Temur, Kandahar Province, Afghanistan. Has owned a car dealership in Mirwais Mena, Dand District in Kandahar Province, Afghanistan. Released from custody in Afghanistan in February 2014. Linked by marriage to Mullah Ubaidullah Akhund Yar Mohammad Akhund (TI.A.22.01.). Belongs to Kakar tribe.

TI.A.94.01. Name: 1: ABDUL BARI 2: AKHUND 3: na 4: na

عبد البارى آخوند :Name (original script)

**Title: a)** Maulavi **b)** Mullah **Designation:** Governor of Helmand Province under the Taliban regime **DOB:** Approximately 1953 **POB: a)** Baghran District, Helmand Province, Afghanistan **b)** Now Zad District, Helmand Province, Afghanistan **Good quality a.k.a.:** Haji Mullah Sahib **Low quality a.k.a.:** Zakir **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012) **Other information:** Member of the Taliban Supreme Council as of 2009. Believed to be in Afghanistan/Pakistan border area. Belongs to Alokozai tribe. Member of Taliban leadership in Helmand Province, Afghanistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.A.9.01. Name: 1: ATTIQULLAH 2: AKHUND 3: na 4: na

عتيق الله أخوند :(Name (original script

**Title:** Maulavi **Designation:** Deputy Minister of Agriculture under the Taliban regime **DOB:** Approximately 1953 **POB:** Shah Wali Kot District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Member of Taliban Supreme Military Council as well as Taliban Supreme Council as at June 2010. Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.158.12. Name: 1: MOHAMMAD 2: AMAN 3: AKHUND 4: na

Name (original script): محمد امان آخوند

Title: na Designation: na DOB: 1970 POB: Bande Tumur Village, Maiwand District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Mohammed Aman b) Mullah Mohammed Oman c) Mullah Mohammad Aman Ustad Noorzai Low quality a.k.a.: a) Mullah Mad Aman Ustad Noorzai b) Sanaullah Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 6 Jan. 2012 (amended on 18 May 2012, 27 Jun. 2013) Other information: Senior Taliban member as at 2011 with financial duties, including raising funds on behalf of the leadership. Has provided logistical support for Taliban operations and channeled proceeds from drug trafficking to arms purchases. Has acted as secretary to Taliban leader Mullah Mohammed Omar (TI.O.4.01.) and as his messenger at senior-level meetings of the Taliban. Also associated with Gul Agha Ishakzai (TI.I.147.10.). Member of Mullah Mohammed Omar's (TI.O.4.01.) inner circle during the Taliban regime.

TI.H.2.01. Name: 1: MOHAMMAD 2: HASSAN 3: AKHUND 4: na

Name (original script): محمد حسن آخوند

**Title: a)** Mullah **b)** Haji **Designation: a)** First Deputy, Council of Ministers under the Taliban regime **b)** Foreign Minister under the Taliban regime **c)** Governor of Kandahar under the Taliban regime **d)** Political Advisor of Mullah Mohammed Omar **DOB: a)** Approximately 1955-1958 **b)** Approximately 1945-1950 **POB:** Pashmul village, Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 20 Dec. 2005, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** A close associate of Mullah Mohammed Omar (TI.O.4.01). Member of Taliban Supreme Council as at Dec. 2009. Belongs to Kakar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.A.66.01. Name: 1: MOHAMMAD ABBAS 2: AKHUND 3: na 4: na

Name (original script): محمد عباس أخوند

**Title:** Mullah **Designation:** a) Mayor of Kandahar under the Taliban regime b) Minister of Public Health under the Taliban regime **DOB:** Approximately 1963 **POB:** Khas Uruzgan District, Uruzgan Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Member of Taliban Supreme Council in charge of the Medical Committee as of Jan. 2011. Directly supervises three medical centers caring for wounded Taliban fighters as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Barakzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.A.60.01. Name: 1: MOHAMMAD ESSA 2: AKHUND 3: na 4: na

محمد عيسى آخوند :Name (original script)

**Title: a)** Alhaj **b)** Mullah **Designation:** Minister of Water, Sanitation and Electricity under the Taliban regime **DOB:** Approximately 1958 **POB:** Mial area, Spin Boldak District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.109.01. Name: 1: AHMAD JAN 2: AKHUNDZADA 3: SHUKOOR 4: AKHUNDZADA

الحمد جان آخوند زاده شکور آخوند زاده: (الده المحمد المحمد

**Title: a)** Maulavi **b)** Mullah **Designation:** Governor of Zabol and Uruzgan Provinces under the Taliban regime **DOB:** 1966-1967 **POB: a)** Lablan village, Dehrawood District, Uruzgan Province, Afghanistan **b)** Zurmat District, Paktia Province, Afghanistan **Good quality a.k.a.: a)** Ahmad Jan Akhunzada **b)** Ahmad Jan Akhund Zada **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 12 Apr. 2010, 29 Nov. 2011, 1 Jun. 2012) **Other information:** Taliban member responsible for Uruzgan Province, Afghanistan, as at early 2007. Brother-in-law of Mullah Mohammed Omar (TI.O.4.01). Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.S.83.01. Name: 1: EHSANULLAH 2: SARFIDA 3: HESAMUDDIN 4: AKHUNDZADA

احسان الله سرفدا حسام الدين أخوندزاده: Name (original script):

**Title:** Maulavi **Designation:** Deputy Minister of Security (Intelligence) under the Taliban regime **DOB:** Approximately 1962-1963 **POB:** Khatak village, Gelan District, Ghazni Province, Afghanistan **Good quality a.k.a.:** a) Ehsanullah Sarfadi b) Ehsanullah Sarfida (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 13 Feb. 2012, 18 May 2012, 31 Dec. 2013) **Other information:** As of mid-2007, he provided support to the Taliban in the form of weapons and money. Believed to be in the Gulf region. Belongs to Taraki tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.101.01. Name: 1: MOHAMMAD ESHAQ 2: AKHUNZADA 3: na 4: na

محمد اسحاق أخوند زاده :Name (original script)

**Title:** Maulavi **Designation:** Governor of Laghman Province under the Taliban regime **DOB:** Between 1963 and 1968 **POB:** Andar District, Ghazni Province, Afghanistan **Good quality a.k.a.:** Mohammad Ishaq Akhund born in 1963 **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Taliban commander for Ghazni Province as at 2008. Belongs to Andar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.148.10. Name: 1: ABDUL HABIB 2: ALIZAI 3: na 4: na

عبد الحبيب عاليزي :Name (original script)

Title: Haji Designation: na DOB: a) 15 Oct. 1963 b) 14 Feb. 1973 c) 1967 d) Approximately 1957 POB: a) Yatimchai village, Musa Qala District, Helmand Province, Afghanistan b) Kandahar Province, Afghanistan Good quality a.k.a.: a) Haji Agha Jan Alizai b) Hajji Agha Jan c) Agha Jan Alazai d) Haji Loi Lala e) Loi Agha f) Abdul Habib g) Agha Jan Alizai والمنافرة المنافرة المنافرة (formerly listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 4 Nov. 2010 (amended on 13 Aug. 2012, 31 Dec. 2013, 11 Feb. 2014) Other information: Has managed a drug trafficking network in Helmand Province, Afghanistan. Has regularly traveled to Pakistan.

TI.H.143.01. Name: 1: HAMDULLAH 2: ALLAH NOOR 3: na 4: na

حمد الله الله نور :(Name (original script

**Title:** Maulavi **Designation:** Repatriation Attache, Taliban Consulate General, Quetta, Pakistan **DOB:** 1973 **POB:** District Number 6, Kandahar City, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** Afghan national identification card (tazkira) number 4414 **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Belongs to Baloch ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010. Additional title: Hafiz.

TI.A.136.01. Name: 1: MOHAMMAD SADIQ 2: AMIR MOHAMMAD 3: na 4: na

محمد صادق امیر محمد :Name (original script

Title: a) Alhaj b) Maulavi Designation: Head of Afghan Trade Agency, Peshawar, Pakistan DOB: 1934 POB: a) Ghazni Province, Afghanistan b) Logar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number SE 011252 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 23 Apr. 2007, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012) Other information: Reportedly deceased. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.A.5.01. Name: 1: MUHAMMAD 2: TAHER 3: ANWARI 4: na

محمد طاهر انوری: Name (original script)

Title: Mullah Designation: a) Director of Administrative Affairs under the Taliban regime b) Minister of Finance under the Taliban regime DOB: Approximately 1961 POB: Zurmat District, Paktia Province, Afghanistan Good quality a.k.a.: a) Mohammad Taher Anwari b) Muhammad Tahir Anwari c) Mohammad Tahre Anwari Low quality a.k.a.: Haji Mudir Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) Other information: Belongs to Andar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.38.01. Name: 1: ABDUL BAQI 2: BASIR 3: AWAL SHAH 4: na

عبدالباقي بصير اول شاه :(Name (original script

**Title: a)** Maulavi **b)** Mullah **Designation: a)** Governor of Khost and Paktika provinces under the Taliban regime **b)** Vice-Minister of Information and Culture under the Taliban regime **c)** Consular Department, Ministry of Foreign Affairs under the Taliban regime **DOB:** Approximately 1960-1962 **POB: a)** Jalalabad City, Nangarhar Province, Afghanistan **b)** Shinwar District, Nangarhar Province, Afghanistan **Good quality a.k.a.:** Abdul Baqi (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 7 Sep. 2007, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012) **Other information:** Believed to be in Afghanistan/Pakistan border area. Taliban member responsible for Nangarhar Province as at 2008. Until 7 Sep. 2007 he was also listed under number TI.A.48.01. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.M.104.01. Name: 1: MOHAMMAD RASUL 2: AYYUB 3: na 4: na

محمد رسول ايوب: Name (original script)

**Title:** Maulavi **Designation:** Governor of Nimroz Province under the Taliban regime **DOB:** Between 1958 and 1963 **POB:** Robat village, Spin Boldak District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Gurg **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Member of the Taliban Quetta Shura. Believed to be in Afghanistan/Pakistan border area. Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.D.113.01. Name: 1: SHAHABUDDIN 2: DELAWAR 3: na 4: na

شهاب الدين دلاور : Name (original script)

**Title:** Maulavi **Designation:** Deputy of High Court under the Taliban regime **DOB:** a) 1957 b) 1953 **POB:** Logar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** Afghan passport number OA296623 **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 22 Apr. 2013) **Other information:** Deputy Head of Taliban Embassy in Riyadh, Saudi Arabia until 25 Sept. 1998. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.D.92.01. Name: 1: DOST MOHAMMAD 2: na 3: na 4: na

Name (original script): دو ست محمد

**Title: a)** Mullah **b)** Maulavi **Designation:** Governor of Ghazni Province under the Taliban regime **DOB:** Between 1968 and 1973 **POB: a)** Nawi Deh village, Daman District, Kandahar Province, Afghanistan **b)** Marghankecha village, Daman District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Doost Mohammad **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012, 31 Dec. 2013) **Other information:** Associated with Mullah Jalil Haqqani (TI.A.34.01). Believed to be in Afghanistan/Pakistan border area. Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.N.19.01. Name: 1: NIK MOHAMMAD 2: DOST MOHAMMAD 3: na 4: na

نیک محمد دوست محمد نیک محمد دوست

**Title:** Maulavi **Designation:** Deputy Minister of Commerce under the Taliban regime **DOB:** Approximately 1957 **POB:** Zangi Abad village, Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Nik Mohammad (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012, 19 Oct. 2012, 31 Dec. 2013) **Other information:** Leads a commission to register enemies of the Taliban as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.E.63.01. Name: 1: MOHAMMAD AZAM 2: ELMI 3: na 4: na

محمد اعظم علمي :Name (original script)

**Title:** Maulavi **Designation:** Deputy Minister of Mines and Industries under the Taliban regime **DOB:** Approximately 1968 **POB:** Sayd Karam District, Paktia Province, Afghanistan **Good quality a.k.a.:** Muhammad Azami **Low quality** 

a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) Other information: Reportedly deceased in 2005. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.F.36.01. Name: 1: FAIZ 2: na 3: na 4: na

Name (original script): فيض

**Title:** Maulavi **Designation:** Head of the Information Department, Ministry of Foreign Affairs under the Taliban regime **DOB:** Approximately 1969 **POB:** Ghazni Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.106.01. Name: 1: MOHAMMAD SHAFIQULLAH 2: AHMADI 3: FATIH KHAN 4: na

محمد شفیق الله احمدی فاتح خان :Name (original script)

Title: Mullah Designation: Governor of Samangan Province under the Taliban regime DOB: 1956-1957 POB: a) Charmistan village, Tirin Kot District, Uruzgan Province, Afghanistan b) Marghi village, Nawa District, Ghazni Province, Afghanistan Good quality a.k.a.: a) Mohammad Shafiq Ahmadi (previously listed as) b) Mullah Shafiqullah Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 1 Jun. 2012, 13 Aug. 2012, 22 Apr. 2013, 31 Dec. 2013) Other information: Originally from Ghazni Province, but later lived in Uruzgan. Taliban Shadow Governor for Uruzgan Province as of late 2012. Reportedly killed in airstrike in Shahjoy District, Zabul Province in early 2013. Belongs to Hotak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.30.01. Name: 1: AREFULLAH 2: AREF 3: GHAZI MOHAMMAD 4: na

عارف الله عارف غازي محمد :Name (original script)

**Title:** Maulavi **Designation:** a) Deputy Minister of Finance under the Taliban regime b) Governor of Ghazni Province under the Taliban regime c) Governor of Paktia Province under the Taliban regime **DOB:** Approximately 1958 **POB:** Lawang (Lawand) village, Gelan District, Ghazni Province, Afghanistan **Good quality a.k.a.:** Arefullah Aref (formerly listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Directs Taliban "front" in Gelan District, Ghazni Province, Afghanistan as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Andar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.O.4.01. Name: 1: MOHAMMED 2: OMAR 3: GHULAM NABI 4: na

محمد عمر غلام نبی :Name (original script)

**Title:** Mullah **Designation:** Leader of the Faithful ('Amir ul-Mumineen'), Afghanistan **DOB: a)** Approximately 1966 **b)** 1960 **c)** 1953 **POB: a)** Naw Deh village, Deh Rawud District, Uruzgan Province, Afghanistan **b)** Noori village, Maiwand District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Father's name is Ghulam Nabi, also known as Mullah Musafir. Left eye missing. Brother-in-law of Ahmad Jan Akhundzada Shukoor Akhundzada (TI.A.109.01.). Believed to be in Afghanistan/Pakistan border area. Belongs to Hotak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.G.161.12. Name: 1: BAKHT 2: GUL 3: na 4: na

بخت گل :(Name (original script

Title: na Designation: na DOB: 1980 POB: Aki Village, Zadran District, Paktiya Province, Afghanistan Good quality a.k.a.: a) Bakhta Gul b) Bakht Gul Bahar c) Shuqib Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: Miram Shah, North Waziristan, Federally Administered Tribal Areas, Pakistan Listed on: 27 Jun. 2012 (amended on 11 Feb. 2014) Other information: Communications assistant to Badruddin Haqqani (deceased). Also coordinates movement of Haqqani insurgents, foreign fighters and weapons in the Afghanistan/Pakistan border area. Belongs to Zadran tribe.

TI.N.69.01. Name: 1: RUSTUM 2: HANAFI 3: HABIBULLAH 4: na

رستم حنفي حبيب الله :Name (original script)

**Title:** Maulavi **Designation:** Deputy Minister of Public Works under the Taliban regime **DOB:** Approximately 1963 **POB:** Dara Kolum, Do Aab District, Nuristan Province, Afghanistan **Good quality a.k.a.:** Rostam Nuristani **Low quality a.k.a.:** Hanafi Sahib **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 18 May 2012, 13 Aug. 2012) **Other information:** Taliban member responsible for Nuristan Province, Afghanistan, as of May 2007. Belongs to Nuristani tribe. Reportedly deceased in early 2012. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.H.140.01. Name: 1: GUL AHMAD 2: HAKIMI 3: na 4: na

گل احمد حکیمی :Name (original script)

Title: Maulavi Designation: Commercial Attache, Taliban Consulate General, Karachi, Pakistan DOB: 1964 POB: a) Logar Province, Afghanistan b) Kabul Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011) Other information: Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.H.43.01. Name: 1: DIN MOHAMMAD 2: HANIF 3: na 4: na

دین محمد حنیف: Name (original script)

**Title:** Qari **Designation:** a) Minister of Planning under the Taliban regime b) Minister of Higher Education under the Taliban regime **DOB:** Approximately 1955 **POB:** Shakarlab village, Yaftali Pain District, Badakhshan Province, Afghanistan **Good quality a.k.a.:** a) Qari Din Mohammad b) ladena Mohammad, born 1 Jan. 1969 in Badakhshan, Nationality: Afghan Passport number OA 454044 **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 25 Oct. 2012) **Other information:** Member of Taliban Supreme Council responsible for Takhar and Badakhshan provinces. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.40.01. Name: 1: JALALUDDIN 2: HAQQANI 3: na 4: na

جلال الدين حقاني :Name (original script)

Title: Maulavi Designation: Minister of Frontier Affairs under the Taliban regime DOB: a) Approximately 1942 b) Approximately 1948 POB: a) Garda Saray area, Waza Zadran District, Paktia Province, Afghanistan b) Neka District, Paktika Province, Afghanistan Good quality a.k.a.: a) Jalaluddin Haqani b) Jallalouddin Haqqani c) Jallalouddine Haqani Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 31 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 1 Feb. 2008, 31 Jul. 2008, 3 Oct. 2008, 29 Nov. 2011, 11 Feb. 2014) Other information: Father of Sirajuddin Jallaloudine Haqqani (TI.H.144.07.), Nasiruddin Haqqani (TI.H.146.10.) and Badruddin Haqqani (deceased). Brother of Mohammad Ibrahim Omari (TI.O.42.01.) and Khalil Ahmed Haqqani (TI.H.150.11.). He is an active Taliban leader. Believed to be in Afghanistan/Pakistan border area. Head of the Taliban Miram Shah Shura as at 2008. Belongs to Zadran tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.150.11. Name: 1: KHALIL 2: AHMED 3: HAQQANI 4: na

خلیل احمد حقانی :Name (original script)

Title: Haji Designation: na DOB: a) 1 Jan. 1966 b) Between 1958 and 1964 POB: Sarana Village, Garda Saray area, Waza Zadran District, Paktia Province, Afghanistan Good quality a.k.a.: a) Khalil Al-Rahman Haqqani b) Khalil ur Rahman Haqqani c) Khaleel Haqqani Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: a) Peshawar, Pakistan b) Near Dergey Manday Madrasa in Dergey Manday Village, near Miram Shah, North Waziristan Agency (NWA), Federally Administered Tribal Areas (FATA), Pakistan c) Kayla Village, near Miram Shah, North Waziristan Agency (NWA), Federally Administered Tribal Areas (FATA), Pakistan d) Sarana Zadran Village, Paktia Province, Afghanistan Listed on: 9 Feb. 2011 (amended on 1 Jun. 2012) Other information: Senior member of the Haqqani Network (TE.H.12.12.), which operates out of North Waziristan in the Federally Administered Tribal Areas of Pakistan. Has previously traveled to, and raised funds in, Dubai, United Arab Emirates. Brother of Jalaluddin Haqqani (TI.H.40.01.) and uncle of Sirajuddin Jallaloudine Haqqani (TI.H.144.07.).

TI.H.79.01. Name: 1: MOHAMMAD SALIM 2: HAQQANI 3: na 4: na

محمد سليم حقاني :Name (original script)

**Title:** Maulavi **Designation:** Deputy Minister of Preventing Vice and Propagating Virtue under the Taliban regime **DOB:** Approximately 1966-1967 **POB:** Alingar District, Laghman Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Deputy Commander of Ezatullah Haqqani Khan Sayyid (TI.H.64.01) as at Mar. 2010. Member of Taliban Peshawar Military Council as at June 2010. Belongs to Pashai ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.146.10. Name: 1: NASIRUDDIN 2: HAQQANI 3: na 4: na

نصير الدين حقاني :Name (original script

Title: na Designation: na DOB: Approximately 1970-1973 POB: Neka District, Paktika Province, Afghanistan Good quality a.k.a.: a) Dr. Alim Ghair b) Naseer Haqqani c) Dr. Naseer Haqqani d) Nassir Haqqani e) Nashir Haqqani Low quality a.k.a.: Naseruddin Nationality: Afghan Passport no.: na National identification no.: na Address: Pakistan Listed on: 20 Jul. 2010 (amended on 29 Jul. 2011, 18 May 2012, 27 Jun. 2013, 11 Feb. 2014) Other information: A leader of the Haqqani Network (TE.H.12.12.), which operates out of North Waziristan in the Federally Administered Tribal Areas of Pakistan. Son of Jalaluddin Haqqani (TI.H.40.01). Has travelled to Saudi Arabia and the United Arab Emirates to raise funds for the Taliban. Reportedly deceased as of 2013.

TI.H.6.01. Name: 1: SAYYED MOHAMMED 2: HAQQANI 3: na 4: na

سید محمد حقانی :Name (original script)

**Title:** Mullah **Designation:** a) Director of Administrative Affairs under the Taliban regime b) Head of Information and Culture in Kandahar Province under the Taliban regime **DOB:** Approximately 1965 **POB:** Chaharbagh village, Arghandab District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Sayyed Mohammad Haqqani **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 20 Dec. 2005, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Graduate of the Haqqaniya madrasa in Akora Khattak, Pakistan. Believed to have had close relations with Taliban Leader Mullah Mohammed Omar (TI.O.4.01). Believed to be in Afghanistan/Pakistan border area. Member of Taliban Supreme Council as at June 2010. Belongs to Barakzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.144.07. Name: 1: SIRAJUDDIN 2: JALLALOUDINE 3: HAQQANI 4: na

سراج الدين جلال الدين حقاني :Name (original script

Title: na Designation: Na'ib Amir (Deputy Commander) DOB: Approximately 1977/1978 POB: a) Danda, Miramshah, North Waziristan, Pakistan b) Srana village, Garda Saray district, Paktia province, Afghanistan c) Neka district, Paktika province, Afghanistan d) Khost province, Afghanistan Good quality a.k.a.: a) Siraj Haqqani b) Serajuddin Haqani c) Siraj Haqani d) Saraj Haqani Low quality a.k.a.: Khalifa Nationality: Afghan Passport no.: na National identification no.: na Address: a) Kela neighborhood/Danda neighborhood, Miramshah, North Waziristan, Pakistan b) Manba'ul uloom Madrasa, Miramshah, North Waziristan, Pakistan c) Dergey Manday Madrasa, Miramshah, North Waziristan, Pakistan Listed on: 13 Sep. 2007 (amended on 22 Apr. 2013) Other information: Heading the Haqqani Network (TE.H.12.12.) as of late 2012. Son of Jalaluddin Haqqani (TI.H.40.01.). Belongs to Sultan Khel section, Zadran tribe of Garda Saray of Paktia province, Afghanistan. Believed to be in the Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.169.14. Name: 1: YAHYA 2: HAQQANI 3: na 4: na

پحیی حقانی :Name (original script)

Title: na Designation: na DOB: a) 1982 b) 1978 POB: na Good quality a.k.a.: Yaya Low quality a.k.a.: Qari Sahab Nationality: Afghan Passport no.: na National identification no.: na Address: A Haqqani Madrassa in the Afghanistan/Pakistan Border Area Listed on: 31 Jul. 2014 Other information: Senior Haqqani Network (HQN) (TE.H.12.12.) member. Closely involved in the group's military, financial, and propaganda activities. Injured leg. Father's name is Hajji Meyawar Khan (deceased).

TI.H.14.01. Name: 1: HIDAYATULLAH 2: na 3: na 4: na

هدایت الله :Name (original script)

**Title:** na **Designation:** Deputy Minister of Civil Aviation and Tourism under the Taliban regime **DOB:** Approximately 1968 **POB:** Arghandab District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Abu Turab **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 8 Mar. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 28 Feb. 2008, 3 Oct. 2008, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Belongs to Ghilzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.H.71.01. Name: 1: NAJIBULLAH 2: HAQQANI 3: HIDAYATULLAH 4: na

نجيب الله حقاني هدايت الله :Name (original script)

Title: Maulavi Designation: Deputy Minister of Finance under the Taliban regime DOB: 1971 POB: Moni village, Shigal District, Kunar Province Good quality a.k.a.: Najibullah Haqani Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: Afghan national identification card (tazkira) number 545167 issued in 1974 Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 29 Nov. 2011, 16 May 2014) Other information: Cousin of Moulavi Noor Jalal. Grandfather's name is Salam. Taliban member responsible for Laghman Province as of late 2010. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.H.49.01. Name: 1: ABDUL RAHMAN 2: AHMAD 3: HOTTAK 4: na

عبدالرحمان احمد هوتک :Name (original script)

**Title:** Maulavi **Designation:** a) Deputy (Cultural) Minister of Information and Culture under the Taliban regime b) Head of Consular Department of Ministry of Foreign Affairs under the Taliban regime **DOB:** Approximately 1957 **POB:** Ghazni Province, Afghanistan **Good quality a.k.a.:** Hottak Sahib **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Belongs to Hotak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.M.119.01. Name: 1: JAN MOHAMMAD 2: MADANI 3: IKRAM 4: na

جان محمد مدنی اکرام: Name (original script)

Title: Maulavi Designation: Charge d'Affaires, Taliban Embassy, Abu Dhabi, United Arab Emirates DOB: 1954-1955 POB: Siyachoy village, Panjwai District, Kandahar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 15 Aug. 2012) Other information: Believed to be in Afghanistan/Pakistan border area. Belongs to Alizai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.I.147.10. Name: 1: GUL 2: AGHA 3: ISHAKZAI 4: na

كُل آغا اسحاقزى :Name (original script)

Title: na Designation: na DOB: Approximately 1972 POB: Band-e Temur, Maiwand District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Mullah Gul Agha b) Mullah Gul Agha Akhund Low quality a.k.a.: a) Hidayatullah b) Haji Hidayatullah c) Hayadatullah Nationality: na Passport no.: na National identification no.: na Address: Pakistan Listed on: 20 Jul. 2010 (amended on 29 Nov. 2011, 31 Dec. 2013) Other information: Member of a Taliban Council that coordinates the collection of zakat (Islamic tax) from Baluchistan Province, Pakistan. Head of Taliban Financial Commission as at mid-2013. Associated with Mullah Mohammed Omar (TI.O.4.01). Served as Omar's principal finance officer and one of his closest advisors. Belongs to Ishaqzai tribe.

TI.J.47.01. Name: 1: QUDRATULLAH 2: JAMAL 3: na 4: na

قدر ت الله جمال: (Name (original script

**Title:** Maulavi **Designation:** Minister of Information under the Taliban regime **DOB:** Approximately 1963 **POB:** Gardez, Paktia Province, Afghanistan **Good quality a.k.a.:** Haji Sahib **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Member of Taliban Supreme Council and member of Taliban Cultural Commission as at 2010. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council

resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.J.170.14. Name: 1: SAIDULLAH 2: JAN 3: na 4: na

سعيدالله جان :Name (original script)

Title: na Designation: na DOB: 1982 POB: Giyan District, Paktika Province, Afghanistan Good quality a.k.a.: Abid Khan Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: na Listed on: 31 Jul. 2014 Other information: Senior member of the Haqqani Network (HQN) (TE.H.12.12.) as of 2013. Provided critical facilitation support to drivers and vehicles transporting HQN ammunition. Also involved in the group's recruiting efforts as of 2011. Father's name is Bakhta Jan.

TI.K.137.01. Name: 1: RAHMATULLAH 2: KAKAZADA 3: na 4: na

Name (original script): رحمت الله کاکا زاده

Title: a) Maulavi b) Mullah Designation: Consul General, Taliban Consulate General, Karachi, Pakistan DOB: 1968 POB: Zurmat District, Paktia Province, Afghanistan Good quality a.k.a.: a) Rehmatullah b) Kakazada Low quality a.k.a.: Mullah Nasir Nationality: Afghan Passport no.: Afghan passport number D 000952 issued on 7 Jan. 1999 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) Other information: Taliban member responsible for Ghazni Province, Afghanistan, as of May 2007. Head of an intelligence network. Believed to be in Afghanistan/Pakistan border area. Belongs to Suleimankheil tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.K.25.01. Name: 1: ABDUL RAUF 2: KHADEM 3: na 4: na

عبدالروف خادم:(Name (original script

**Title:** Mullah **Designation:** Commander of Central Corps under the Taliban regime **DOB:** a) Between 1958 and 1963 b) Approximately 1970 **POB:** a) Azan village, Kajaki District, Helmand Province, Afghanistan b) Spin Boldak District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Mullah Abdul Rauf Aliza **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 13 Feb. 2012) **Other information:** Member of the Taliban Quetta Shura as at 2009. Taliban member responsible for Uruzgan Province, Afghanistan, as at 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.K.93.01. Name: 1: KHAIRULLAH 2: KHAIRKHWAH 3: na 4: na

Amme (original script): خير الله خير خواه

Title: a) Maulavi b) Mullah Designation: a) Governor of Herat Province under the Taliban regime b) Spokesperson of the Taliban regime c) Governor of Kabul province under the Taliban regime d) Minister of Internal Affairs under the Taliban regime DOB: Approximately 1963 POB: Poti village, Arghistan district, Kandahar province, Afghanistan Good quality a.k.a.: a) Mullah Khairullah Khairkhwah b) Khirullah Said Wali Khairkhwa, born in Kandahar on 01 Jan.1967 Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: Guantanamo Bay prison Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 12 Apr. 2010, 29 Nov. 2011, 31 Dec. 2013) Other information: In custody of the United States of America as at mid-2013. Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.E.64.01. Name: 1: EZATULLAH 2: HAQQANI 3: KHAN SAYYID 4: na

عزت الله حقانی خان سید :Name (original script)

**Title:** Maulavi **Designation:** Deputy Minister of Planning under the Taliban regime **DOB:** Approximately 1957 **POB:** Alingar District, Laghman Province, Afghanistan **Good quality a.k.a.:** Ezatullah Haqqani (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 29 Nov. 2011, 18 May 2012) **Other information:** Member of the Taliban Peshawar Shura as of 2008. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.N.13.01. Name: 1: MOHAMMAD NAIM 2: BARICH 3: KHUDAIDAD 4: na

Name (original script): محمد نعیم بریځ خدایداد

Title: Mullah Designation: Deputy Minister of Civil Aviation under the Taliban regime DOB: Approximately 1975 POB:

a) Lakhi village, Hazarjuft Area, Garmsir District, Helmand Province, Afghanistan b) Laki village, Garmsir District, Helmand Province, Afghanistan c) Lakari village, Garmsir District, Helmand Province, Afghanistan d) Darvishan, Garmsir District, Helmand Province, Afghanistan Good quality a.k.a.: a) Mullah Naeem Barech b) Mullah Naeem Baraich c) Mullah Naimullah d) Mullah Naim Bareh e) Mohammad Naim, (previously listed as) f) Mullah Naim Barich g) Mullah Naim Barech h) Mullah Naim Barech Akhund i) Mullah Naeem Baric j) Naim Berich k) Haji Gul Mohammad Naim Barich l) Gul Mohammad m) Haji Ghul Mohammad n) Gul Mohammad Kamran o) Mawlawi Gul Mohammad Low quality a.k.a.: Spen Zrae Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012, 13 Aug. 2012, 22 Apr. 2013, 31 Dec. 2013) Other information: Member of the Taliban Military Commission as at mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Barich tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.K.163.12. Name: 1: KHAIRULLAH 2: BARAKZAI 3: KHUDAI NAZAR 4: na

خيرالله باركزي خداي نظر :Name (original script)

Title: Haji Designation: na DOB: 1965 POB: a) Zumbaleh village, Nahr-e Saraj District, Helmand Province, Afghanistan b) Mirmadaw village, Gereshk District, Helmand Province, Afghanistan c) Qilla Abdullah, Baluchistan Province, Pakistan Good quality a.k.a.: a) Haji Khairullah b) Haji Khair Ullah c) Haji Kheirullah d) Haji Karimullah e) Haji Khair Mohammad Low quality a.k.a.: na Nationality: na Passport no.: Pakistan passport number BP4199631 expires on 25 Jun. 2014, officially cancelled as of 2013 National identification no.: Pakistan National Identification number 5440005229635, officially cancelled as of 2013 Address: Abdul Manan Chowk, Pashtunabad, Quetta, Baluchistan Province, Pakistan Listed on: 29 Jun. 2012 (amended on 11 Feb. 2014) Other information: Co-owner of Haji Khairullah Haji Sattar Money Exchange (TE.H.1.12.) and associated also with Abdul Satar Abdul Manan (TI.A.162.12.). Belongs to Barakzai tribe. Father's name is Haji Khudai Nazar. Alternative father's name is Nazar Mohammad.

TI.Q.165.12. Name: 1: MOHAMMED QASIM 2: MIR WALI 3: KHUDAI RAHIM 4: na

محمد قاسم میر ولی خدایر حیم: Name (original script)

Title: Haji Designation: na DOB: Between 1975 and 1976 POB: a) Minar village, Garmser District, Helmand Province, Afghanistan b) Darweshan Village, Garmser District, Helmand Province Good quality a.k.a.: a) Muhammad Qasim b) Abdul Salam Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: a) Afghan national identification card (tazkira) number 57388 issued in Lashkar Gah District, Helmand Province, Afghanistan b) Residential card number 665, Ayno Maina, Kandahar Province, Afghanistan Address: a) Wesh, Spin Boldak District, Kandahar Province, Afghanistan b) Safaar Bazaar, Garmser District, Helmand Province, Afghanistan c) Room number 33, 5th Floor Sarafi Market, Kandahar City, Kandahar Province, Afghanistan Listed on: 21 Nov. 2012 (amended on 22 Apr. 2013) Other information: Owner of Rahat Ltd. (TE.R.13.12.). Involved in the supply of weapons for Taliban, including improvised explosive devices (IED). Arrested in 2012 and in custody in Afghanistan as of January 2013. Associated with Rahat Ltd. (TE.R.13.12.).

TI.A.53.01. Name: 1: ABDUL RAZAQ 2: AKHUND 3: LALA AKHUND 4: na

عبد الرزاق أخوند لا لا أخوند الرزاق أخوند المرزاق المرزاق أخوند المرزاق المرزاق المرزاق أخوند المرزاق المرز

**Title:** Mullah **Designation:** a) Minister of Interior Affairs under the Taliban regime b) Chief of Kabul Police under the Taliban regime **DOB:** Approximately 1958 **POB:** Spin Boldak District, Kandahar Province, Afghanistan, in the area bordering Chaman District, Quetta, Pakistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Member of Taliban Supreme Council as at June 2008. Deputy of Mullah Mohammed Omar (TI.O.4.01.) as at Mar. 2010. Member of the Supervision Commission of the Taliban as of mid-2013. Involved in drug trafficking. Believed to be in Afghanistan/Pakistan border area. Belongs to Achekzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.M.102.01. Name: 1: ZIA-UR-RAHMAN 2: MADANI 3: na 4: na

ضيا الرحمان مدنى :Name (original script)

Title: Maulavi Designation: Governor of Logar Province under the Taliban regime DOB: Approximately 1960 POB: a) Paliran village, Namakab District, Takhar Province, Afghanistan b) Taluqan City, Takhar Province, Afghanistan Good quality a.k.a.: a) Ziaurrahman Madani b) Zaia u Rahman Madani c) Madani Saheb d) Diya' al-Rahman Madani Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 1 Feb. 2008, 13 Feb. 2012, 31 Dec.

2013) **Other information:** Involved in drug trafficking. Taliban member responsible for military affairs in Takhar province, Afghanistan, as of May 2007. Facilitated fund raising in the Gulf on behalf of the Taliban since 2003. Also facilitated meetings between Taliban officials and wealthy supporters and arranged for more than a dozen individuals to travel to Kabul, Afghanistan, for suicide attacks. Believed to be in the Gulf region. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.M.7.01. Name: 1: ABDUL LATIF 2: MANSUR 3: na 4: na

عبداللطيف منصور :Name (original script)

Title: Maulavi Designation: Minister of Agriculture under the Taliban regime DOB: Approximately 1968 POB: a) Zurmat District, Paktia Province, Afghanistan b) Garda Saray District, Paktia Province, Afghanistan Good quality a.k.a.: a) Abdul Latif Mansoor b) Wali Mohammad Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 31 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012, 18 May 2012, 22 Apr. 2013) Other information: Taliban Shadow Governor for Logar Province as of late 2012. Believed to be in Afghanistan/Pakistan border area. Belongs to Sahak tribe (Ghilzai). Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.M.68.01. Name: 1: MOHAMMADULLAH 2: MATI 3: na 4: na

Name (original script): محمد الله مطيع

Title: Maulavi Designation: Minister of Public Works under the Taliban regime DOB: Approximately 1961 POB: Arghandab District, Kandahar Province, Afghanistan Good quality a.k.a.: Mawlawi Nanai Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 31 Dec. 2013) Other information: Lost one leg in 1980s. Interim leader of Taliban Supreme Council from February to April 2010. In charge of recruitment activities as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Isakzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.A.21.01. Name: 1: ALLAH DAD 2: MATIN 3: na 4: na

الله داد متین :Name (original script)

Title: Mullah Designation: a) Minister of Urban Development under the Taliban regime b) President of Central Bank (Da Afghanistan Bank) under the Taliban regime c) Head of Ariana Afghan Airlines under the Taliban regime DOB: a) Approximately 1953 b) Approximately 1960 POB: Kadani village, Spin Boldak District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Allahdad (previously listed as) b) Shahidwror Low quality a.k.a.: Akhund Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) Other information: One foot lost in landmine explosion. Believed to be in Afghanistan/Pakistan border area. Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.M.20.01. Name: 1: MATIULLAH 2: na 3: na 4: na

مطيع الله :(Name (original script

Title: Mullah Designation: Director, Kabul Custom House under the Taliban regime DOB: Approximately 1973 POB: Daman District, Kandahar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 31 Dec. 2013) Other information: Works on recruitment for the Taliban movement as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.M.135.01. Name: 1: ABDUL QUDDUS 2: MAZHARI 3: na 4: na

عبد القدوس مظهري :(Name (original script

Title: Maulavi Designation: Education Attache, Taliban Consulate General, Peshawar, Pakistan DOB: 1970 POB: Kunduz Province, Afghanistan Good quality a.k.a.: Akhtar Mohammad Maz-hari (previously listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number SE 012820, issued on 4 Nov. 2000 National identification no.: na Address: Kushal Khan Mena, District Number 5, Kabul, Afghanistan Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 18 Jul. 2007, 21 Sep. 2007, 23 Nov. 2011) Other information: Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.M.23.01. Name: 1: FAZL MOHAMMAD 2: MAZLOOM 3: na 4: na

Name (original script): فضل محمد مظلوم

Title: Mullah Designation: Deputy Chief of Army Staff of the Taliban regime DOB: Between 1963 and 1968 POB: Uruzgan, Afghanistan Good quality a.k.a.: a) Molah Fazl b) Fazel Mohammad Mazloom Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: Guantanamo Bay prison Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 31 Dec. 2013) Other information: In custody of the United States of America as at mid-2013. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.M.78.01. Name: 1: MOHAMMAD WALI 2: MOHAMMAD EWAZ 3: na 4: na

محمد ولى محمد عوض Name (original script):

**Title:** Maulavi **Designation:** Minister of Ministry of Preventing Vice and Propagating Virtue under the Taliban regime **DOB:** Approximately 1965 **POB:** a) Jelawur village, Arghandab District, Kandahar Province, Afghanistan b) Siyachoy village, Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** Mohammad Wali (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012, 31 Dec. 2013) **Other information:** Reportedly deceased in December 2006 and buried in Panjwai District, Kandahar Province, Afghanistan. Belonged to Ghilzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.M.99.01. Name: 1: MOHAMMAD SHAFIQ 2: MOHAMMADI 3: na 4: na

محمد شفیق محمدی :Name (original script)

**Title:** Maulavi **Designation:** a) Governor of Khost Province under the Taliban regime b) Governor General of Paktia, Paktika, Khost and Ghazni Provinces under the Taliban regime **DOB:** Approximately 1948 **POB:** Tirin Kot District, Uruzgan Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Supervises two military training centers of the Taliban as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Hotak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.A.122.01. Name: 1: ABDUL MANAN 2: MOHAMMAD ISHAK 3: na 4: na

عبدالمنان محمد اسحاق: Name (original script)

**Title:** Maulavi **Designation:** a) First Secretary, Taliban Embassy, Riyadh, Saudi Arabia b) Commercial Attache, Taliban Embassy, Abu Dhabi, United Arab Emirates **DOB:** 1940-1941 **POB:** Siyachoy village, Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **Nationalidentification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 15 Aug. 2012) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.3.01. Name: 1: ABDUL KABIR 2: MOHAMMAD JAN 3: na 4: na

عبد الكبير محمد جان :Name (original script)

**Title:** Maulavi **Designation:** a) Second Deputy, Economic Affairs, Council of Ministers under the Taliban regime b) Governor of Nangarhar Province under the Taliban regime c) Head of Eastern Zone under the Taliban regime **DOB:** Approximately 1963 **POB:** Pul-e-Khumri or Baghlan Jadid District, Baghlan Province, Afghanistan **Good quality a.k.a.:** A. Kabir **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 20 Dec. 2005, 18 Jul. 2007, 21 Sep. 2007, 13 Feb. 2012, 13 Aug. 2012, 31 Dec. 2013) **Other information:** Active in terrorist operations in Eastern Afghanistan. Collects money from drug traffickers. Believed to be in Afghanistan/Pakistan border area. Member of the Taliban Supreme Council as at 2009. Family is originally from Neka District, Paktia Province, Afghanistan. Responsible for attack on Afghan parliamentarians in November 2007 in Baghlan; owns land in central Baghlan Province. Belongs to Zadran tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.H.141.01. Name: 1: ABDULLAH 2: HAMAD 3: MOHAMMAD KARIM 4: na

عبد الله حماد محمد کریم :Name (original script)

Title: Maulavi Designation: Consul General, Taliban Consulate General, Quetta, Pakistan DOB: 1972 POB:

Darweshan village, Hazar Juft area, Garmser District, Helmand Province, Afghanistan **Good quality a.k.a.:** al-Hammad **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** Afghan passport number D 000857, issued on 20 Nov. 1997 **National identification no.:** Afghan national identification card (tazkira) number 300786 **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Belongs to Baloch ethnic group. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.S.126.01. Name: 1: MOHAMMAD 2: SARWAR 3: SIDDIQMAL 4: MOHAMMAD MASOOD

محمد سرور صدیق مل محمد مسعود :Name (original script)

**Title:** na **Designation:** Third Secretary, Taliban Embassy, Islamabad, Pakistan **DOB:** 1963 **POB:** Jani Khel District, Paktia Province, Afghanistan **Good quality a.k.a.:** Mohammad Sarwar Siddiqmal (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** Afghan national identification card (tazkira) number 19657 **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Belongs to Mangal tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.M.52.01. Name: 1: MOHAMMAD YAQOUB 2: na 3: na 4: na

محمد یعقوب: Name (original script)

Title: Maulavi Designation: Head of Bakhtar Information Agency (BIA) under the Taliban regime DOB: Approximately 1966 POB: a) Shahjoi District, Zabul Province, Afghanistan b) Janda District, Ghazni Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 1 Jun. 2012, 31 Dec. 2013) Other information: Member of Taliban Cultural Commission. Directs a Taliban "front" and coordinates all military activities of Taliban forces in Maiwand District, Kandahar Province, Afghanistan as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Kharoti (Taraki) tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.M.26.01. Name: 1: AMIR KHAN 2: MOTAQI 3: na 4: na

امير خان متقى :Name (original script)

**Title:** Mullah **Designation:** a) Minister of Education under the Taliban regime b) Taliban representative in UN-led talks under the Taliban regime **DOB:** Approximately 1968 **POB:** a) Zurmat District, Paktia Province, Afghanistan b) Shin Kalai village, Nad-e-Ali District, Helmand Province, Afghanistan **Good quality a.k.a.:** Amir Khan Muttaqi **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Member of the Taliban Supreme Council as at June 2007. Believed to be in Afghanistan/Pakistan border area. Belongs to Sulaimankhel tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.M.51.01. Name: 1: ABDULHAI 2: MOTMAEN 3: na 4: na

عبدالحي مطمئن :Name (original script)

Title: Maulavi Designation: a) Director of the Information and Culture Department in Kandahar Province under the Taliban regime b) Spokesperson of the Taliban regime DOB: Approximately 1973 POB: a) Shinkalai village, Nad-e-Ali District, Helmand Province, Afghanistan b) Zabul Province, Afghanistan Good quality a.k.a.: Abdul Haq son of M. Anwar Khan (عبد الحق ولا محمد انور خان), Afghan passport number OA462456, issued on 31 Jan. 2012 (11-11-1390) by the Afghan Consulate General in Peshawar, Pakistan Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number OA462456, issued on 31 Jan. 2012 under the name of Abdul Haq National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013, 16 May 2014) Other information: Family is originally from Zabul, but settled later in Helmand. Member of the Taliban Supreme Council and spokesperson for Mullah Mohammed Omar (TI.O.4.01.) as of 2007. Believed to be in Afghanistan/Pakistan border area. Belongs to Kharoti tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.T.16.01. Name: 1: ALLAH DAD 2: TAYEB 3: WALI 4: MUHAMMAD

Name (original script): الله داد طیب ولی محمد

**Title: a)** Mullah **b)** Haji **Designation:** Deputy Minister of Communication under the Taliban regime **DOB:** Approximately 1963 **POB: a)** Ghorak District, Kandahar Province, Afghanistan **b)** Nesh District, Uruzgan Province, Afghanistan **Good** 

quality a.k.a.: a) Allah Dad Tayyab b) Allah Dad Tabeeb Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 18 May 2012) Other information: Belongs to Popalzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.H.73.01. Name: 1: MOHAMMAD 2: MOSLIM 3: HAQQANI 4: MUHAMMADI GUL

محمد مسلم حقانی محمدی گل :Name (original script)

**Title:** Maulavi **Designation:** a) Deputy Minister of Haj and Religious Affairs under the Taliban regime b) Deputy Minister of Higher Education under the Taliban regime **DOB:** 1965 **POB:** Gawargan village, Pul-e-Khumri District, Baghlan Province, Afghanistan **Good quality a.k.a.:** Moslim Haqqani **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** Afghan national identification card (tazkira) number 1136 **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Ethnic Pashtun from Baghlan Province. Believed to be in Afghanistan/Pakistan border area. Speaks fluent English, Urdu and Arabic. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.M.132.01. Name: 1: NAJIBULLAH 2: MUHAMMAD JUMA 3: na 4: na

Name (original script): نجیب الله محمد جمعه

Title: Maulavi Designation: Consul General, Taliban Consulate General, Peshawar, Pakistan DOB: 1958 POB: Zere Kohi area, Shindand District, Farah Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: Najib Ullah Nationality: Afghan Passport no.: Afghan passport number 000737, issued on 20 Oct. 1996 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 23 Apr. 2007, 21 Sep. 2007, 29 Nov. 2011) Other information: Member of Taliban Peshawar Military Council as at 2010. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.N.44.01. Name: 1: HAMDULLAH 2: NOMANI 3: na 4: na

حمد الله نعماني :(Name (original script

Title: Maulavi Designation: a) Minister of Higher Education under the Taliban regime b) Mayor of Kabul City under the Taliban regime DOB: Approximately 1968 POB: Sipayaw village, Andar District, Ghazni Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011) Other information: Member of the Taliban Supreme Council. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.N.138.01. Name: 1: MOHAMMAD 2: ALEEM 3: NOORANI 4: na

محمد عليم نوراني :Name (original script)

**Title:** Mufti **Designation:** First Secretary, Taliban Consulate General, Karachi, Pakistan **DOB:** Approximately 1963 **POB:** Ghazni Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.N.154.11. Name: 1: MALIK 2: NOORZAI 3: na 4: na

مالک نورزی :Name (original script)

Title: Haji Designation: na DOB: a) 1957 b) 1960 c) 1 Jan. 1963 POB: a) Chaman border town, Pakistan b) Pishin, Baluchistan Province, Pakistan Good quality a.k.a.: a) علجي مالك نورزى (Hajji Malik Noorzai; Hajji Malak Noorzai; Hajji Malak Noorzai; Hajji Malek Noorzai) b) Allah Muhammad Low quality a.k.a.: a) Haji Maluk b) Haji Aminullah Nationality: Afghan Passport no.: Pakistani passport number FA0157612, issued on 23 Jul. 2009, expires on 22 Jul. 2014, officially cancelled as of 2013, issued under name Allah Muhammad National identification no.: Pakistani national identification number 54201-247561-5, officially cancelled as of 2013 Address: a) Boghra Road, Miralzei Village, Chaman, Baluchistan Province, Pakistan b) Kalay Rangin, Spin Boldak District, Kandahar province, Afghanistan Listed on: 4 Oct. 2011 (amended on 29 Nov. 2011, 1 Jun. 2012, 11 Feb. 2014) Other information: Taliban financier. Owns businesses in Japan and frequently travels to Dubai, United Arab Emirates, and Japan. As of 2009, facilitated Taliban activities, including through recruitment and the provision of logistical support. Believed to be in the Afghanistan/Pakistan border area. Belongs to Noorzai tribe. Brother of Faizullah Khan Noorzai (TI.M.153.11.). Father's name is Haji Akhtar

Muhammad.

TI.N.89.01. Name: 1: NURULLAH 2: NURI 3: na 4: na

نور الله نوری: Name (original script)

**Title:** Maulavi **Designation:** a) Governor of Balkh Province under the Taliban Regime b) Head of Northern Zone under the Taliban regime **DOB:** a) Approximately 1958 b) 1 Jan. 1967 **POB:** Shahjoe District, Zabul Province, Afghanistan **Good quality a.k.a.:** Norullah Noori **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** Guantanamo Bay prison **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** In custody of the United States of America as at mid-2013. Belongs to Tokhi tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.N.97.01. Name: 1: ABDUL MANAN 2: NYAZI 3: na 4: na

عبدالمنان نيازي: Name (original script)

Title: Mullah Designation: a) Governor of Kabul Province under the Taliban regime b) Governor of Balk Province under the Taliban regime DOB: Approximately 1968 POB: a) Pashtoon Zarghoon District, Herat Province, Afghanistan b) Sardar village, Kohsan District, Herat Province, Afghanistan Good quality a.k.a.: a) Abdul Manan Nayazi b) Abdul Manan Niazi Low quality a.k.a.: a) Baryaly b) Baryalai Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 12 Apr. 2010, 29 Nov. 2011, 13 Feb. 2012, 31 Dec. 2013) Other information: Taliban member responsible for Herat, Farah and Nimroz provinces as at mid-2013. Member of the Taliban Supreme Council and Quetta Shura. Believed to be in Afghanistan/Pakistan border area. Belongs to Achekzai tribe. Involved in transporting suicide bombers to Afghanistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.N.166.13. Name: 1: AHMED SHAH 2: NOORZAI 3: OBAIDULLAH 4: na

احمد شاه نور ز ی عبیدالله: (Name (original script

Title: Mullah Designation: na DOB: a) 1 Jan. 1985 b) 1981 POB: Quetta, Pakistan Good quality a.k.a.: a) Mullah Ahmed Shah Noorzai b) Haji Ahmad Shah c) Haji Mullah Ahmad Shah d) Maulawi Ahmed Shah e) Mullah Mohammed Shah Low quality a.k.a.: na Nationality: na Passport no.: Pakistani passport number NC5140251, issued on 23 Oct. 2009 expires on 22 Oct. 2014, officially cancelled as of 2013 National identification no.: Pakistani national identity card number 54401-2288025-9, officially cancelled as of 2013 Address: Quetta, Pakistan Listed on: 26 Feb. 2013 (amended on 11 Feb. 2014) Other information: Owns and operates the Roshan Money Exchange (TE.R.11.12.). Provided financial services to Ghul Agha Ishakzai (TI.I.147.10.) and other Taliban in Helmand Province. Alternative title is Maulavi.

TI.O.88.01. Name: 1: ABDUL JABBAR 2: OMARI 3: na 4: na

عبدالجبار عمرى :Name (original script)

**Title:** Maulavi **Designation:** Governor of Baghlan Province under the Taliban regime **DOB:** Approximately 1958 **POB:** Zabul Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** a) Mullah Jabbar b) Muawin Jabbar **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 22 Apr. 2013) **Other information:** Belongs to Hottak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.O.42.01. Name: 1: MOHAMMAD IBRAHIM 2: OMARI 3: na 4: na

محمد ابراهیم عمری :Name (original script)

Title: Alhaj Designation: Deputy Minister of Frontier Affairs under the Taliban regime DOB: Approximately 1958 POB: Garda Saray, Waza Zadran District, Paktia Province, Afghanistan Good quality a.k.a.: Ibrahim Haqqani Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Jul. 2011, 29 Nov. 2011) Other information: Brother of Jalaluddin Haqqani (TI.A.40.01.) Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.S.67.01. Name: 1: SHER MOHAMMAD ABBAS 2: STANEKZAI 3: PADSHAH KHAN 4: na

شير محمد عباس استانكزي يادشاه خان: Name (original script)

**Title:** Maulavi **Designation:** a) Deputy Minister of Public Health under the Taliban regime b) Deputy Minister of Foreign Affairs under the Taliban regime **DOB:** Approximately 1963 **POB:** Qala-e-Abbas, Shah Mazar area, Baraki Barak District, Logar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.T.58.01. Name: 1: NOORUDDIN 2: TURABI 3: MUHAMMAD 4: QASIM

نور الدين ترابي محمد قاسم :Name (original script)

Title: a) Mullah b) Maulavi Designation: Minister of Justice under the Taliban regime DOB: a) Approximately 1963 b) Approximately 1955 c) 1956 POB: a) Spin Boldak District, Kandahar Province, Afghanistan b) Chora District, Uruzgan Province, Afghanistan c) Dehrawood District, Uruzgan Province, Afghanistan Good quality a.k.a.: Noor ud Din Turabi Low quality a.k.a.: Haji Karim Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 12 Apr. 2010, 29 Nov. 2011) Other information: Deputy to Mullah Mohammed Omar (TI.O.4.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.A.107.01. Name: 1: AMINULLAH 2: AMIN 3: QUDDUS 4: na

Name (original script): امين الله امين قدوس

Title: Maulavi Designation: Governor of Saripul Province under the Taliban regime DOB: Approximately 1973 POB: Loy Karez village, Spin Boldak District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Muhammad Yusuf b) Aminullah Amin (previously listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) Other information: Member of Taliban Supreme Council as at 2011. Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.H.27.01. Name: 1: ABDUL SALAM 2: HANAFI 3: ALI MARDAN 4: QUL

عبدالسلام حنفي على مردان قل .(Name (original script

**Title: a)** Mullah **b)** Maulavi **Designation:** Deputy Minister of Education under the Taliban regime **DOB:** Approximately 1968 **POB: a)** Darzab District, Faryab Province, Afghanistan **b)** Qush Tepa District, Jawzjan Province, Afghanistan **Good quality a.k.a.: a)** Abdussalam Hanifi **b)** Hanafi Saheb **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 1 Feb. 2008, 29 Nov. 2011) **Other information:** Taliban member responsible for Jawzjan Province in Northern Afghanistan until 2008. Involved in drug trafficking. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 1 Jun. 2010.

TI.R.157.12. Name: 1: FAZL 2: RABI 3: na 4: na

فضل ربيع :(Name (original script

Title: na Designation: Senior official in Konar Province during the Taliban regime DOB: a) 1972 b) 1975 POB: a) Kohe Safi District, Parwan Province, Afghanistan b) Kapisa Province, Afghanistan c) Nangarhar Province, Afghanistan d) Kabul Province, Afghanistan Good quality a.k.a.: a) Fazl Rabbi b) Fazal Rabbi c) Faisal Rabbi Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 6 Jan. 2012 (amended on 31 May 2013) Other information: Represents and provides financial and logistical support to the Haqqani Network (TE.H.12.12.), which is based in Afghanistan/Pakistan border area. Member of the Taliban Financial Council. Has travelled abroad to raise funds on behalf of Sirajuddin Jallaloudine Haqqani (TI.H.144.07.), Jalaluddin Haqqani (TI.H.40.01.), the Haqqani network and the Taliban. Believed to be in Afghanistan/Pakistan border area.

TI.R.15.01. Name: 1: YAR MOHAMMAD 2: RAHIMI 3: na 4: na

یار محمد رحیمی :Name (original script)

**Title:** Mullah **Designation:** Minister of Communication under the Taliban regime **DOB:** Approximately 1953 **POB:** Taluqan village, Panjwai District, Kandahar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** 

na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) Other information: Member of Taliban Supreme Council as at 2009. Believed to be in Afghanistan/Pakistan border area. Belongs to Nurzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.R.96.01. Name: 1: MOHAMMAD HASAN 2: RAHMANI 3: na 4: na

محمد حسن رحمانی: Name (original script)

**Title:** Mullah **Designation:** Governor of Kandahar Province under the Taliban regime **DOB:** Approximately 1963 **POB:** a) Deh Rawud District, Uruzgan Province, Afghanistan b) Chora District, Uruzgan Province, Afghanistan c) Charchino District, Uruzgan Province, Afghanistan **Good quality a.k.a.:** Gud Mullah Mohammad Hassan **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Has a prosthetic right leg. Member of Taliban Supreme Council as of mid-2013, acted as deputy of Mullah Mohammed Omar (TI.O.4.01.) in Mar. 2010. Believed to be in Afghanistan/Pakistan border area. Belongs to Achekzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.R.172.14. Name: 1: QARI 2: RAHMAT 3: na 4: na

قاری رحمت: Name (original script)

Title: na Designation: na DOB: a) 1981 b) 1982 POB: Shadal (variant Shadaal) Bazaar, Achin District, Nangarhar Province, Afghanistan Good quality a.k.a.: Kari Rahmat Low quality a.k.a.: na Nationality: na Passport no.: na National identification no.: na Address: a) Kamkai Village, Achin District, Nangarhar Province, Afghanistan b) Nangarhar Province, Afghanistan Listed on: 21 Aug. 2014 Other information: A Taliban commander since at least Feb. 2010. Collects taxes and bribes on behalf of the Taliban. Liaises with and provides Taliban operatives in Nangarhar Province, Afghanistan, with information, guidance, housing and weapons and has emplaced improvised explosive devices (IED) and conducted attacks against International Security Assistance Force (ISAF) and Afghan forces.

TI.R.84.01. Name: 1: HABIBULLAH 2: RESHAD 3: na 4: na

Aame (original script): حبیب الله رشاد

**Title:** Mullah **Designation:** Head of Investigation Department, Ministry of Security (Intelligence) under the Taliban regime **DOB:** Between 1968 and 1973 **POB:** Waghaz District, Ghazni Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Deputy Head (Intelligence) of the Quetta Military Council as of 2009. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.S.108.01. Name: 1: ABDULHAI 2: SALEK 3: na 4: na

عبدالحي سالك :Name (original script)

Title: Maulavi Designation: Governor of Uruzgan Province under the Taliban regime DOB: Approximately 1965 POB: Awlyatak Village, Gardan Masjid Area, Chaki Wardak District, Maidan Wardak Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 24 Mar. 2009, 29 Nov. 2011, 18 May 2012) Other information: Reportedly deceased in North Afghanistan in 1999. Belonged to Wardak tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.S.110.01. Name: 1: NOOR MOHAMMAD 2: SAQIB 3: na 4: na

نور محمد ثاقب:(Name (original script

Title: na Designation: Chief Justice of Supreme Court under the Taliban regime DOB: Approximately 1958 POB: a) Bagrami District, Kabul Province, Afghanistan b) Tarakhel area, Deh Sabz District, Kabul Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) Other information: Member of Taliban Supreme Council and Head of Taliban Religious Committee. Belongs to Ahmadzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.S.87.01. Name: 1: SADUDDIN 2: SAYYED 3: na 4: na

سعد الدين سيد الدين سيد الدين سيد الدين سيد

**Title: a)** Maulavi **b)** Alhaj **c)** Mullah **Designation: a)** Vice-Minister of Work and Social Affairs under the Taliban regime **b)** Mayor of Kabul City under the Taliban regime **DOB:** Approximately 1968 **POB: a)** Chaman District, Pakistan **b)** Spin Boldak District, Kandahar Province, Afghanistan **Good quality a.k.a.: a)** Sadudin Sayed **b)** Sadruddin **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 31 Dec. 2013) **Other information:** Advisor to the Taliban Supreme Council as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Barakzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.S.133.01. Name: 1: ABDUL WALI 2: SEDDIQI 3: na 4: na

عبدالولى صديقي :Name (original script)

**Title:** Qari **Designation:** Third Secretary, Taliban Consulate General, Peshawar, Pakistan **DOB:** 1974 **POB:** Zilzilay village, Andar District, Ghazni Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** Afghan passport number D 000769 issued on 2 Feb. 1997 **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.S.98.01. Name: 1: ABDUL WAHED 2: SHAFIQ 3: na 4: na

عبد الواحد شفيق: Name (original script)

**Title:** Maulavi **Designation:** Deputy Governor of Kabul Province under the Taliban regime **DOB:** Approximately 1968 **POB:** Nangarhar Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011) **Other information:** Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.S.28.01. Name: 1: SAID AHMED 2: SHAHIDKHEL 3: na 4: na

سيد احمد شهيد خيل: (Name (original script

**Title:** Maulavi **Designation:** Deputy Minister of Education under the Taliban regime **DOB:** Approximately 1975 **POB:** Spandeh (Espandi 'Olya) village, Andar District, Ghazni Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 20 Dec. 2005, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) **Other information:** In July 2003 he was in custody in Kabul, Afghanistan. Released from custody in 2007. Believed to be in Afghanistan/Pakistan border area. Member of the Taliban leadership council as of mid-2013. Belongs to Andar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.M.11.01. Name: 1: AKHTAR 2: MOHAMMAD 3: MANSOUR 4: SHAH MOHAMMED

Name (original script): اختر محمد منصور شاه محمد

Title: a) Maulavi b) Mullah Designation: Minister of Civil Aviation and Transportation under the Taliban regime DOB: a) Approximately 1960 b) 1966 POB: Band-e-Timur village, Maiwand District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Akhtar Mohammad Mansour Khan Muhammad b) Akhtar Muhammad Mansoor c) Akhtar Mohammad Mansoor Low quality a.k.a.: Naib Imam Nationality: Afghan Passport no.: Afghan passport number SE-011697 issued on 25 Jan. 1988 in Kabul, expired on 23 Feb. 2000 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 1 Feb. 2008, 29 Nov. 2011) Other information: Involved in drug trafficking as of 2011, primarily through Gerd-e-Jangal, Afghanistan. Active in the provinces of Khost, Paktia and Paktika, Afghanistan as of May 2007. Taliban "Governor" of Kandahar as of May 2007. Deputy to Mullah Abdul Ghani Baradar (TI.B.24.01.) in the Taliban Supreme Council as of 2009. Taliban official responsible for four southern provinces of Afghanistan. Following the arrest of Mullah Baradar in February 2010 he was temporarily-in-charge of the Taliban Supreme Council. Believed to be in Afghanistan/Pakistan border area. Belongs to Ishaqzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.S.103.01. Name: 1: SHAMSUDDIN 2: na 3: na 4: na

شمس الدين: Name (original script): شمس

Title: a) Maulavi b) Qari Designation: Governor of Wardak (Maidan) Province under the Taliban regime DOB: Approximately 1968 POB: Keshim District, Badakhshan Province, Afghanistan Good quality a.k.a.: Pahlawan Shamsuddin Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013) Other information: Believed to be in Afghanistan/Pakistan/Iran border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.H.118.01. Name: 1: HAMIDULLAH 2: AKHUND 3: SHER MOHAMMAD 4: na

Name (original script): حمید الله آخوند شیر محمد

1988 Sanctions List

**Title:** Mullah **Designation:** Head of Ariana Afghan Airlines under the Taliban regime **DOB:** Between 1972 and 1973 **POB:** a) Sarpolad village, Washer District, Helmand Province, Afghanistan b) Arghandab District, Kandahar Province, Afghanistan **Good quality a.k.a.:** a) Janat Gul b) Hamidullah Akhund (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** Afghanistan **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 9 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 13 Aug. 2012) **Other information:** Belongs to Ghilzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.Z.152.11. Name: 1: SANGEEN 2: ZADRAN 3: SHER MOHAMMAD 4: na

سنگین حدر ان شیر محمد :Name (original script)

Title: a) Maulavi b) Mullah Designation: na DOB: a) Approximately 1976 b) Approximately 1979 POB: Tang Stor Khel, Ziruk District, Paktika Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: a) Sangin b) Sangin Zadran c) Sangeen Khan Zadran d) Sangeen e) Fateh f) Noori Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 16 Aug. 2011 (amended on 13 Aug. 2012, 18 Oct. 2013) Other information: Taliban Shadow Governor for Paktika Province as of late 2012. Senior commander of the Haqqani Network (TE.H.12.12.). Senior lieutenant to Sirajuddin Jallaloudine Haqqani (TI.H.144.07.). Alternative spelling of title (a): Maulvi. Belongs to Kharoti tribe. Reportedly deceased September 2013.

TI.S.139.01. Name: 1: ABDUL GHAFAR 2: SHINWARI 3: na 4: na

عبدالغفار شينواري :Name (original script)

Title: Haji Designation: Third Secretary, Taliban Consulate General, Karachi, Pakistan DOB: 29 Mar. 1965 POB: Nangarhar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number D 000763, issued on 9 Jan. 1997 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 21 Sep. 2007, 29 Nov. 2011) Other information: Believed to be in Afghanistan/Pakistan border area. Belongs to Safi tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.S.111.01. Name: 1: HAMDULLAH 2: SUNANI 3: na 4: na

حمد الله سناني: Name (original script)

**Title:** Maulavi **Designation:** Head of Dar-ul-Efta (Fatwa Department) of Supreme Court under the Taliban regime **DOB:** Approximately 1923 **POB:** Dai Chopan District, Zabul Province, Afghanistan **Good quality a.k.a.:** Sanani (previously listed as) **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Reportedly deceased in 2001. Belonged to Kakar tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.T.75.01. Name: 1: ABDUL RAQIB 2: TAKHARI 3: na 4: na

عبدالرقيب تخارى :Name (original script)

Title: Maulavi Designation: Minister of Repatriation under the Taliban regime DOB: Between 1968 and 1973 POB: Zardalu Darra village, Kalafgan District, Takhar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 31 Dec. 2013, 16 May 2014) Other information: Member of Taliban Supreme Council responsible for Takhar and Badakhshan provinces as at Dec. 2009. Confirmed killed on 17 February in Peshawar, Pakistan and buried in Takhar Province, Afghanistan. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.T.168.14. Name: 1: QARI 2: SAIFULLAH 3: TOKHI 4: na

قارى سيف الله توخى :Name (original script)

Title: Qari Designation: na DOB: Approximately 1964 POB: Daraz Village, Jaldak wa Tarnak District, Zabul Province, Afghanistan Good quality a.k.a.: a) Qari Saifullah b) Qari Saifullah Al Tokhi c) Saifullah Tokhi Low quality a.k.a.: Qari Sahab Nationality: Afghan Passport no.: na National identification no.: na Address: Chalo Bawari area, Quetta City, Baluchistan Province, Pakistan Listed on: 19 Mar. 2014 (amended on 16 May 2014) Other information: Believed to be in Afghanistan/Pakistan border area. Taliban Shadow Deputy Governor and operational commander in Zabul Province, Afghanistan, responsible for the laying of improvised explosive devices and the organisation of suicide attacks. Physical description: height: 180 cm; weight: approximately 90 kg; build: athletic build; eye colour: brown; hair colour: red; complexion: medium brown. Distinguishing physical marks: large round face, full beard, and walks with a limp due to plastic prosthesis in place of his left lower leg. Ethnic background: Pashtun; Belongs to Tokhi tribe, Barkozai sub-tribe (alternative tribe spelling: Torchi), Barkozai (alternative tribe spelling: Bakorzai, العكورزي sub-tribe, Kishta Barkorzai (lower Barkorzai) clan. Marital Status: married. Father's name: Agha Mohammad. Brother's name: Humdullah.

TI.W.95.01. Name: 1: WALIJAN 2: na 3: na 4: na

ولی جان :Name (original script)

**Title:** Maulavi **Designation:** Governor of Jawzjan Province under the Taliban regime **DOB:** Approximately 1968 **POB:** a) Quetta, Pakistan b) Nimroz Province, Afghanistan **Good quality a.k.a.:** na **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Member of the Taliban Gerd-e-Jangal Shura and Head of the Taliban Prisoners and Refugees Committee. Belongs to Ishaqzai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.34.01. Name: 1: ABDUL JALIL 2: HAQQANI 3: WALI MOHAMMAD 4: na

عبد الجليل حقاني ولي محمد :(Name (original script

Title: a) Maulavi b) Mullah Designation: Deputy Minister of Foreign Affairs under the Taliban regime DOB: Approximately 1963 POB: a) Khwaja Malik village, Arghandab District, Kandahar Province, Afghanistan b) Kandahar City, Kandahar Province, Afghanistan Good quality a.k.a.: a) Abdul Jalil Akhund b) Akhter Mohmad son of Noor Mohmad (اختر محمد ولد نور محمد), born in 1965 in Kandahar, Afghanistan passport number OR1961825 issued on 4 Feb. علجي) 2003 by the Afghan Consulate in Quetta, Pakistan, expired 2 Feb. 2006 c) Haji Gulab Gul son of Haji Hazrat Gul born in 1955 in Logar, Afghanistan passport number TR024417 issued 20 Dec. 2003 by Central (گلاب گل ولد حاجي حضرت گل Passport Department in Kabul, Afghanistan, expired 29 Dec. 2006 d) Abdul Jalil Haqqani (previously listed as) Low quality a.k.a.: Nazar Jan Nationality: Afghan Passport no.: a) Afghan passport number OR1961825, issued on 4 Feb. 2003 expired 2 Feb. 2006 under the name of Akhter Mohmad b) Afghan passport number TR024417, issued on 20 Dec. 2003 expired 29 Dec. 2006 under the name of Haji Gulab Gul National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 27 Sep. 2007, 13 Feb. 2012, 11 Feb. 2013, 31 Dec. 2013, 16 May 2014) Other information: Believed to be in Afghanistan/Pakistan border area. Member of the Taliban Supreme Council as of May 2007. Member of the Financial Commission of the Taliban Council. Responsible for logistics for the Taliban and also active as a businessman in his personal capacity as at mid-2013. Belongs to Alizai tribe. Brother of Atiqullah Wali Mohammad (TI.A.70.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.A.70.01. Name: 1: ATIQULLAH 2: WALI MOHAMMAD 3: na 4: na

عتيق الله ولي محمد :Name (original script)

Title: a) Haji b) Mullah Designation: a) Director of Foreign Relations, Kandahar Province under the Taliban regime b) Director of Public Works, Kandahar Province under the Taliban regime c) First Deputy Minister of Agriculture under the Taliban regime d) Deputy Minister of Public Works under the Taliban regime DOB: Approximately 1962 POB: a) Tirin Kot District, Uruzgan Province, Afghanistan b) Khwaja Malik village, Arghandab District, Kandahar Province, Afghanistan Good quality a.k.a.: Atiqullah (previously listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 19 Oct. 2012, 11 Feb. 2013, 31 Dec. 2013) Other information: Originally from Uruzgan, settled and lived later in Kandahar. Was a member of Taliban Supreme Council Political Commission in 2010. No specific role in the Taliban movement, active as a businessman in his personal capacity as of mid-2013. Believed to be in Afghanistan/Pakistan border area. Belongs to Alizai tribe. Brother of Abdul Jalil Haqqani Wali Mohammad (TI.A.34.01). Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.129.01. Name: 1: NAZIRULLAH 2: HANAFI 3: WALIULLAH 4: na

نذير الله حنفي ولي الله: Name (original script)

Title: a) Maulavi b) Haji Designation: Commercial Attache, Taliban Embassy, Islamabad, Pakistan DOB: 1962 POB: Spin Boldak District, Kandahar Province, Afghanistan Good quality a.k.a.: Nazirullah Aanafi Waliullah Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number D 000912, issued on 30 Jun. 1998 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 18 Jul. 2007, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011) Other information: Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.W.82.01. Name: 1: ABDUL-HAQ 2: WASSIQ 3: na 4: na

عبد الحق وثيق :Name (original script)

**Title:** Maulavi **Designation:** Deputy Minister of Security (Intelligence) under the Taliban regime **DOB:** a) 1971 b) Approximately 1975 **POB:** Gharib village, Khogyani District, Ghazni Province, Afghanistan **Good quality a.k.a.:** a) Abdul-Haq Wasseq b) Abdul Haq Wasiq **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** Guantanamo Bay prison **Listed on:** 31 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 3 Oct. 2008, 29 Nov. 2011, 31 Dec. 2013, 11 Feb. 2014) **Other information:** In custody of the United States of America as at 2011. Review pursuant to Security Council resolution 1822 (2008) was concluded on 27 Jul. 2010.

TI.A.85.01. Name: 1: AHMED JAN 2: AKHUNDZADA 3: WAZIR 4: na

Name (original script): احمد جان آخوندزاده وزير

Title: Maulavi Designation: Minister of Water and Electricity under the Taliban regime DOB: Between 1953 and 1958 POB: a) Kandahar Province, Afghanistan b) Tirin Kot District, Uruzgan Province, Afghanistan Good quality a.k.a.: a) Haji Ahmad Jan b) Ahmed Jan Akhund (previously listed as) Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011) Other information: Member of Taliban Supreme Military Council as at 2009. Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.W.39.01. Name: 1: MOHAMMAD JAWAD 2: WAZIRI 3: na 4: na

محمد جواد وزيرى: Name (original script)

Title: na Designation: UN Department, Ministry of Foreign Affairs under the Taliban regime DOB: Approximately 1960 POB: a) Jaghatu District, Maidan Wardak Province, Afghanistan b) Sharana District, Paktia Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 23 Feb. 2001 (amended on 3 Sep. 2003, 21 Sep. 2007, 29 Nov. 2011, 18 May 2012) Other information: Believed to be in Afghanistan/Pakistan border area. Belongs to Wazir tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 23 Jul. 2010.

TI.A.22.01. Name: 1: UBAIDULLAH 2: AKHUND 3: YAR MOHAMMAD AKHUND 4: na

عبيدالله أخوند يار محمد أخوند :Name (original script)

Title: a) Mullah b) Hadji c) Maulavi Designation: Minister of Defence under the Taliban regime DOB: a) Approximately 1968 b) 1969 POB: a) Sangisar village, Panjwai District, Kandahar Province, Afghanistan b) Arghandab District, Kandahar Province, Afghanistan Good quality a.k.a.: a) Obaidullah Akhund b) Obaid Ullah Akhund Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011, 18 May 2012, 31 Dec. 2013) Other information: He was one of the deputies of Mullah Mohammed Omar (Tl.0.4.01.) and a member of the Taliban's Supreme Council, in charge of military operations. Arrested in 2007 and was in custody in Pakistan. Confirmed deceased in March 2010 and buried in Karachi, Pakistan. Linked by marriage to Saleh Mohammad Kakar Akhtar Muhammad (Tl.K.149.10). Belonged to Alokozai tribe. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.Z.171.14. Name: 1: MUHAMMAD 2: OMAR 3: ZADRAN 4: na

محمد عمر حُدران: Name (original script)

**Title: a)** Maulavi **b)** Mullah **Designation:** na **DOB:** 1958 **POB:** Sultan Kheyl Village, Spera District, Khost Province, Afghanistan **Good quality a.k.a.:** Mohammad-Omar Jadran **Low quality a.k.a.:** na **Nationality:** na **Passport no.:** 

na **National identification no.:** na **Address:** Afghanistan/Pakistan Border Area **Listed on:** 31 Jul. 2014 **Other information:** Haqqani Network (HQN) (TE.H.12.12.) leader in command of over 100 militants active in Khost Province, Afghanistan as of 2013. Involved in the preparation of attacks against Afghan and international forces in Afghanistan.

TI.Z.33.01. Name: 1: ABDUL RAHMAN 2: ZAHED 3: na 4: na

عبدالرحمان زاهد :(Name (original script

**Title:** Mullah **Designation:** Deputy Minister of Foreign Affairs under the Taliban regime **DOB:** Approximately 1963 **POB:** Kharwar District, Logar Province, Afghanistan **Good quality a.k.a.:** Abdul Rehman Zahid **Low quality a.k.a.:** na **Nationality:** Afghan **Passport no.:** na **National identification no.:** na **Address:** na **Listed on:** 25 Jan. 2001 (amended on 3 Sep. 2003, 18 Jul. 2007, 21 Sep. 2007, 29 Nov. 2011) **Other information:** Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 21 Jul. 2010.

TI.Z.127.01. Name: 1: MOHAMMAD 2: ZAHID 3: na 4: na

Name (original script): محمد زاهد

Title: Mullah Designation: Third Secretary, Taliban Embassy, Islamabad, Pakistan DOB: 1971 POB: Logar Province, Afghanistan Good quality a.k.a.: na Low quality a.k.a.: na Nationality: Afghan Passport no.: Afghan passport number D 001206, issued on 17 Jul. 2000 National identification no.: na Address: na Listed on: 25 Jan. 2001 (amended on 3 Sep. 2003, 25 Jul. 2006, 21 Sep. 2007, 29 Nov. 2011) Other information: Believed to be in Afghanistan/Pakistan border area. Review pursuant to Security Council resolution 1822 (2008) was concluded on 29 Jul. 2010.

TI.Z.164.12 Name: 1: ABDUL RAUF 2: ZAKIR 3: na 4: na

عبد الروف ذاكر :Name (original script)

Title: Qari Designation: na DOB: Between 1969 and 1971 POB: Kabul Province, Afghanistan Good quality a.k.a.: Qari Zakir Low quality a.k.a.: na Nationality: Afghan Passport no.: na National identification no.: na Address: na Listed on: 5 Nov. 2012 (amended on 31 May 2013) Other information: Chief of suicide operations for the Haqqani Network (TE.H.12.12.) under Sirajuddin Jallaloudine Haqqani (TI.H.144.07.) and in charge of all operations in Kabul, Takhar, Kunduz and Baghlan provinces. Oversees training of suicide attackers and provides instructions on how to construct improvised explosives devices (IEDs).

TI.M.153.11. Name: 1: FAIZULLAH 2: KHAN 3: NOORZAI 4: na

فيض الله خان نور زي : Name (original script)

Title: Haji Designation: na DOB: a) 1966 b) 1961 c) Between 1968 and 1970 d) 1962 POB: a) Lowy Kariz, Spin Boldak District, Kandahar Province, Afghanistan b) Kadanay, Spin Boldak District, Kandahar Province, Afghanistan c) Chaman, Baluchistan Province, Pakistan Good quality a.k.a.: a) Haji Faizullah Noor b) Faizullah Noorzai Akhtar Mohammed Mira Khan, (previously listed as) c) حاجى فيض الله خان نورزى (Hajji Faizullah Khan Noorzai; Haji Faizullah Khan, Haji Fiazullah) d) Haji Faizullah Noori Low quality a.k.a.: a) Haji Pazullah Noorzai b) Haji Mullah Faizullah Nationality: Afghan Passport no.: na National identification no.: na Address: a) Boghra Road, Miralzei Village, Chaman, Baluchistan Province, Pakistan b) Kalay Rangin, Spin Boldak District, Kandahar Province, Afghanistan Listed on: 4 Oct. 2011 (amended on 29 Nov. 2011, 1 Jun. 2012) Other information: Prominent Taliban financier. As of mid-2009, supplied weapons, ammunition, explosives and medical equipment to Taliban fighters; and raised funds for the Taliban, and provided training to them, in the Afghanistan/Pakistan border region. Has previously organized and funded Taliban operations in Kandahar Province, Afghanistan. As of 2010, travelled to and owned businesses in Dubai, United Arab Emirates, and Japan. Belongs to Noorzai tribe, Miralzai sub-tribe. Brother of Malik Noorzai (TI.N.154.11.). Father's name is Akhtar Mohammed (a.k.a.: Haji Mira Khan).

#### B. Entities and other groups and undertakings associated with the Taliban

TE.H.10.12. Name: HAJI KHAIRULLAH HAJI SATTAR MONEY EXCHANGE

حاجي خير الله و حاجي ستار صر افي :(Name (original script

A.k.a.: a) Haji Khairullah-Haji Sattar Sarafi b) Haji Khairullah and Abdul Sattar and Company c) Haji Khairullah Money Exchange d) Haji Khair Ullah Money Service e) Haji Salam Hawala f) Haji Hakim Hawala g) Haji Alim Hawala h) Sarafi-yi Haji Khairullah Haji Satar Haji Esmatullah F.k.a.: na Address: a) Branch Office 1: i) Chohar Mir Road, Kandahari Bazaar, Quetta City, Baluchistan Province, Pakistan; ii) Room number 1, Abdul Sattar Plaza, Hafiz Saleem Street,

Munsafi Road, Quetta, Baluchistan Province, Pakistan iii) Shop number 3, Dr. Bano Road, Quetta, Baluchistan Province, Pakistan iv) Office number 3, Near Fatima Jinnah Road, Dr. Bano Road, Quetta, Baluchistan Province, Pakistan v) Kachara Road, Nasrullah Khan Chowk, Quetta, Baluchistan Province, Pakistan vi) Wazir Mohammad Road, Quetta, Baluchistan Province, Pakistan; b) Branch Office 2: Peshawar, Khyber Paktunkhwa Province, Pakistan; c) Branch Office 3: Moishah Chowk Road, Lahore, Punjab Province, Pakistan; d) Branch Office 4: Karachi, Sindh Province, Pakistan; e) Branch Office 5: i) Larran Road number 2, Chaman, Baluchistan Province, Pakistan ii) Chaman Central Bazaar, Chaman, Baluchistan Province, Pakistan f) Branch Office 6: Shop number 237, Shah Zada Market (also known as Sarai Shahzada), Puli Khishti area, Police District 1, Kabul, Afghanistan, Telephone: +93-202-103386, +93-202-101714, 0202-104748, Mobile: +93-797-059059, +93-702-222222, e-mail: helmand exchange msp@yahoo.com q) Branch Office 7: i) Shops number 21 and 22, 2nd Floor, Kandahar City Sarafi Market, Kandahar City, Kandahar Province, Afghanistan ii) New Sarafi Market, 2nd Floor, Kandahar City, Kandahar Province, Afghanistan iii) Safi Market, Kandahar City, Kandahar Province, Afghanistan h) Branch Office 8: Gereshk City, Nahr-e Saraj District, Helmand Province, Afghanistan i) Branch Office 9: i) Lashkar Gah Bazaar, Lashkar Gah, Lashkar Gah District, Helmand Province, Afghanistan ii) Haji Ghulam Nabi Market, 2nd Floor, Lashkar Gah District, Helmand Province, Afghanistan j) Branch Office 10: i) Suite numbers 196-197, 3rd Floor, Khorasan Market, Herat City, Herat Province, Afghanistan ii) Khorasan Market, Shahre Naw, District 5, Herat City, Herat Province, Afghanistan k) Branch Office 11: i) Sarafi Market, Zaranj District, Nimroz Province, Afghanistan ii) Ansari Market, 2nd Floor, Nimroz Province, Afghanistan I) Branch Office 12: Sarafi Market, Wesh, Spin Boldak District, Afghanistan m) Branch Office 13: Sarafi Market, Farah, Afghanistan n) Branch Office 14: Dubai, United Arab Emirates o) Branch Office 15: Zahedan, Iran p) Branch Office 16: Zabul, Iran Listed on: 29 Jun. 2012 (amended on 13 Aug. 2012, 25 Oct. 2012) Other information: Pakistan National Tax Number: 1774308; Pakistan National Tax Number: 0980338; Pakistan National Tax Number: 3187777; Afghan Money Service Provider License Number: 044. Haji Khairullah Haji Sattar Money Exchange was used by Taliban leadership to transfer money to Taliban commanders to fund fighters and operations in Afghanistan as of 2011. Associated with Abdul Sattar Abdul Manan (TI.A.162.12.) and Khairullah Barakzai Khudai Nazar (TI.K.163.12.).

## TE.H.12.12. Name: HAQQANI NETWORK (HQN)

Mame (original script): شبکه حقانی

A.k.a.: na F.k.a.: na Address: na Listed on: 5 Nov. 2012 Other information: Network of Taliban fighters centered around the border between Khost Province, Afghanistan and North Waziristan, Pakistan. Founded by Jalaluddin Haqqani (Tl.H.40.01.) and currently headed by his son Sirajuddin Jallaloudine Haqqani (Tl.H.144.07.). Other listed members include Nasiruddin Haqqani (Tl.H.146.10.), Sangeen Zadran Sher Mohammad (Tl.Z.152.11.), Abdul Aziz Abbasin (Tl.A.155.11.), Fazl Rabi (Tl.R.157.12.), Ahmed Jan Wazir (Tl.W.159.12.), Bakht Gul (Tl.G.161.12.), Abdul Rauf Zakir (Tl.Z.164.12.). Responsible for suicide attacks and targeted assassination as well as kidnappings in Kabul and other provinces of Afghanistan. Linked to Al-Qaida (QE.A.4.01.), Islamic Movement of Uzbekistan (QE.I.10.01.), Tehrik-e Taliban Pakistan (QE.T.132.11.), Lashkar I Jhangvi (QE.L.96.03.), and Jaish-IMohammed (QE.J.19.01.).

TE.R.13.12. Name: RAHAT LTD.

Name (original script): راحت لمتد

A.k.a.: a) Rahat Trading Company b) Haji Muhammad Qasim Sarafi c) New Chagai Trading d) Musa Kalim Hawala F.k.a.: na Address: a) Branch Office 1: Room number 33, 5th Floor, Sarafi Market, Kandahar city, Kandahar Province, Afghanistan b) Branch Office 2: Shop number 4, Azizi Bank, Haji Muhammad Isa Market, Wesh, Spin Boldak, Kandahar Province, Afghanistan c) Branch Office 3: Safaar Bazaar, Garmser District, Helmand Province, Afghanistan d) Branch Office 4: Lashkar Gah, Helmand Province, Afghanistan e) Branch Office 5: Gereshk District, Helmand Province, Afghanistan f) Branch Office 6: Zaranj District, Nimroz Province, Afghanistan g) Branch Office 7: i) Dr Barno Road, Quetta, Pakistan ii) Haji Mohammed Plaza, Tol Aram Road, near Jamaluddin Afghani Road, Quetta, Pakistan iii) Kandahari Bazaar, Quetta, Pakistan h) Branch Office 8: Chaman, Baluchistan Province, Pakistan i) Branch Office 9: Chaghi Bazaar, Chaghi, Baluchistan Province, Pakistan j) Branch Office 10: Zahedan, Zabol Province, Iran Listed on: 21 Nov. 2012 (amended on 27 Jun. 2013) Other information: Rahat Ltd. was used by Taliban leadership to transfer funds originating from external donors and narcotics trafficking to finance Taliban activity as of 2011 and 2012. Owned by Mohammed Qasim Mir Wali Khudai Rahim (TI.Q.165.12.). Also associated Mohammad Naim Barich Khudaidad (TI.N.13.01.).

TE.R.11.12. Name: ROSHAN MONEY EXCHANGE

صر افی روشان: Name (original script)

A.k.a.: a) Roshan Sarafi b) Roshan Trading Company c) Rushaan Trading Company d) Roshan Shirkat e) Maulawi Ahmed Shah Hawala f) Mullah Ahmed Shah Hawala g) Haji Ahmad Shah Hawala h) Ahmad Shah Hawala F.k.a.: na Address: a) Branch Office 1: i) Shop number 1584, Furqan (variant Fahr Khan) Center, Chalhor Mal Road, Quetta,

Baluchistan Province, Pakistan ii) Flat number 4, Furgan Center, Jamaluddin Afghani Road, Quetta, Baluchistan Province, Pakistan iii) Office number 4, 2nd Floor, Muslim Plaza Building, Doctor Banu Road, Quetta, Baluchistan Province, Pakistan iv) Cholmon Road, Quetta, Baluchistan Province, Pakistan v) Munsafi Road, Quetta, Baluchistan Province, Pakistan vi) Shop number 1, 1st Floor, Kadari Place, Abdul Samad Khan Street (next to Fatima Jena Road), Quetta, Baluchistan Province, Pakistan b) Branch Office 2: i) Safar Bazaar, Garmser District, Helmand Province, Afghanistan ii) Main Bazaar, Safar, Helmand Province, Afghanistan c) Branch Office 3: i) Haji Ghulam Nabi Market, Lashkar Gah, Helmand Province, Afghanistan ii) Money Exchange Market, Lashkar Gah, Helmand Province, Afghanistan iii) Lashkar Gah Bazaar, Helmand Province, Afghanistan d) Branch Office 4: Hazar Joft, Garmser District, Helmand Province, Afghanistan e) Branch Office 5: Ismat Bazaar, Marjah District, Helmand Province, Afghanistan f) Branch Office 6: Zarani, Nimruz Province, Afghanistan g) Branch Office 7: i) Suite number 8, 4th Floor, Sarafi Market, District number 1, Kandahar City, Kandahar Province, Afghanistan ii) Shop number 25, 5th Floor, Sarafi Market, Kandahar City, Kandahar District, Kandahar Province, Afghanistan h) Branch Office 8: Lakri City, Helmand Province, Afghanistan i) Branch Office 9: Gerd-e-Jangal, Chaghi District, Baluchistan Province, Pakistan j) Branch Office 10: Chaghi, Chaghi District, Baluchistan Province, Pakistan k) Branch Office 11: Aziz Market, in front of Azizi Bank, Waish Border, Spin Boldak District, Kandahar Province, Afghanistan Listed on: 29 Jun. 2012 (amended on 25 Oct. 2012) Other information: Roshan Money Exchange stores and transfers funds to support Taliban military operations and narcotics trade in Afghanistan. Owned by Ahmed Shah Noorzai Obaidullah (TI.N.166.13.).

# CONSOLIDATED LIST OF ENTITIES AND INDIVIDUALS<sup>1</sup>

The Consolidated List contains the entities and individuals subject to assets freeze and/or travel ban as decided by the Security Council and the Sanctions Committee established pursuant to resolution 1718 (2006). An informal compilation of the names of the entities and individuals in the Korean language are available on the Committee's website at <a href="http://www.un.org/sc/committees/1718/pdf/List">http://www.un.org/sc/committees/1718/pdf/List</a> Entities and Individuals Korean.pdf.

## A) Entities

- 1. **KOREA MINING DEVELOPMENT TRADING CORPORATION** (a.k.a. CHANGGWANG SINYONG CORPORATION; a.k.a. EXTERNAL TECHNOLOGY GENERAL CORPORATION; a.k.a. DPRKN MINING DEVELOPMENT TRADING COOPERATION; a.k.a. "KOMID"). Central District, Pyongyang, DPRK. Primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons.
- 2. **KOREA RYONBONG GENERAL CORPORATION** (a.k.a. KOREA YONBONG GENERAL CORPORATION; f.k.a. LYONGAKSAN GENERAL TRADING CORPORATION). Pot'onggang District, Pyongyang, DPRK; Rakwon-dong, Pothonggang District, Pyongyang, DPRK. Defense conglomerate specializing in acquisition for DPRK defense industries and support to that country's military-related sales.
- 3. **TANCHON COMMERCIAL BANK** (f.k.a. CHANGGWANG CREDIT BANK; f.k.a., KOREA CHANGGWANG CREDIT BANK). Saemul 1-Dong Pyongchon District, Pyongyang, DPRK. Main DPRK financial entity for sales of conventional arms, ballistic missiles, and goods related to the assembly and manufacture of such weapons.

## 4. NAMCHONGANG TRADING CORPORATION

<u>Description</u>: Namchongang is a DPRK trading company subordinate to the General Bureau of Atomic Energy (GBAE). Namchongang has been involved in the procurement of Japanese origin vacuum pumps that were identified at a DPRK nuclear facility, as well as nuclear-related procurement associated with a German individual. It has further been involved in the purchase of aluminum tubes and other equipment specifically suitable for a uranium enrichment program from the late 1990s. Its representative is a former diplomat who served as DPRK's representative for the IAEA inspection of the Yongbyon nuclear facilities in 2007. Namchongang's proliferation activities are of grave concern given the DPRK's past proliferation activities.

Location: Pyongyang, DPRK.

A.K.A.: NCG; NAMCHONGANG TRADING; NAM CHON GANG CORPORATION; NOMCHONGANG TRADING CO.; NAM CHONG GAN TRADING CORPORATION

## 5. HONG KONG ELECTRONICS

<u>Description</u>: owned or controlled by, or acts or purports to act for or on behalf of Tanchon Commercial Bank and KOMID. Hong Kong Electronics has transferred millions of dollars of proliferation-related funds on behalf of Tanchon Commercial Bank and KOMID (both designated by the Committee in April 2009) since 2007. Hong Kong Electronics has facilitated the movement of money from Iran to the DPRK on behalf of KOMID.

Location: Sanaee St., Kish Island, Iran.

A.K.A.: HONG KONG ELECTRONICS KISH CO.

<sup>&</sup>lt;sup>1</sup> Entities and individuals were designated by the Committee on 24 April 2009 (S/2009/222), 16 July 2009 (S/2009/364), 2 May 2012 (S/2012/287) and 28 July 2014; and by the Security Council in resolutions 2087 (2013) and 2094 (2013).

# 6. KOREA HYOKSIN TRADING CORPORATION

<u>Description</u>: a DPRK company based in Pyongyang that is subordinate to Korea Ryonbong General Corporation (designated by the Committee in April 2009) and is involved in the development of WMD. Location: Rakwon-dong, Pothonggang District, Pyongyang, DPRK.

A.K.A.: KOREA HYOKSIN EXPORT AND IMPORT CORPORATION

## 7. GENERAL BUREAU OF ATOMIC ENERGY (GBAE)

<u>Description</u>: The GBAE is responsible for the DPRK's nuclear program, which includes the Yongbyon Nuclear Research Center and its 5 MWe (25 MWt) plutonium production research reactor, as well as its fuel fabrication and reprocessing facilities. The GBAE has held nuclear-related meetings and discussions with the International Atomic Energy Agency. GBAE is the primary DPRK government agency that oversees nuclear programs, including the operation of the Yongbyon Nuclear Research Center.

Location: Haeudong, Pyongchen District, Pyongyang, DPRK.

A.K.A.: General Department of Atomic Energy (GDAE)

## 8. KOREAN TANGUN TRADING CORPORATION

<u>Description</u>: Korea Tangun Trading Corporation is subordinate to DPRK's Second Academy of Natural Sciences and is primarily responsible for the procurement of commodities and technologies to support DPRK's defense research and development programs, including, but not limited to, WMD and delivery system programs and procurement, including materials that are controlled or prohibited under relevant multilateral control regimes.

Location: Pyongyang, DPRK.

## 9. AMROGGANG DEVELOPMENT BANKING CORPORATION

<u>Description</u>: Amroggang, which was established in 2006, is a Tanchon Commercial Bank-related company managed by Tanchon officials. Tanchon plays a role in financing KOMID's sales of ballistic missiles and has also been involved in ballistic missile transactions from KOMID to Iran's Shahid Hemmat Industrial Group (SHIG). Tanchon Commercial Bank was designated by the Committee in April 2009 and is the main DPRK financial entity for sales of conventional arms, ballistic missiles, and goods related to the assembly and manufacture of such weapons. KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons. The Security Council designated SHIG in resolution 1737 (2006) as an entity involved in Iran's ballistic missile programme.

Location: Tongan-dong, Pyongyang, DPRK

A.K.A.: AMROGGANG Development Bank; Amnokkang Development Bank

# 10. GREEN PINE ASSOCIATED CORPORATION

<u>Description</u>: Green Pine Associated Corporation ("Green Pine") has taken over many of the activities of the Korea Mining Development Trading Corporation (KOMID). KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons. Green Pine is also responsible for approximately half of the arms and related material exported by the DPRK. Green Pine has been identified for sanctions for exporting arms or related material from North Korea. Green Pine specializes in the production of maritime military craft and armaments, such as submarines, military boats and missile systems, and has exported torpedoes and technical assistance to Iranian defence-related firms.

<u>Location</u>: c/o Reconnaissance General Bureau Headquarters, Hyongjesan-Guyok, Pyongyang, North Korea; Nungrado, Pyongyang, DPRK

A.K.A.: CHO'NGSONG UNITED TRADING COMPANY; CHONGSONG YONHAP; CH'O'NGSONG YO'NHAP; CHOSUN CHAWO'N KAEBAL T'UJA HOESA; JINDALLAE; KU'MHAERYONG COMPANY LTD; NATURAL RESOURCES DEVELOPMENT AND INVESTMENT CORPORATION; SAEINGP'IL COMPANY

## 11. KOREA HEUNGJIN TRADING COMPANY

<u>Description</u>: The Korea Heungjin Trading Company is used by KOMID for trading purposes. We suspect it has been involved in supplying missile-related goods to Iran's Shahid Hemmat Industrial Group (SHIG). Heungjin has been associated with KOMID, and, more specifically, KOMID's procurement office. Heungjin has been used to procure an advanced digital controller with applications in missile design. KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons. The Security Council designated SHIG in resolution 1737 (2006) as an entity involved in Iran's ballistic missile programme.

Location: Pyongyang, DPRK

A.K.A.: Hunjin TRADING Co., Korea Henjin Trading Co., Korea Hengjin Trading Company

## 12. KOREAN COMMITTEE FOR SPACE TECHNOLOGY

<u>Description</u>: The Korean Committee for Space Technology (KCST) orchestrated the DPRK's launches on 13 April 2012 and 12 December 2012 via the satellite control center and Sohae launch area.

AKA: DPRK Committee for Space Technology; Department of Space Technology of the DPRK;

Committee for Space Technology; KCST

Location: Pyongyang, DPRK

#### 13. BANK OF EAST LAND

<u>Description</u>: DPRK financial institution Bank of East Land facilitates weapons-related transactions for, and other support to, arms manufacturer and exporter Green Pine Associated Corporation (Green Pine). Bank of East Land has actively worked with Green Pine to transfer funds in a manner that circumvents sanctions. In 2007 and 2008, Bank of East Land facilitated transactions involving Green Pine and Iranian financial institutions, including Bank Melli and Bank Sepah. The Security Council designated Bank Sepah in resolution 1747 (2007) for providing support to Iran's ballistic missile program. Green Pine was designated by the Committee in April 2012.

AKA: Dongbang BANK; TONGBANG U'NHAENG; TONGBANG BANK

Location: PO Box 32, BEL Building, Jonseung-Dung, Moranbong District, Pyongyang, DPRK

## 14. KOREA KUMRYONG TRADING CORPORATION

<u>Description</u>: Used as an alias by the Korea Mining Development Trading Corporation (KOMID) to carry out procurement activities. KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons.

#### 15. TOSONG TECHNOLOGY TRADING CORPORATION

<u>Description</u>: The Korea Mining Development Corporation (KOMID) is the parent company of Tosong Technology Trading Corporation. KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons.

Location: Pyongyang, DPRK

## 16. KOREA RYONHA MACHINERY JOINT VENTURE CORPORATION

<u>Description</u>: Korea Ryonbong General Corporation is the parent company of Korea Ryonha Machinery Joint Venture Corporation. Korea Ryonbong General Corporation was designated by the Committee in April 2009 and is a defense conglomerate specializing in acquisition for DPRK defense industries and support to that country's military-related sales.

AKA: Chosun Yunha Machinery Joint Operation Company; Korea Ryenha Machinery J/V Corporation; Ryonha Machinery Joint Venture Corporation; Ryonha Machinery Corporation; Ryonha Machinery; Ryonha Machiner Tool; Ryonha Machiner Tool Corporation; Ryonha Machinery Corp.; Ryonhwa Machinery Joint Venture Corporation; Ryonhwa Machinery JV; Huichon Ryonha Machinery General Plant; Unsan; Unsan Solid Tools; and Millim Technology Company; 朝鲜联合机械贸易会社 (original script).

<u>Location</u>: Tongan-dong, Central District, Pyongyang, DPRK; Mangungdae-gu, Pyongyang, DPRK; Mangyongdae District, Pyongyang, DPRK

<u>Email addresses</u>: ryonha@silibank.com; sjc-117@hotmail.com; and millim@silibank.com <u>Telephone numbers</u>: 850-2-18111; 850-2-18111-8642; and 850 2 18111-3818642 <u>Facsimile number</u>: 850-2-381-4410

## 17. LEADER (HONG KONG) INTERNATIONAL

<u>Description</u>: Facilitates shipments on behalf of the Korea Mining Development Trading Corporation (KOMID). KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons. <u>AKA</u>: Leader International Trading Limited; Leader (Hong Kong) International Trading Limited <u>Location</u>: LM-873, RM B, 14/F, Wah Hen Commercial Centre, 383 Hennessy Road, Wanchai, Hong Kong, China

Other Information: Hong Kong company registration number 1177053

## 18. SECOND ACADEMY OF NATURAL SCIENCES

<u>Description</u>: The Second Academy of Natural Sciences is a national-level organization responsible for research and development of the DPRK's advanced weapons systems, including missiles and probably nuclear weapons. The Second Academy of Natural Sciences uses a number of subordinate organizations to obtain technology, equipment, and information from overseas, including Tangun Trading Corporation, for use in the DPRK's missile and probably nuclear weapons programs. Tangun Trading Corporation was designated by the Committee in July 2009 and is primarily responsible for the procurement of commodities and technologies to support DPRK's defense research and development programs, including, but not limited to, weapons of mass destruction and delivery system programs and procurement, including materials that are controlled or prohibited under relevant multilateral control regimes.

A.K.A: 2ND ACADEMY OF NATURAL SCIENCES; CHE 2 CHAYON KWAHAKWON; ACADEMY OF NATURAL SCIENCES; CHAYON KWAHAK-WON; NATIONAL DEFENSE ACADEMY; KUKPANG KWAHAK-WON; SECOND ACADEMY OF NATURAL SCIENCES RESEARCH INSTITUTE; SANSRI

Location: Pyongyang, DPRK

## 19. KOREA COMPLEX EQUIPMENT IMPORT CORPORATION

<u>Description</u>: Korea Ryonbong General Corporation is the parent company of Korea Complex Equipment Import Corporation. Korea Ryonbong General Corporation was designated by the Committee in April 2009 and is a defense conglomerate specializing in acquisition for DPRK defense industries and support to that country's military-related sales.

Location: Rakwon-dong, Pothonggang District, Pyongyang, DPRK

## 20. OCEAN MARITIME MANAGEMENT COMPANY, LIMITED (OMM)

<u>Description</u>: Ocean Maritime Management Company, Limited is the operator/manager of the vessel *Chong Chon Gang*. It played a key role in arranging the shipment of concealed cargo of arms and related materiel from Cuba to the DPRK in July 2013. As such, Ocean Maritime Management Company, Limited contributed to activities prohibited by the resolutions, namely the arms embargo imposed by resolution

1718 (2006), as modified by resolution 1874 (2009), and contributed to the evasion of the measures imposed by these resolutions.

<u>Location</u>: Donghung Dong, Central District, PO Box 120, Pyongyang, DPRK; Dongheung-dong Changgwang Street, Chung-Ku, PO Box 125, Pyongyang, DPRK

Other Information: International Maritime Organization (IMO) Number: 1790183

## B) Individuals

- 1. **YUN HO-JIN**: Director of Namchongang Trading Corporation; oversees the import of items needed for the uranium enrichment program. (Additional information: born 13 October 1944; also known as Yun Ho-chin)
- 2. **RI JE-SON**: Minister of Atomic Energy Industry since April 2014. Former Director of the General Bureau of Atomic Energy (GBAE), chief agency directing DPRK's nuclear program; facilitated several nuclear endeavors including GBAE's management of Yongbyon Nuclear Research Center and Namchongang Trading Corporation. (Additional information: born 1938; also known as Ri Che-son)
- 3. **HWANG SOK-HWA**: Director in the General Bureau of Atomic Energy (GBAE); involved in DPRK's nuclear program; as Chief of the Scientific Guidance Bureau in the GBAE, served on the Science Committee inside the Joint Institute for Nuclear Research.
- 4. **RI HONG-SOP**: Former director, Yongbyon Nuclear Research Center, oversaw three core facilities that assist in the production of weapons-grade plutonium: the Fuel Fabrication Facility, the Nuclear Reactor, and the Reprocessing Plant. (Additional information: born 1940)
- 5. **HAN YU-RO**: Director of Korea Ryongaksan General Trading Corporation; involved in DPRK's ballistic missile program.

## 6. PAEK CHANG-HO

<u>Description</u>: senior official and head of the satellite control center of Korean Committee for Space Technology.

AKA: Pak Chang-Ho; Paek Ch'ang-Ho

<u>Identifiers</u>: Passport: 381420754; Passport Date of Issue: 7 December 2011; Passport Date of Expiration: 7 December 2016; D.O.B. 18 June 1964; P.O.B. Kaesong, DPRK; Gender: Male

## 7. CHANG MYONG-CHIN

<u>Description</u>: General Manager of the Sohae Satellite Launching Station and head of launch center at which the 13 April and 12 December 2012 launches took place.

AKA: Jang Myong-Jin

Identifiers: D.O.B. 19 February 1968; Alt. D.O.B. 1965 or 1966; Gender: Male

## 8. RA KY'ONG-SU

<u>Description</u>: Ra Ky'ong-Su is a Tanchon Commercial Bank (TCB) official. In this capacity he has facilitated transactions for TCB. Tanchon was designated by the Committee in April 2009 as the main DPRK financial entity responsible for sales of conventional arms, ballistic missiles, and goods related to the assembly and manufacture of such weapons.

AKA: Ra Kyung-Su

Identifiers: D.O.B. 4 June 1954; Passport: 645120196; Gender: Male

## 9. KIM KWANG-IL

<u>Description</u>: Kim Kwang-il is a Tanchon Commercial Bank (TCB) official. In this capacity, he has facilitated transactions for TCB and the Korea Mining Development Trading Corporation (KOMID). Tanchon was designated by the Committee in April 2009 as the main DPRK financial entity responsible for sales of conventional arms, ballistic missiles, and goods related to the assembly and manufacture of such

weapons. KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons. <u>Identifiers</u>: D.O.B. 1 September 1969; Passport: PS381420397; Gender: Male

## 10. YO'N CHO'NG NAM

<u>Description</u>: Chief Representative for the Korea Mining Development Trading Corporation (KOMID). The KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons.

## 11. KO CH'O'L-CHAE

<u>Description</u>: Deputy Chief Representative for the Korea Mining Development Trading Corporation (KOMID). The KOMID was designated by the Committee in April 2009 and is the DPRK's primary arms dealer and main exporter of goods and equipment related to ballistic missiles and conventional weapons.

## 12. MUN CHO'NG-CH'O'L

<u>Description</u>: Mun Cho'ng-Ch'o'l is a TCB official. In this capacity he has facilitated transactions for TCB. Tanchon was designated by the Committee in April 2009 is the main DPRK financial entity for sales of conventional arms, ballistic missiles, and goods related to the assembly and manufacture of such weapons.

# SECURITY COUNCIL COMMITTEE ESTABLISHED PURSUANT TO RESOLUTION 1737 (2006)

INDIVIDUALS AND ENTITIES DESIGNATED AS SUBJECT TO THE TRAVEL BAN AND ASSETS FREEZE PURSUANT TO RESOLUTIONS 1737 (2006), 1747 (2007), 1803 (2008), AND 1929 (2010) AND TO THE COMMITTEE DECISIONS OF 18 APRIL 2012 AND 20 DECEMBER 2012.

For designations by the Security Council, the reference numbers given to each individual or entity are composed of either an I or an E for respectively individual or entity followed by the two last figures of the Security Council resolution in which they were first listed (17""37"", 17""47"", 18""03""or 19""29""), followed by, where available, the letter given to each sub-heading of the Annex to the relevant resolution and the number of the individual or entity in that Annex. For Security Council resolution 1747, where the Annex does not have lettered sub-headings, the letters A to D have been inserted to complete the reference number. For designations by the Security Council Committee the reference number is composed of: the letters AC.50, the date of designation, and a numerical identifier when more than one individual or entity was designated on the same date.

## Individuals Subject to Assets Freeze and Travel Ban

The assets freeze is set out in paragraph 12 of resolution 1737 (2006), paragraph 4 of resolution 1747 (2007), paragraph 7 of resolution 1803 (2008) and paragraphs 11, 12, and 19 of resolution 1929 (2010). Exemptions to that measure are set out in paragraphs 13, 14, and 15 of resolution 1737 (2006). The travel ban is set out in paragraph 5 of the resolution 1803 (2008) and paragraph 10 of the resolution 1929 (2010). Exemptions to that measure are set out in paragraph 6 of resolution 1803 (2008) and paragraph 10 of resolution 1929 (2010).

- **I.47.C.1.** Fereidoun **Abbasi-Davani** (Senior Ministry of Defence and Armed Forces Logistics (MODAFL) scientist with links to the Institute of Applied Physics, working closely with Mohsen Fakhrizadeh-Mahabadi, designated below)
- **I.37.C.3.** Dawood **Agha-Jani**, Head of the PFEP (Natanz)
- **I.AC.50.18.04.12.(1)** Azim **Aghajani (aka Azim Adhajani)**, Member of the IRGC-Qods Force operating under the direction of Qods Force Commander, Major General Qasem Soleimani who was designated by the UN Security Council in resolution 1747 (2007); facilitated a breach of paragraph 5 of resolution 1747 (2007) prohibiting the export of arms and related material from Iran. (Additional information: Nationality: Iran; Passport Number: 6620505, 9003213)
- **I.47.D.2** Vice Admiral Ali Akbar **Ahmadian** (Chief of IRGC Joint Staff)
- **I.03.I.1.** Amir Moayyed **Alai** (involved in managing the assembly and engineering of centrifuges)
- **I.37.C.2.** Behman **Asgarpour**, Operational Manager (Arak)
- **I.03.I.2.** Mohammad Fedai **Ashiani** (involved in the production of ammonium uranyl carbonate and management of the Natanz enrichment complex)
- I.03.I.3. Abbas Rezaee Ashtiani, a senior official at the AEOI Office of Exploration and Mining Affairs
- I.37.D.4. Bahmanyar Morteza Bahmanyar, Head of Finance and Budget Dept, AIO
- **I.03.I.4.** Haleh **Bakhtiar** (Involved in the production of magnesium at a concentration of 99 percent)
- **I.03.I.5.** Morteza **Behzad** (involved in making centrifuge components)

- I.37.D.2. Ahmad Vahid Dastjerdi, Head of the AIO
- **I.47.C.8.** Ahmad **Derakhshandeh** (Chairman and Managing Director of Bank Sepah, which provides support for the AIO and subordinates, including SHIG and SBIG, both of which were designated under resolution 1737 (2006))
- **I.03.I.6.** Dr. Mohammad **Eslami** (Head of Defence Industries Training and Research Institute)
- I.37.D.3. Reza-Gholi Esmaeli, Head of Trade and International Affairs Department AIO
- **I.47.C.2.** Mohsen **Fakhrizadeh-Mahabadi** (Senior MODAFL scientist and former head of the Physics Research Centre (PHRC). The IAEA have asked to interview him about the activities of the PHRC over the period he was head but Iran has refused)
- **I.47.D.5.** Brigadier General Mohammad **Hejazi** (Commander of Bassij resistance force)
- **I.47.C.5.** Mohsen **Hojati** (Head of Fajr Industrial Group, which is designated under resolution 1737 (2006) for its role in the ballistic missile programme)
- **I.03.I.7.** Seyyed Hussein **Hosseini** (AEOI official involved in the heavy water research reactor project at Arak)
- **I.47.C.6.** Mehrdada Akhlaghi **Ketabachi** (Head of SBIG, which is designated under resolution 1737 (2006) for its role in the ballistic missile programme)
- I.37.C.6. Ali Hajinia Leilabadi, Director General of Mesbah Energy Company
- **I.47.C.7.** Naser **Maleki** (Head of SHIG, which is designated under resolution 1737 (2006) for its role in Iran's ballistic missile programme. Naser Maleki is also a MODAFL official overseeing work on the Shahab-3 ballistic missile programme. The Shahab-3 is Iran's long range ballistic missile currently in service)
- **I.03.I.9.** Hamid-Reza **Mohajerani** (involved in production management at the Uranium Conversion Facility (UCF) at Esfahan)
- **I.37.C.5.** Jafar **Mohammadi**, Technical Adviser to the AEOI (in charge of managing the production of valves for centrifuges)
- I.37.C.4. Ehsan Monajemi, Construction Project Manager, Natanz
- **I.03.I.10.** Brigadier-General Mohammad Reza **Naqdi** (former Deputy Chief of Armed Forces General Staff for Logistics and Industrial Research/Head of State Anti-Smuggling Headquarters, engaged in efforts to get round the sanctions imposed by resolutions 1737 (2006) and 1747 (2007))
- **I.37.C.7.** Lt Gen Mohammad Mehdi **Nejad Nouri**, Rector of Malek Ashtar University of Defence Technology (chemistry dept, affiliated to MODALF, has conducted experiments on beryllium)
- **I.03.I.11.** Houshang **Nobari** (involved in the management of the Natanz enrichment complex)
- I.37.C.1. Mohammad Qannadi, AEOI Vice President for Research and Development
- **I.47.C.4.** Amir **Rahimi** (Head of Esfahan Nuclear Fuel Research and Production Center, which is part of the AEOI's Nuclear Fuel Production and Procurement Company, which is involved in enrichment-related activities)
- **I.29.A.23.** Javad **Rahiqi**, Head of the Atomic Energy Organization of Iran (AEOI) Esfahan Nuclear Technology Center. (Additional information: DOB: 24 April 1954; POB: Marshad)
- **I.03.I.12.** Abbas **Rashidi** (involved in enrichment work at Natanz)
- **I.47.D.1.** Brigadier General Morteza **Rezaie** (Deputy Commander of IRGC)
- **I.03.I.8.** M. Javad Karimi **Sabet** (Head of Novin Energy Company, which is designated under resolution 1747 (2007))
- **I.47.D.4.** Rear Admiral Morteza **Safari** (Commander of IRGC Navy)

- I.37.E.1. Maj Gen Yahya Rahim Safavi, Commander, IRGC (Pasdaran)
- **I.47.C.3.** Seyed Jaber **Safdari** (Manager of the Natanz Enrichment Facilities)
- **I.37.D.1.** Gen Hosein **Salimi**, Commander of the Air Force, IRGC (Pasdaran)
- **I.47.D.6.** Brigadier General Qasem **Soleimani** (Commander of Qods force)
- **I.03.I.13.** Ghasem **Soleymani** (Director of Uranium Mining Operations at the Saghand Uranium Mine)
- **I.AC.50.18.04.12.(2)** Ali Akbar **Tabatabaei (aka Sayed Akbar Tahmaesebi),** Member of the IRGC Qods Force operating under the direction of Qods Force Commander, Major General Qasem Soleimani who was designated by the UN Security Council in resolution 1747 (2007); facilitated a breach of paragraph 5 of resolution 1747 (2007) prohibiting the export of arms and related material from Iran. (Additional information: Nationality: Iran; DOB: 1967)
- **I.47.D.3.** Brigadier General Mohammad Reza **Zahedi** (Commander of IRGC Ground Forces)
- **I.47.D.7.** General **Zolqadr** (IRGC officer, Deputy Interior Minister for Security Affairs)

\* \* \*

# **Entities Subject to Assets Freeze**

The assets freeze is set out in paragraph 12 of resolution 1737 (2006), paragraph 4 of resolution 1747 (2007), paragraph 7 of resolution 1803 (2008) and paragraphs 11, 12, and 19 of resolution 1929 (2010). Exemptions to that measure are set out in paragraphs 13, 14, and 15 of resolution 1737 (2006).

- **E.37.A.7. 7th of Tir** (subordinate of DIO, widely recognized as being directly involved in the nuclear programme)
- E.03.III.1. Abzar Boresh Kaveh Co. (BK Co.) (involved in the production of centrifuge components)
- E.29.I.1. Amin Industrial Complex (aka Amin Industrial Compound, Amin Industrial Company),

Amin Industrial Complex sought temperature controllers which may be used in nuclear research and operational/production facilities. Amin Industrial Complex is owned or controlled by, or acts on behalf of, the Defense Industries Organization (DIO), which was designated in resolution 1737 (2006). Location: P.O. Box 91735-549, Mashad, Iran; Amin Industrial Estate, Khalage Rd., Seyedi District, Mashad, Iran; Kaveh Complex, Khalaj Rd., Seyedi St., Mashad, Iran

- **E.47.A.1.** Ammunition and Metallurgy Industries Group (AMIG) (aka Ammunition Industries Group) (AMIG controls 7th of Tir, which is designated under resolution 1737 (2006) for its role in Iran's centrifuge programme. AMIG is in turn owned and controlled by the Defence Industries Organisation (DIO), which is designated under resolution 1737 (2006))
- **E.29.I.2. Armament Industries Group** Armament Industries Group (AIG) manufacturers and services a variety of small arms and light weapons, including large- and medium-calibre guns and related technology. AIG conducts the majority of its procurement activity through Hadid Industries Complex. Location: Sepah Islam Road, Karaj Special Road Km 10, Iran; Pasdaran Ave., P.O. Box 19585/777, Tehran, Iran
- E.37.A.1. Atomic Energy Organisation of Iran
- **E.47.A.8.** Bank Sepah and Bank Sepah International (Bank Sepah provides support for the Aerospace Industries Organisation (AIO) and subordinates, including Shahid Hemmat Industrial Group (SHIG) and

Shahid Bagheri Industrial Group (SBIG), both of which were designated under resolution 1737 (2006))

- **E.03.III.2.** Barzagani Tejarat Tavanmad Saccal companies (subsidiary of Saccal System companies) (this company tried to purchase sensitive goods for an entity listed in resolution 1737 (2006))
- **E.AC.50.18.04.12. Behineh Trading Co.** An Iranian company that played a key role in Iran's illicit transfer of arms to West Africa and acted on behalf of the IRGC Qods Force, commanded by Major General Qasem Soleimani, designated by the UN Security Council in resolution 1747 (2007), as the shipper of the weapons consignment. (Additional information: Location: Tavakoli Building, Opposite of 15th Alley, Emam-Jomeh Street, Tehran, Iran; Telephone: 98 919 538 2305; Website: http://www.behinehco.ir)
- **E.47.A.7.** Cruise Missile Industry Group (aka Naval Defence Missile Industry Group) (Production and development of cruise missiles. Responsible for naval missiles including cruise missiles)
- **E.37.A.6. Defence Industries Organisation** (overarching MODAFL-controlled entity, some of whose subordinates have been involved in the centrifuge programme making components, and in the missile programme)
- **E.29.I.3. Defense Technology and Science Research Center** Defense Technology and Science Research Center (DTSRC) is owned or controlled by, or acts on behalf of, Iran's Ministry of Defense and Armed Forces Logistics (MODAFL), which oversees Iran's defence R and D, production, maintenance, exports, and procurement. Location: Pasdaran Ave, PO Box 19585/777, Tehran, Iran
- **E.29.I.4. Doostan International Company** Doostan International Company (DICO) supplies elements to Iran's ballistic missile program
- **E.03.III.3.** Electro Sanam Company (E. S. Co./E. X. Co.) (AIO front-company, involved in the ballistic missile programme)
- **E.47.A.2.** Esfahan Nuclear Fuel Research and Production Centre (NFRPC) and Esfahan Nuclear Technology Centre (ENTC) (Parts of the Atomic Energy Organisation of Iran's (AEOI) Nuclear Fuel Production and Procurement Company, which is involved in enrichment-related activities. AEOI is designated under resolution 1737 (2006))
- **E.03.III.4.** Ettehad Technical Group (AIO front-company, involved in the ballistic missile programme)
- **E.37.B.3. Fajr Industrial Group** (formerly Instrumentation Factory Plant, subordinate entity of AIO)
- **E.29.I.5. Farasakht Industries** Farasakht Industries is owned or controlled by, or act on behalf of, the Iran Aircraft Manufacturing Company, which in turn is owned or controlled by MODAFL. Location: P.O. Box 83145-311, Kilometer 28, Esfahan-Tehran Freeway, Shahin Shahr, Esfahan, Iran
- **E.37.A.5.** Farayand Technique (involved in centrifuge programme, identified in IAEA reports)
- **E.29.II.1.** Fater (or Faater) Institute Khatam al-Anbiya (KAA) subsidiary. Fater has worked with foreign suppliers, likely on behalf of other KAA companies on IRGC projects in Iran.
- **E.29.I.6.** First East Export Bank, P.L.C. First East Export Bank, PLC is owned or controlled by, or acts on behalf of, Bank Mellat. Over the last seven years, Bank Mellat has facilitated hundreds of millions of dollars in transactions for Iranian nuclear, missile, and defense entities. Location: Unit Level 10 (B1), Main Office Tower, Financial Park Labuan, Jalan Merdeka, 87000 WP Labuan, Malaysia; Business Registration Number LL06889 (Malaysia)
- E.29.II.2. Gharagahe Sazandegi Ghaem Gharagahe Sazandegi Ghaem is owned or controlled by KAA.
- **E.29.II.3. Ghorb Karbala** Ghorb Karbala is owned or controlled by KAA.
- **E.29.II.4.** Ghorb Nooh Ghorb Nooh is owned or controlled by KAA.
- **E.29.II.5.** Hara Company Owned or controlled by Ghorb Nooh.

- **E.29.II.6.** Imensazan Consultant Engineers Institute Owned or controlled by, or acts on behalf of, KAA.
- **E.03.III.5.** Industrial Factories of Precision (IFP) Machinery (aka Instrumentation Factories Plant) (used by AIO for some acquisition attempts)
- **E.29.III.1.** Irano Hind Shipping Company Location: 18 Mehrshad Street, Sadaghat Street, Opposite of Park Mellat, Valie-Asr Ave., Tehran, Iran; 265, Next to Mehrshad, Sedaghat St., Opposite of Mellat Park, Vali Asr Ave., Tehran 1A001, Iran
- **E.29.III.2.** IRISL Benelux NV Location: Noorderlaan 139, B-2030, Antwerp, Belgium; V.A.T. Number BE480224531 (Belgium)
- **E.03.III.6.** Jabber Ibn Hayan (AEOI laboratory involved in fuel-cycle activities)
- **E.03.III.7. Joza Industrial Co.** (AIO front-company, involved in the ballistic missile programme)
- E.37.A.3. Kala-Electric (aka Kalaye Electric) (provider for PFEP Natanz)
- **E.47.A.5.** Karaj Nuclear Research Centre (Part of AEOI's research division)
- **E.29.I.7. Kaveh Cutting Tools Company** Kaveh Cutting Tools Company is owned or controlled by, or acts on behalf of, the DIO. Location: 3rd Km of Khalaj Road, Seyyedi Street, Mashad 91638, Iran; Km 4 of Khalaj Road, End of Seyedi Street, Mashad, Iran; P.O. Box 91735-549, Mashad, Iran; Khalaj Rd., End of Seyyedi Alley, Mashad, Iran; Mogan St., Pasdaran St., Pasdaran Cross Rd., Tehran, Iran
- **E.47.A.3. Kavoshyar Company** (Subsidiary company of AEOI, which has sought glass fibres, vacuum chamber furnaces and laboratory equipment for Iran's nuclear programme)
- **E.29.II.7.** Khatam al-Anbiya Construction Headquarters Khatam al-Anbiya Construction Headquarters (KAA) is an IRGC-owned company involved in large scale civil and military construction projects and other engineering activities. It undertakes a significant amount of work on Passive Defense Organization projects. In particular, KAA subsidiaries were heavily involved in the construction of the uranium enrichment site at Qom/Fordow.
- **E.03.III.8.** Khorasan Metallurgy Industries (subsidiary of the Ammunition Industries Group (AMIG) which depends on DIO. Involved in the production of centrifuges components)
- **E.29.I.8. M. Babaie Industries** M. Babaie Industries is subordinate to Shahid Ahmad Kazemi Industries Group (formally the Air Defense Missile Industries Group) of Iran's Aerospace Industries Organization (AIO). AIO controls the missile organizations Shahid Hemmat Industrial Group (SHIG) and the Shahid Bakeri Industrial Group (SBIG), both of which were designated in resolution 1737 (2006). Location: P.O. Box 16535-76, Tehran, 16548, Iran
- **E.29.II.8.** Makin Makin is owned or controlled by or acting on behalf of KAA, and is a subsidiary of KAA.
- **E.29.I.9. Malek Ashtar University** A subordinate of the DTRSC within MODAFL. This includes research groups previously falling under the Physics Research Center (PHRC). IAEA inspectors have not been allowed to interview staff or see documents under the control of this organization to resolve the outstanding issue of the possible military dimension to Iran's nuclear program. Location: Corner of Imam Ali Highway and Babaei Highway, Tehran, Iran
- **E.37.A.2. Mesbah Energy Company** (provider for A40 research reactor Arak)
- **E.29.I.10. Ministry of Defense Logistics Export (aka MODLEX),** Ministry of Defense Logistics Export (MODLEX) sells Iranian-produced arms to customers around the world in contravention of resolution 1747 (2007), which prohibits Iran from selling arms or related materiel. Location: PO Box 16315-189, Tehran, Iran; located on the west side of Dabestan Street, Abbas Abad District, Tehran, Iran
- E.29.I.11. Mizan Machinery Manufacturing (aka 3MG), Mizan Machinery Manufacturing (3M) is owned

- or controlled by, or acts on behalf of, SHIG. Location: P.O. Box 16595-365, Tehran, Iran
- **E.29.I.12.** Modern Industries Technique Company (aka Rahkar Company, Rahkar Industries, Rahkar Sanaye Company, Rahkar Sanaye Novin), Modern Industries Technique Company (MITEC) is responsible for design and construction of the IR-40 heavy water reactor in Arak. MITEC has spearheaded procurement for the construction of the IR-40 heavy water reactor. Location: Arak, Iran
- **E.03.III.9. Niru Battery Manufacturing Company** (subsidiary of the DIO. Its role is to manufacture power units for the Iranian military including missile systems)
- **E.47.A.6.** Novin Energy Company (aka Pars Novin) (Operates within AEOI and has transferred funds on behalf of AEOI to entities associated with Iran's nuclear programme)
- **E.29.I.13.** Nuclear Research Center for Agriculture and Medicine (aka Center for Agricultural Research and Nuclear Medicine, Karaji Agricultural and Medical Research Center), The Nuclear Research Center for Agriculture and Medicine (NFRPC) is a large research component of the Atomic Energy Organization of Iran (AEOI), which was designated in resolution 1737 (2006). The NFRPC is AEOI's center for the development of nuclear fuel and is involved in enrichment-related activities. Location: P.O. Box 31585-4395, Karaj, Iran
- **E.29.II.9.** Omran Sahel Owned or controlled by Ghorb Nooh.
- **E.29.II.10.** Oriental Oil Kish Oriental Oil Kish is owned or controlled by or acting on behalf of KAA.
- **E.47.A.4.** Parchin Chemical Industries (Branch of DIO, which produces ammunition, explosives, as well as solid propellants for rockets and missiles)
- **E.47.B.2.** Pars Aviation Services Company (Maintains various aircraft including MI-171, used by IRGC Air Force)
- **E.37.A.4.** Pars Trash Company (involved in centrifuge programme, identified in IAEA reports)
- **E.29.I.14. Pejman Industrial Services Corporation** Pejman Industrial Services Corporation is owned or controlled by, or acts on behalf of, SBIG. Location: P.O. Box 16785-195, Tehran, Iran
- **E.03.III.10. Pishgam (Pioneer) Energy Industries** (has participated in construction of the Uranium Conversion Facility at Esfahan)
- **E.47.B.1.** Qods Aeronautics Industries (Produces unmanned aerial vehicles (UAVs), parachutes, paragliders, para-motors, etc. Iranian Revolutionary Guard Corps (IRGC) has boasted of using these products as part of its asymmetric warfare doctrine)
- **E.29.II.11.** Rah Sahel Rah Sahel is owned or controlled by or acting on behalf of KAA.
- **E.29.II.12.** Rahab Engineering Institute Rahab is owned or controlled by or acting on behalf of KAA, and is a subsidiary of KAA.
- **E.29.I.15. Sabalan Company** Sabalan is a cover name for SHIG. Location: Damavand Tehran Highway, Tehran, Iran
- **I.AC.50.20.12.12.(2) SAD Import Export Company** SAD Import Export Company has assisted Parchin Chemical Industries and 7th of Tir Industries, a United Nations designated entity, in violating paragraph 5 of resolution 1747 (2007). Location: Haftom Tir Square, South Mofte Avenue, Tour Line No 3/1, Tehran, Iran. (2) PO Box 1584864813
- **E.03.III.11.** Safety Equipment Procurement (SEP) (AIO front-company, involved in the ballistic missile programme)
- **E.29.I.16.** Sahand Aluminum Parts Industrial Company (SAPICO) SAPICO is a cover name for SHIG. Location: Damavand Tehran Highway, Tehran, Iran

- **E.29.II.13.** Sahel Consultant Engineers Owned or controlled by Ghorb Nooh.
- **E.47.A.9.** Sanam Industrial Group (subordinate to AIO, which has purchased equipment on AIO's behalf for the missile programme)
- **E.29.II.14.** Sepanir Sepanir is owned or controlled by or acting on behalf of KAA.
- **E.29.II.15. Sepasad Engineering Company** Sepasad Engineering Company is owned or controlled by or acting on behalf of KAA.
- **E.37.B.2.** Shahid Bagheri Industrial Group (SBIG) (subordinate entity of AIO)
- **E.37.B.1. Shahid Hemmat Industrial Group (SHIG)** (subordinate entity of AIO)
- **E.29.I.17. Shahid Karrazi Industries** Shahid Karrazi Industries is owned or controlled by, or act on behalf of, SBIG. Location: Tehran, Iran
- **E.29.I.18.** Shahid Sattari Industries (aka Shahid Sattari Group Equipment Industries), Shahid Sattari Industries is owned or controlled by, or acts on behalf of, SBIG. Location: Southeast Tehran, Iran
- **E.29.I.19. Shahid Sayyade Shirazi Industries** Shahid Sayyade Shirazi Industries (SSSI) is owned or controlled by, or acts on behalf of, the DIO. Location: Next To Nirou Battery Mfg. Co, Shahid Babaii Expressway, Nobonyad Square, Tehran, Iran; Pasdaran St., P.O. Box 16765, Tehran 1835, Iran; Babaei Highway Next to Niru M.F.G, Tehran, Iran
- **E.47.B.3.** Sho'a' Aviation (Produces micro-lights which IRGC has claimed it is using as part of its asymmetric warfare doctrine)
- **E.29.III.3. South Shipping Line Iran (SSL)** Location: Apt. No. 7, 3rd Floor, No. 2, 4th Alley, Gandi Ave., Tehran, Iran; Qaem Magham Farahani St., Tehran, Iran
- **E.29.I.20. Special Industries Group** Special Industries Group (SIG) is a subordinate of DIO. Location: Pasdaran Avenue, PO Box 19585/777, Tehran, Iran
- **E.03.III.12. TAMAS Company** (involved in enrichment-related activities. TAMAS is the overarching body, under which four subsidiaries have been established, including one for uranium extraction to concentration and another in charge of uranium processing, enrichment and waste)
- **E.29.I.21. Tiz Pars** Tiz Pars is a cover name for SHIG. Between April and July 2007, Tiz Pars attempted to procure a five axis laser welding and cutting machine, which could make a material contribution to Iran's missile program, on behalf of SHIG. Location: Damavand Tehran Highway, Tehran, Iran
- **E.47.A.10.** Ya Mahdi Industries Group (subordinate to AIO, which is involved in international purchases of missile equipment)
- **I.AC.50.20.12.12.(1)** Yas Air Yas Air is the new name for Pars Air, a company that was owned by Pars Aviation Services Company, which in turn was designated by the United Nations Security Council in resolution 1747 (2007). Yas Air has assisted Pars Aviation Services Company, a United Nations-designated entity, in violating paragraph 5 of resolution 1747 (2007). Location: Mehrabad International Airport, Next to Terminal No. 6, Tehran, Iran
- **E.29.I.22.** Yazd Metallurgy Industries (aka Yazd Ammunition Manufacturing and Metallurgy Industries, Directorate of Yazd Ammunition and Metallurgy Industries), Yazd Metallurgy Industries (YMI) is a subordinate of DIO. Location: Pasdaran Avenue, Next To Telecommunication Industry, Tehran 16588, Iran; Postal Box 89195/878, Yazd, Iran; P.O. Box 89195-678, Yazd, Iran; Km 5 of Taft Road, Yazd, Iran

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S/2006/985



Distr.: General 15 December 2006

Original: English

# Letter dated 7 December 2006 from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the President of the Security Council

Please find attached the guidelines for sensitive missile-relevant transfers, to be read in conjunction with the letter dated 13 October 2006 from the Permanent Representative of France to the United Nations addressed to the President of the Security Council (S/2006/815) (see annex). I should be grateful if you would make the necessary arrangements for the present letter and its annex to be issued as a Security Council document.

(Signed) Emyr Jones Parry

Annex to the letter dated 7 December 2006 from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the President of the Security Council

## Guidelines for sensitive missile-relevant transfers

- 1. The purpose of these Guidelines is to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons. The Guidelines are also intended to limit the risk of controlled items and their technology falling into the hands of terrorist groups and individuals. The Guidelines are not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction. These Guidelines, including the attached Annex, form the basis for controlling transfers to any destination beyond the Government's jurisdiction or control of all delivery systems (other than manned aircraft) capable of delivering weapons of mass destruction, and of equipment and technology relevant to missiles whose performance in terms of payload and range exceeds stated parameters. Restraint will be exercised in the consideration of all transfers of items within the Annex and all such transfers will be considered on a case-by-case basis. The Government will implement the Guidelines in accordance with national legislation.
- 2. The Annex consists of two categories of items, which term includes equipment and technology, Category I items, all of which are in Annex items 1 and 2, are those items of greatest sensitivity. If a Category I item is included in a system, that system will also be considered as Category I, except when the incorporated item cannot be separated, removed or duplicated. Particular restraint will be exercised in the consideration of Category I transfers regardless of their purpose, and there will be a strong presumption to deny such transfers. Particular restraint will also be exercised in the consideration of transfers of any items in the Annex, or of any missiles (whether or not in the Annex), if the Government judges, on the basis of all available, persuasive information, evaluated according to factors including those in paragraph 3, that they are intended to be used for the delivery of weapons of mass destruction, and there will be a strong presumption to deny such transfers, Until further notice, the transfer of Category I production facilities will not be authorised. The transfer of other Category I items will be authorised only on rare occasions and where the Government (A) obtains binding governmentto-government undertakings embodying the assurances from the recipient government called for in paragraph 5 of these Guidelines and (B) assumes responsibility for taking all steps necessary to ensure that the item is put only to its stated end-use. It is understood that the decision to transfer remains the sole and sovereign judgement of the Government.
- 3. In the evaluation of transfer applications for Annex items, the following factors will be taken into account:
  - A. Concerns about the proliferation of weapons of mass destruction;
  - B. The capabilities and objectives of the missile and space programs of the recipient state;
  - C. The significance of the transfer in terms of the potential development of delivery systems (other than manned aircraft) for weapons of mass destruction;

- D. The assessment of the end use of the transfers, including the relevant assurances of the recipient states referred to in sub paragraphs 5.A and 5.B below;
- E. The applicability of relevant multilateral agreements.
- F. The risk of controlled items falling into the hands of terrorist groups and individuals.
- 4. The transfer of design and production technology directly associated with any items in the Annex will be subject to as great a degree of scrutiny and control as will the equipment itself, to the extent permitted by national legislation.
- 5. Where the transfer could contribute to a delivery system for weapons of mass destruction, the Government will authorize transfers of items in the Annex only on receipt of appropriate assurances from the government of the recipient state that:
  - A. The items will be used only for the purpose stated and that such use will not be modified nor the items modified or replicated without the prior consent of the Government;
  - B. Neither the items nor replicas nor derivatives thereof will be re transferred without the consent of the Government.
- 6. In furtherance of the effective operation of the Guidelines, the Government will, as necessary and appropriate, exchange relevant in formation with other governments applying the same Guidelines.
- 7. The Government will:

A. provide that its national export controls require an authorisation for the transfer of non-listed items if the exporter has been informed by the competent authorities of the Government that the items may be intended, in their entirety or part, for use in connection with delivery systems for weapons of mass destruction other than manned aircraft;

- B. and, if the exporter is aware that non-listed items are intended to contribute to such activities, in their entirety or part, provide, to the extent compatible with national export controls, for notification by the exporter to the authorities referred to above, which will decide whether or not it is appropriate to make the export concerned subject to authorisation.
- 8. The adherence of all States to these Guidelines in the interest of international peace and security would be welcome.



# Information Circular

## INFCIRC/254/Rev.11/Part 1<sup>a</sup>

Date: 12 November 2012

**General Distribution** 

Original: English

Communication Received from the Permanent Mission of the United States of America to the International Atomic Energy Agency regarding Certain Member States' Guidelines for the Export of Nuclear Material, Equipment and Technology

- 1. The Secretariat has received a note verbale from the Permanent Mission of the United States of America, dated 12 October 2012, in which it requests that the Agency circulates, to all Member States, a letter of 5 September 2012 from the Chairman of the Nuclear Suppliers Group, Mr Richard J.K. Stratford, to the Director General, on behalf of the Governments of Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America<sup>b</sup>, providing further information on those Governments' Guidelines for Nuclear Transfers.
- 2. In the light of the wish expressed in the above-mentioned note verbale, the text of the note verbale, as well as the letter and attachments thereto, are hereby reproduced for the information of all Member States.

<sup>a</sup> INFCIRC/254/Part 2, as amended, contains Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials,

Software and Related Technology.

<sup>&</sup>lt;sup>b</sup> The European Commission and the Chair of the Zangger Committee participate as observers.

23/2012

The Permanent Mission of the United States of America to the International Atomic Energy Agency presents its compliments to the Director General of the IAEA and has the honour to forward a letter to the Director General dated September 5, 2012, from Richard J.K. Stratford, Director of Nuclear Energy, Safety & Security Affairs, U.S. Department of State, current Chair of the NSG, regarding agreed amendments to INFCIRC/254/Part 1 (the NSG Part 1 Guidelines).

The Permanent Mission of the United States of America has the honour to request that the amended INFCIRC/254 and a comparison table of changes, together with Mr. Stratford's letter be circulated among the Member States of the IAEA.

The Permanent Mission of the United States of America to the International

Organizations in Vienna avails itself of this opportunity to renew to the Director General of the

IAEA the assurances of its highest consideration.

Fl.

United States Mission to International
Organizations in Vienna,
October 12, 2012

DIPLOMATIC NOTE

# CHAIRMAN OF THE NUCLEAR SUPPLIERS GROUP

Office of Nuclear Energy, Safety and Security
Bureau of International Security and Nonproliferation
U.S. Department of State
Washington, DC
United States of America

Tel 1 202 647 4061; Fax 1 202 647 0775 Email: StratfordRJ@state.gov

September 5, 2012

On behalf of the Governments of Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxemburg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and United States<sup>1</sup>, I have the honour to refer to all previous relevant communications from these Governments concerning their decisions to act in accordance with the Guidelines for Nuclear Transfers currently published as document INFCIRC/254/Rev.10/Part1, including its Annexes.

These Governments have decided to add, to the Supporting Activities section of the NSG Part 1 Guidelines, a new paragraph 12 entitled "Support for Access to Nuclear Material for Peaceful Purposes." The new text reads as follows:

# BEGIN TEXT:

# 12. Support for access to nuclear material for peaceful uses

Suppliers should, in accordance with the objective of these guidelines, facilitate access to nuclear material for the peaceful uses of nuclear energy, and encourage, within the scope of Article IV of the NPT, recipients to take the fullest possible advantage of the international commercial market and other available international mechanisms for nuclear fuel services while not undermining the global fuel market. END TEXT

The European Commission and the Chair of the Zangger Committee participate as observers.

In the interest of clarity, the complete text of the modified Guidelines and its Annexes is reproduced in the attachment, as well as a "Comparison Table of Changes to the Guidelines for Nuclear Transfers."

The above Governments have decided to act in accordance with the Guidelines so revised and to implement them in accordance with their respective national legislation.

In reaching this decision, these Governments are fully aware of the need to contribute to economic development while avoiding contributing in any way to a proliferation of nuclear weapons or other nuclear explosive devices or the diversion to acts of nuclear terrorism, and of the need to separate the issue of non-proliferation or non-diversion assurances from that of commercial competition.

Insofar as trade within the European Union is concerned, the Governments that are Member States of the European Union will implement this decision in light of their commitments as Member States of the Union.

I would be grateful if you would bring this Note and its attachment to the attention of all Member States of the IAEA, as INFCIRC/254/Rev. 11/Part 1.

On behalf of the above Governments I wish to avail myself of this opportunity to renew to you the assurances of the Governments' highest consideration.

Yours sincerely,

Bu Sturfac

Richard J. K. Stratford Chair of the Nuclear Suppliers Group

H.E. Yukiya Amano Director General International Atomic Energy Agency Vienna, Austria

### **GUIDELINES FOR NUCLEAR TRANSFERS**

1. The following fundamental principles for safeguards and export controls should apply to nuclear transfers for peaceful purposes to any non-nuclear-weapon State and, in the case of controls on retransfer, to transfers to any State. In this connection, suppliers have defined an export trigger list.

# Prohibition on nuclear explosives

2. Suppliers should authorize transfer of items or related technology identified in the trigger list only upon formal governmental assurances from recipients explicitly excluding uses which would result in any nuclear explosive device.

### **Physical protection**

- 3. (a) All nuclear materials and facilities identified by the agreed trigger list should be placed under effective physical protection to prevent unauthorized use and handling. The levels of physical protection to be ensured in relation to the type of materials, equipment and facilities, have been agreed by the suppliers, taking account of international recommendations.
  - (b) The implementation of measures of physical protection in the recipient country is the responsibility of the Government of that country. However, in order to implement the terms agreed upon amongst suppliers, the levels of physical protection on which these measures have to be based should be the subject of an agreement between supplier and recipient.
  - (c) In each case special arrangements should be made for a clear definition of responsibilities for the transport of trigger list items.

### **Safeguards**

- 4. (a) Suppliers should transfer trigger list items or related technology to a non-nuclear weapon State only when the receiving State has brought into force an agreement with the IAEA requiring the application of safeguards on all source and special fissionable material in its current and future peaceful activities. Suppliers should authorize such transfers only upon formal governmental assurances from the recipient that:
  - if the above-mentioned agreement should be terminated the recipient will bring into force an agreement with the IAEA based on existing IAEA model safeguards agreements requiring the application of safeguards on all trigger list items or related technology transferred by the supplier or processed, or produced or used in connection with such transfers; and
  - if the IAEA decides that the application of IAEA safeguards is no longer possible, the supplier and recipient should elaborate appropriate verification measures. If the recipient does not accept these measures, it should allow at the request of the supplier the restitution of transferred and derived trigger list items.

- (b) Transfers covered by paragraph 4 (a) to a non-nuclear-weapon State without such a safeguards agreement should be authorized only in exceptional cases when they are deemed essential for the safe operation of existing facilities and if safeguards are applied to those facilities. Suppliers should inform and, if appropriate, consult in the event that they intend to authorize or to deny such transfers.
- (c) The policy referred to in paragraph 4 (a) and 4 (b) does not apply to agreements or contracts drawn up on or prior to April 3, 1992. In case of countries that have adhered or will adhere to INFCIRC/254/Rev. 1/Part 1 later than April 3, 1992, the policy only applies to agreements (to be) drawn up after their date of adherence.
- (d) Under agreements to which the policy referred to in paragraph 4 (a) does not apply (see paragraphs 4 (b) and (c)) suppliers should transfer trigger list items or related technology only when covered by IAEA safeguards with duration and coverage provisions in conformity with IAEA doc. GOV/1621. However, suppliers undertake to strive for the earliest possible implementation of the policy referred to in paragraph 4 (a) under such agreements.
- (e) Suppliers reserve the right to apply additional conditions of supply as a matter of national policy.
- 5. Suppliers will jointly reconsider their common safeguards requirements, whenever appropriate.

# **Special controls on sensitive exports**

- 6. Suppliers should exercise a policy of restraint in the transfer of sensitive facilities, equipment, technology and material usable for nuclear weapons or other nuclear explosive devices, especially in cases when a State has on its territory entities that are the object of active NSG Guidelines Part 2 denial notifications from more than one NSG Participating Government.
  - (a) In the context of this policy, suppliers should not authorize the transfer of enrichment and reprocessing facilities, and equipment and technology therefore if the recipient does not meet, at least, all of the following criteria:
    - (i) Is a Party to the Treaty on the Non-Proliferation of Nuclear Weapons and is in full compliance with its obligations under the Treaty;
    - (ii) Has not been identified in a report by the IAEA Secretariat which is under consideration by the IAEA Board of Governors, as being in breach of its obligations to comply with its safeguards agreement, nor continues to be the subject of Board of Governors decisions calling upon it to take additional steps to comply with its safeguards obligations or to build confidence in the peaceful nature of its nuclear programme, nor has been reported by the IAEA Secretariat as a state where the IAEA is currently unable to implement its safeguards agreement. This criterion would not apply in cases where the IAEA Board of Governors or the United Nations Security Council subsequently decides that adequate assurances exist as to the peaceful purposes of the recipient's nuclear programme and its compliance with its safeguards obligations. For the

- purposes of this paragraph, "breach" refers only to serious breaches of proliferation concern;
- (iii) Is adhering to the NSG Guidelines and has reported to the Security Council of the United Nations that it is implementing effective export controls as identified by Security Council Resolution 1540;
- (iv) Has concluded an inter-governmental agreement with the supplier including assurances regarding non-explosive use, effective safeguards in perpetuity, and retransfer;
- (v) Has made a commitment to the supplier to apply mutually agreed standards of physical protection based on current international guidelines; and
- (vi) Has committed to IAEA safety standards and adheres to accepted international safety conventions.
- (b) In considering whether to authorize such transfers, suppliers, while taking into account paragraphs 4(e), 6(a), and 10, should consult with potential recipients to ensure that enrichment and reprocessing facilities, equipment and technology are intended for peaceful purposes only; also taking into account at their national discretion, any relevant factors as may be applicable.
- (c) Suppliers will make special efforts in support of effective implementation of IAEA safeguards for enrichment or reprocessing facilities, equipment or technology and should, consistent with paragraphs 4 and 13 of the Guidelines, ensure their peaceful nature. In this regard suppliers should authorize transfers, pursuant to this paragraph, only when the recipient has brought into force a Comprehensive Safeguards Agreement, and an Additional Protocol based on the Model Additional Protocol or, pending this, is implementing appropriate safeguards agreements in cooperation with the IAEA, including a regional accounting and control arrangement for nuclear materials, as approved by the IAEA Board of Governors.
- (d) In accordance with paragraph 16(b) of the Guidelines, prior to beginning transfers of enrichment or reprocessing facilities, equipment, or technology, suppliers should consult with Participating Governments regarding the nonproliferation related terms and conditions applicable to the transfer.
- (e) If enrichment or reprocessing facilities, equipment, or technology are to be transferred, suppliers should encourage recipients to accept, as an alternative to national plants, supplier involvement and/or other appropriate multinational participation in resulting facilities. Suppliers should also promote international (including IAEA) activities concerned with multinational regional fuel cycle centres.

# Special arrangements for export of enrichment facilities, equipment and technology

7. All States that meet the criteria in paragraph 6 above are eligible for transfers of enrichment facilities, equipment and technology. Suppliers recognize that the application

of the Special Arrangements below must be consistent with NPT principles, in particular Article IV. Any application by the suppliers of the following Special Arrangements may not abrogate the rights of States meeting the criteria in paragraph 6.

- (a) For a transfer of an enrichment facility, or equipment or technology therefor, suppliers should seek a legally-binding undertaking from the recipient state that neither the transferred facility, nor any facility incorporating such equipment or based on such technology, will be modified or operated for the production of greater than 20% enriched uranium. Suppliers should seek to design and construct such an enrichment facility or equipment therefor so as to preclude, to the greatest extent practicable, the possibility of production of greater than 20% enriched uranium.
- (b) For a transfer of an enrichment facility or equipment based on a particular enrichment technology which has been demonstrated to produce enriched uranium on a significant scale as of 31 December 2008, suppliers should:
  - (1) Avoid, as far as practicable, the transfer of enabling design and manufacturing technology associated with such items; and
  - (2) Seek from recipients an appropriate agreement to accept sensitive enrichment equipment, and enabling technologies, or an operable enrichment facility under conditions that do not permit or enable replication of the facilities.

Information required for regulatory purposes or to ensure safe installation and operation of a facility should be shared to the extent necessary without divulging enabling technology.

(c) Cooperative enrichment enterprises based on a particular enrichment technology which has not been demonstrated to produce enriched uranium on a significant scale as of 31 December 2008, may be developed by participants individually or jointly; and any transfer of the resulting facilities and equipment will become subject to paragraph 7(b) no later than prior to the deployment of a prototype. For the purposes of paragraph 7(c) of the Guidelines, a prototype is a system or facility which is operated to generate technical information to confirm the technical potential or viability of the separation process for large-scale separation of uranium isotopes.

Suppliers may propose alternative arrangements relating to control of transfers of new enrichment technology to facilitate cooperation on enrichment technology. Such arrangements should be equivalent to those in Paragraph 7(b), and the NSG should be consulted on these arrangements. Participating Governments will review the arrangements for export of enrichment facilities, equipment and technology every five years beginning in 2013 for the purpose of addressing changes in enrichment technology and commercial practices.

(d) Suppliers recognize that when implementing the arrangements envisaged by Paragraph 7 in relation to existing and new cooperative enrichment enterprises, enabling technology may be held by, shared among, and transferred between partners of such enterprises, if partners agree to do so on the basis of their established decision making processes. Suppliers recognize that uranium enrichment may involve supply chains for the production and transfer of equipment for enrichment facilities and such transfers can be made, subject to the relevant provisions of these Guidelines.

- (e) Suppliers should make special efforts to ensure effective implementation of IAEA safeguards at supplied enrichment facilities, consistent with paragraphs 13 and 14 of the Guidelines. For a transfer of an enrichment facility, the supplier and recipient state should work together to ensure that the design and construction of the transferred facility is implemented in such a way so as to facilitate IAEA safeguards. The supplier and recipient state should consult with the IAEA about such design and construction features at the earliest possible time during the facility design phase, and in any event before construction of the enrichment facility is started. The supplier and recipient state should also work together to assist the recipient state in developing effective nuclear material and facilities protection measures, consistent with paragraphs 12 and 14 of the Guidelines.
- (f) Suppliers should satisfy themselves that recipients have security arrangements in place that are equivalent or superior to their own to protect the facilities and technology from use or transfer inconsistent with the national laws of the receiving state.

### **Definitions Section:**

For the purpose of implementing Paragraph 7 of the Guidelines "Cooperative Enrichment Enterprise" means a multi-country or multi-company (where at least two of the companies are incorporated in different countries) joint development or production effort. It could be a consortium of states or companies or a multinational corporation.

# Controls on supplied or derived material usable for nuclear weapons or other nuclear explosive devices

8. Suppliers should, in order to advance the objectives of these guidelines and to provide opportunities further to reduce the risks of proliferation, include, whenever appropriate and practicable, in agreements on supply of nuclear materials or of facilities which produce material usable for nuclear weapons or other nuclear explosive devices, provisions calling for mutual agreement between the supplier and the recipient on arrangements for reprocessing, storage, alteration, use, transfer or retransfer of any material usable for nuclear weapons or other nuclear explosive devices involved.

### **Controls on retransfer**

- 9. (a) Suppliers should transfer trigger list items or related technology only upon the recipient's assurance that in the case of:
  - (1) retransfer of such items or related technology,

or

(2) transfer of trigger list items derived from facilities originally transferred by the supplier, or with the help of equipment or technology originally transferred by the supplier;

the recipient of the retransfer or transfer will have provided the same assurances as those required by the supplier for the original transfer.

- (b) In addition the supplier's consent should be required for:
  - (1) any retransfer of trigger list items or related technology and any transfer referred to under paragraph 9(a) (2) from any State which does not require full scope safeguards, in accordance with paragraph 4(a) of these Guidelines, as a condition of supply;
  - (2) any retransfer of enrichment, reprocessing or heavy water production facilities, equipment or related technology, and for any transfer of facilities or equipment of the same type derived from items originally transferred by the supplier;
  - (3) any retransfer of heavy water or material usable for nuclear weapons or other nuclear explosive devices.
- (c) To ensure the consent right as defined under paragraph 9(b), government to government assurances will be required for any relevant original transfer.
- (d) Suppliers should consider restraint in the transfer of items and related technology identified in the trigger list if there is a risk of retransfers contrary to the assurances given under paragraph 9(a) and (c) as a result of a failure by the recipient to develop and maintain appropriate, effective national export and transshipment controls, as identified by UNSC Resolution 1540.

# **Non-proliferation Principle**

10. Notwithstanding other provisions of these Guidelines, suppliers should authorize transfer of items or related technology identified in the trigger list only when they are satisfied that the transfers would not contribute to the proliferation of nuclear weapons or other nuclear explosive devices or be diverted to acts of nuclear terrorism.

# **Implementation**

11. Suppliers should have in place legal measures to ensure the effective implementation of the Guidelines, including export licensing regulations, enforcement measures, and penalties for violations.

# **SUPPORTING ACTIVITIES**

# Support for access to nuclear material for peaceful uses

12. Suppliers should, in accordance with the objectives of these guidelines, facilitate access to nuclear material for the peaceful uses of nuclear energy, and encourage, within the scope of Article IV of the NPT, recipients to take the fullest possible advantage of the

international commercial market and other available international mechanisms for nuclear fuel services while not undermining the global fuel market.

# **Physical security**

13. Suppliers should promote international co-operation in the areas of physical security through the exchange of physical security information, protection of nuclear materials in transit, and recovery of stolen nuclear materials and equipment. Suppliers should promote broadest adherence to the respective international instruments, inter alia, to the Convention on the Physical Protection of Nuclear Material, as well as implementation of INFCIRC/225, as amended from time to time. Suppliers recognize the importance of these activities and other relevant IAEA activities in preventing the proliferation of nuclear weapons and countering the threat of nuclear terrorism.

# **Support for effective IAEA safeguards**

14. Suppliers should make special efforts in support of effective implementation of IAEA safeguards. Suppliers should also support the Agency's efforts to assist Member States in the improvement of their national systems of accounting and control of nuclear material and to increase the technical effectiveness of safeguards.

Similarly, they should make every effort to support the IAEA in increasing further the adequacy of safeguards in the light of technical developments and the rapidly growing number of nuclear facilities, and to support appropriate initiatives aimed at improving the effectiveness of IAEA safeguards.

# **Trigger list plant design features**

15. Suppliers should encourage the designers and makers of trigger list facilities to construct them in such a way as to facilitate the application of safeguards and to enhance physical protection, taking also into consideration the risk of terrorist attacks. Suppliers should promote protection of information on the design of trigger list installations, and stress to recipients the necessity of doing so. Suppliers also recognize the importance of including safety and non-proliferation features in designing and construction of trigger list facilities.

# **Export Controls**

16. Suppliers should, where appropriate, stress to recipients the need to subject transferred trigger list items and related technology and trigger list items derived from facilities originally transferred by the supplier or with the help of equipment or technology originally transferred by the supplier to export controls as outlined in UNSC Resolution 1540. Suppliers are encouraged to offer assistance to recipients to fulfil their respective obligations under UNSC Resolution 1540 where appropriate and feasible.

### **Consultations**

17. (a) Suppliers should maintain contact and consult through regular channels on matters connected with the implementation of these Guidelines.

- (b) Suppliers should consult, as each deems appropriate, with other governments concerned on specific sensitive cases, to ensure that any transfer does not contribute to risks of conflict or instability.
- (c) Without prejudice to sub-paragraphs (d) to (f) below:
  - In the event that one or more suppliers believe that there has been a violation of supplier/recipient understanding resulting from these Guidelines, particularly in the case of an explosion of a nuclear device, or illegal termination or violation of IAEA safeguards by a recipient, suppliers should consult promptly through diplomatic channels in order to determine and assess the reality and extent of the alleged violation. Suppliers are also encouraged to consult where nuclear material or nuclear fuel cycles activity undeclared to the IAEA or a nuclear explosive activity is revealed.
  - Pending the early outcome of such consultations, suppliers will not act in a manner that could prejudice any measure that may be adopted by other suppliers concerning their current contacts with that recipient. Each supplier should also consider suspending transfers of Trigger List items while consultations under 16(c) are ongoing, pending supplier agreement on an appropriate response.
  - Upon the findings of such consultations, the suppliers, bearing in mind Article XII
    of the IAEA Statute, should agree on an appropriate response and possible action,
    which could include the termination of nuclear transfers to that recipient.
- (d) If a recipient is reported by the IAEA to be in breach of its obligation to comply with its safeguards agreement, suppliers should consider the suspension of the transfer of Trigger List items to that State whilst it is under investigation by the IAEA. For the purposes of this paragraph, "breach" refers only to serious breaches of proliferation concern;
- (e) Suppliers support the suspension of transfers of Trigger List items to States that violate their nuclear non-proliferation and safeguards obligations, recognising that the responsibility and authority for such decisions rests with national governments or the United Nations Security Council. In particular, this is applicable in situations where the IAEA Board of Governors takes any of the following actions:
  - finds, under Article XII.C of the Statute, that there has been non-compliance in the recipient, or requires a recipient to take specific actions to bring itself into compliance with its safeguards obligations;
  - Decides that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded, including situations where actions taken by a recipient have made the IAEA unable to carry out its safeguards mission in that State.

An extraordinary Plenary meeting will take place within one month of the Board of Governors' action, at which suppliers will review the situation, compare national policies and decide on an appropriate response.

- (f) The provisions of subparagraph (e) above do not apply to transfers under paragraph 4 (b) of the Guidelines.
- 18. Unanimous consent is required for any changes in these Guidelines, including any which might result from the reconsideration mentioned in paragraph 5.

# ANNEX A TRIGGER LIST REFERRED TO IN GUIDELINES

### **GENERAL NOTES**

- 1. The object of these controls should not be defeated by the transfer of component parts. Each government will take such actions as it can to achieve this aim and will continue to seek a workable definition for component parts, which could be used by all suppliers.
- 2. With reference to Paragraph 9(b)(2) of the Guidelines, *same type* should be understood as when the design, construction or operating processes are based on the same or similar physical or chemical processes as those identified in the Trigger List.
- 3. Suppliers recognize the close relationship for certain isotope separation processes between plants, equipment and technology for uranium enrichment and that for the separation of stable isotopes for research, medical and other non-nuclear industrial purposes. In that regard, suppliers should carefully review their legal measures, including export licensing regulations and information/technology classification and security practices, for stable isotope separation activities to ensure the implementation of approporiate protection measures as warranted. Suppliers recognize that, in particular cases, appropriate protection measures for stable isotope separation activities will be essentially the same as those for uranium enrichment. (See Introductory Note in Section 5 of the Trigger List.) In accordance with Paragraph 16(a) of the Guidelines, suppliers shall consult with other suppliers as appropriate, in order to promote uniform policies and procedures in the transfer and protection of stable isotope separation plants, equipment and technology.

# **TECHNOLOGY CONTROLS**

The transfer of "technology" directly associated with any item in the List will be subject to as great a degree of scrutiny and control as will the item itself, to the extent permitted by national legislation.

Controls on "technology" transfer do not apply to information "in the public domain" or to "basic scientific research".

In addition to controls on "technology" transfer for nuclear non-proliferation reasons, suppliers should promote protection of this technology for the design, construction, and operation of trigger list facilities in consideration of the risk of terrorist attacks, and should stress to recipients the necessity of doing so.

### **DEFINITIONS**

"Technology" means specific information required for the "development", production", or "use" of any item contained in the List. This information may take the form of "technical data", or "technical assistance".

"Basic scientific research" - Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena and observable facts, not primarily directed towards a specific practical aim or objective.

"development" - is related to all phases before "production" such as:

- design
- design research
- design analysis
- design concepts
- assembly and testing of prototypes
- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

"in the public domain" - "In the public domain," as it applies herein, means technology that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove technology from being in the public domain.)

"production" - means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

"technical assistance" - "Technical assistance" may take forms such as: instruction, skills, training, working knowledge, consulting services.

Note: "Technical assistance" may involve transfer of "technical data".

"technical data" - "Technical data" may take forms such as blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

"use" - Operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing.

### MATERIAL AND EQUIPMENT

# 1. Source and special fissionable material

As defined in Article XX of the Statute of the International Atomic Energy Agency:

### 1.1. "Source material"

The term "source material" means uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors shall from time to time determine; and such other material as the Board of Governors shall from time to time determine.

# 1.2. "Special fissionable material"

- i) The term "special fissionable material" means plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time determine; but the term "special fissionable material" does not include source material.
- ii) The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.

However, for the purposes of the Guidelines, items specified in subparagraph (a) below, and exports of source or special fissionable material to a given recipient country, within a period of 12 months, below the limits specified in subparagraph (b) below, shall not be included:

(a) Plutonium with an isotopic concentration of plutonium-238 exceeding 80%.

Special fissionable material when used in gram quantities or less as a sensing component in instruments; and

Source material which the Government is satisfied is to be used only in non-nuclear activities, such as the production of alloys or ceramics;

(b) Special fissionable material Natural uranium 500 kilograms;
Depleted uranium 1000 kilograms; and Thorium 1000 kilograms.

# 2. Equipment and Non-nuclear Materials

The designation of items of equipment and non-nuclear materials adopted by the Government is as follows (quantities below the levels indicated in the Annex B being regarded as insignificant for practical purposes):

- 2.1. Nuclear reactors and especially designed or prepared equipment and components therefor (see Annex B, section 1.);
- 2.2. Non-nuclear materials for reactors (see Annex B, section 2.);
- 2.3. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor (see Annex B, section 3.);
- 2.4. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor (see Annex B, section 4.);
- 2.5. Plants for the separation of isotopes of natural uranium, depleted uranium or special fissionable material and equipment, other than analytical instruments, especially designed or prepared therefor (see Annex B, section 5.);
- 2.6. Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor (see Annex B, section 6.);
- 2.7. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in sections 4 and 5 respectively, and equipment especially designed or prepared therefor (See Annex B, section 7.).

# ANNEX B CLARIFICATION OF ITEMS ON THE TRIGGER LIST (as designated in Section 2 of MATERIAL AND EQUIPMENT of Annex A)

# 1. Nuclear reactors and especially designed or prepared equipment and components therefor

# 1.1. Complete nuclear reactors

Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors, the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

### **EXPLANATORY NOTE**

A "nuclear reactor" basically includes the items within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain or come in direct contact with or control the primary coolant of the reactor core.

It is not intended to exclude reactors which could reasonably be capable of modification to produce significantly more than 100 grams of plutonium per year. Reactors designed for sustained operation at significant power levels, regardless of their capacity for plutonium production are not considered as "zero energy reactors".

# **EXPORTS**

The export of the whole set of major items within this boundary will take place only in accordance with the procedures of the Guidelines. Those individual items within this functionally defined boundary which will be exported only in accordance with the procedures of the Guidelines are listed in paragraphs 1.2. to 1.10. The Government reserves to itself the right to apply the procedures of the Guidelines to other items within the functionally defined boundary.

### 1.2. Nuclear reactor vessels

Metal vessels, or major shop-fabricated parts therefor, especially designed or prepared to contain the core of a nuclear reactor as defined in paragraph 1.1. above, as well as relevant reactor internals as defined in paragraph 1.8. below.

# **EXPLANATORY NOTE**

The reactor vessel head is covered by item 1.2. as a major shop-fabricated part of a reactor vessel.

# 1.3. Nuclear reactor fuel charging and discharging machines

Manipulative equipment especially designed or prepared for inserting or removing fuel in a nuclear reactor as defined in paragraph 1.1. above.

### **EXPLANATORY NOTE**

The items noted above are capable of on-load operation or at employing technically sophisticated positioning or alignment features to allow complex off-load fueling operations such as those in which direct viewing of or access to the fuel is not normally available.

### 1.4. Nuclear reactor control rods and equipment

Especially designed or prepared rods, support or suspension structures therefor, rod drive mechanisms or rod guide tubes to control the fission process in a nuclear reactor as defined in paragraph 1.1. above.

# 1.5. Nuclear reactor pressure tubes

Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a reactor as defined in paragraph 1.1. above at an operating pressure in excess of 50 atmospheres.

### 1.6. Zirconium tubes

Zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg for any one recipient country in any period of 12 months, especially designed or prepared for use in a reactor as defined in paragraph 1.1. above, and in which the relation of hafnium to zirconium is less than 1:500 parts by weight.

# 1.7. Primary coolant pumps

Pumps especially designed or prepared for circulating the primary coolant for nuclear reactors as defined in paragraph 1.1. above.

### **EXPLANATORY NOTE**

Especially designed or prepared pumps may include elaborate sealed or multi-sealed systems to prevent leakage of primary coolant, canned-driven pumps, and pumps with inertial mass systems. This definition encompasses pumps certified to Section III, Division I, Subsection NB (Class 1 components) of the American Society of Mechanical Engineers (ASME) Code, or equivalent standards.

# 1.8. Nuclear reactor internals

"Nuclear reactor internals" especially designed or prepared for use in a nuclear reactor as defined in paragraph 1.1 above, including support columns for the core, fuel channels, thermal shields, baffles, core grid plates, and diffuser plates.

### **EXPLANATORY NOTE**

"Nuclear reactor internals" are major structures within a reactor vessel which have one or more functions such as supporting the core, maintaining fuel alignment, directing primary coolant flow, providing radiation shields for the reactor vessel, and guiding in-core instrumentation.

# 1.9. Heat exchangers

Heat exchangers (steam generators) especially designed or prepared for use in the primary coolant circuit of a nuclear reactor as defined in paragraph 1.1 above.

### **EXPLANATORY NOTE**

Steam generators are especially designed or prepared to transfer the heat generated in the reactor (primary side) to the feed water (secondary side) for steam generation. In the case of a liquid metal fast breeder reactor for which an intermediate liquid metal coolant loop is also present, the heat exchangers for transferring heat from the primary side to the intermediate coolant circuit are understood to be within the scope of control in addition to the steam generator. The scope of control for this entry does not include heat exchangers for the emergency cooling system or the decay heat cooling system.

### 1.10. Neutron detection and measuring instruments

Especially designed or prepared neutron detection and measuring instruments for determining neutron flux levels within the core of a reactor as defined in paragraph 1.1. above.

### **EXPLANATORY NOTE**

The scope of this entry encompasses in-core and ex-core instrumentation which measure flux levels in a large range, typically from  $10^4$  neutrons per cm<sup>2</sup> per second to  $10^{10}$  neutrons per cm<sup>2</sup> per second or more. Ex-core refers to those instruments outside the core of a reactor as defined in paragraph 1.1. above, but located within the biological shielding.

### 2. Non-nuclear materials for reactors

# 2.1. Deuterium and heavy water

Deuterium, heavy water (deuterium oxide) and any other deuterium compound in which the ratio of deuterium to hydrogen atoms exceeds 1:5000 for use in a nuclear reactor as defined in paragraph 1.1. above in quantities exceeding 200 kg of deuterium atoms for any one recipient country in any period of 12 months.

# 2.2. Nuclear grade graphite

Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50 g/cm<sup>3</sup> for use in a nuclear reactor as defined in paragraph 1.1 above, in quantities exceeding 30 metric tons for any one recipient country in any period of 12 months.

### **EXPLANATORY NOTE**

For the purpose of export control, the Government will determine whether or not the exports of graphite meeting the above specifications are for nuclear reactor use.

Boron equivalent (BE) may be determined experimentally or is calculated as the sum of  $BE_z$  for impurities (excluding  $BE_{carbon}$  since carbon is not considered an impurity) including boron, where:

 $BE_z$  (ppm) = CF x concentration of element Z (in ppm);

CF is the conversion factor:  $(\sigma_z \times A_B)$  divided by  $(\sigma_B \times A_z)$ ;

 $\sigma_B$  and  $\sigma_z$  are the thermal neutron capture cross sections (in barns) for naturally occurring boron and

element Z respectively; and  $A_{\text{B}}$  and  $A_{\text{z}}$  are the atomic masses of naturally occurring boron and element Z respectively.

# 3. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor

### INTRODUCTORY NOTE

Reprocessing irradiated nuclear fuel separates plutonium and uranium from intensely radioactive fission products and other transuranic elements. Different technical processes can accomplish this separation. However, over the years Purex has become the most commonly used and accepted process. Purex involves the dissolution of irradiated nuclear fuel in nitric acid, followed by separation of the uranium, plutonium, and fission products by solvent extraction using a mixture of tributyl phosphate in an organic diluent.

Purex facilities have process functions similar to each other, including: irradiated fuel element chopping, fuel dissolution, solvent extraction, and process liquor storage. There may also be equipment for thermal denitration of uranium nitrate, conversion of plutonium nitrate to oxide or metal, and treatment of fission product waste liquor to a form suitable for long term storage or disposal. However, the specific type and configuration of the equipment performing these functions may differ between Purex facilities for several reasons, including the type and quantity of irradiated nuclear fuel to be reprocessed and the intended disposition of the recovered materials, and the safety and maintenance philosophy incorporated into the design of the facility.

A "plant for the reprocessing of irradiated fuel elements", includes the equipment and components which normally come in direct contact with and directly control the irradiated fuel and the major nuclear material and fission product processing streams.

These processes, including the complete systems for plutonium conversion and plutonium metal production, may be identified by the measures taken to avoid criticality (e.g. by geometry), radiation exposure (e.g. by shielding), and toxicity hazards (e.g. by containment).

# **EXPORTS**

The export of the whole set of major items within this boundary will take place only in accordance with the procedures of the Guidelines.

The Government reserves to itself the right to apply the procedures of the Guidelines to other items within the functionally defined boundary as listed below.

Items of equipment that are considered to fall within the meaning of the phrase "and equipment especially designed or prepared" for the reprocessing of irradiated fuel elements include:

# 3.1. Irradiated fuel element chopping machines

### INTRODUCTORY NOTE

This equipment breaches the cladding of the fuel to expose the irradiated nuclear material to dissolution. Especially designed metal cutting shears are the most commonly employed, although advanced equipment, such as lasers, may be used.

Remotely operated equipment especially designed or prepared for use in a reprocessing plant as identified above and intended to cut, chop or shear irradiated nuclear fuel assemblies, bundles or rods.

### 3.2. Dissolvers

### INTRODUCTORY NOTE

Dissolvers normally receive the chopped-up spent fuel. In these critically safe vessels, the irradiated nuclear material is dissolved in nitric acid and the remaining hulls removed from the process stream.

Critically safe tanks (e.g. small diameter, annular or slab tanks) especially designed or prepared for use in a reprocessing plant as identified above, intended for dissolution of irradiated nuclear fuel and which are capable of withstanding hot, highly corrosive liquid, and which can be remotely loaded and maintained.

# 3.3. Solvent extractors and solvent extraction equipment

### INTRODUCTORY NOTE

Solvent extractors both receive the solution of irradiated fuel from the dissolvers and the organic solution which separates the uranium, plutonium, and fission products. Solvent extraction equipment is normally designed to meet strict operating parameters, such as long operating lifetimes with no maintenance requirements or adaptability to easy replacement, simplicity of operation and control, and flexibility for variations in process conditions.

Especially designed or prepared solvent extractors such as packed or pulse columns, mixer settlers or centrifugal contactors for use in a plant for the reprocessing of irradiated fuel. Solvent extractors must be resistant to the corrosive effect of nitric acid. Solvent extractors are normally fabricated to extremely high standards (including special welding and inspection and quality assurance and quality control techniques) out of low carbon stainless steels, titanium, zirconium, or other high quality materials.

# 3.4. Chemical holding or storage vessels

#### INTRODUCTORY NOTE

Three main process liquor streams result from the solvent extraction step. Holding or storage vessels are used in the further processing of all three streams, as follows:

- (a) The pure uranium nitrate solution is concentrated by evaporation and passed to a denitration process where it is converted to uranium oxide. This oxide is re-used in the nuclear fuel cycle.
- (b) The intensely radioactive fission products solution is normally concentrated by evaporation and stored as a liquor concentrate. This concentrate may be subsequently evaporated and converted to a form suitable for storage or disposal.
- (c) The pure plutonium nitrate solution is concentrated and stored pending its transfer to further process steps. In particular, holding or storage vessels for plutonium solutions are designed to avoid criticality problems resulting from changes in concentration and form of this stream.

Especially designed or prepared holding or storage vessels for use in a plant for the reprocessing of irradiated fuel. The holding or storage vessels must be resistant to the corrosive effect of nitric acid. The holding or storage vessels are normally fabricated of materials such as low carbon stainless steels, titanium or zirconium, or other high quality materials. Holding or storage vessels may be designed for remote operation and maintenance and may have the following features for control of nuclear criticality:

- (1) walls or internal structures with a boron equivalent of at least two per cent, or
- (2) a maximum diameter of 175 mm (7 in) for cylindrical vessels, or
- (3) a maximum width of 75 mm (3 in) for either a slab or annular vessel.

# 4. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor

### INTRODUCTORY NOTE

Nuclear fuel elements are manufactured from one or more of the source or special fissionable materials mentioned in MATERIAL AND EQUIPMENT of this annex. For oxide fuels, the most common type of fuel, equipment for pressing pellets, sintering, grinding and grading will be present. Mixed oxide fuels are handled in glove boxes (or equivalent containment) until they are sealed in the cladding. In all cases, the fuel is hermetically sealed inside a suitable cladding which is designed to be the primary envelope encasing the fuel so as to provide suitable performance and safety during reactor operation. Also, in all cases, precise control of processes, procedures and equipment to extremely high standards is necessary in order to ensure predictable and safe fuel performance.

### **EXPLANATORY NOTE**

Items of equipment that are considered to fall within the meaning of the phrase "and equipment especially designed or prepared" for the fabrication of fuel elements include equipment which:

- (a) normally comes in direct contact with, or directly processes, or controls, the production flow of nuclear material;
- (b) seals the nuclear material within the cladding;
- (c) checks the integrity of the cladding or the seal; or
- (d) checks the finish treatment of the sealed fuel.

Such equipment or systems of equipment may include, for example:

- 1) fully automatic pellet inspection stations especially designed or prepared for checking final dimensions and surface defects of the fuel pellets;
- 2) automatic welding machines especially designed or prepared for welding end caps onto the fuel pins (or rods);
- 3) automatic test and inspection stations especially designed or prepared for checking the integrity of completed fuel pins (or rods).
  - Item 3 typically includes equipment for: a) x-ray examination of pin (or rod) end cap welds, b) helium leak detection from pressurized pins (or rods), and c) gamma-ray scanning of the pins (or rods) to check for correct loading of the fuel pellets inside.

# 5. Plants for the separation of isotopes of natural uranium, depleted uranium or special fissionable material and equipment, other than analytical instruments, especially designed or prepared therefor

### INTRODUCTORY NOTE

Plants, equipment and technology for the separation of uranium isotopes have, in many instances, a close relationship to plants, equipment and technology for the separation of stable isotopes. In particular cases, the controls under Section 5 also apply to plants and equipment that are intended for the separation of stable isotopes. These controls of plants and equipment for the separation of stable isotopes are complimentary to controls on plants and equipment especially designed or prepared for the processing, use or production of special fissionable material covered by the Trigger List. These complementary Section 5 controls for stable isotope uses do not apply to the electromagnetic isotope separation process, which is addressed under Part 2 of the Guidelines.

Processes for which the controls in Section 5 equally apply whether the intended use is uranium isotope separation or stable isotope separation are: gas centrifuge, gaseous diffusion, the plasma separation process, and acrodynamic processes.

For some processes, the relationship to uranium isotope separation depends on the element (stable isotope) being separated. These processes are: laser-based processes (e.g. molecular laser isotope separation and atomic vapor laser isotope separation), chemical exchange, and ion exchange. Suppliers must therefore evaluate these processes on a case-by-case basis to apply Section 5 controls for stable isotope uses accordingly.

Items of equipment that are considered to fall within the meaning of the phrase "equipment, other than analytical instruments, especially designed or prepared" for the separation of isotopes of uranium include:

# 5.1. Gas centrifuges and assemblies and components especially designed or prepared for use in gas centrifuges

### INTRODUCTORY NOTE

The gas centrifuge normally consists of a thin-walled cylinder(s) of between 75 mm (3 in) and 400 mm (16 in) diameter contained in a vacuum environment and spun at high peripheral speed of the order of 300 m/s or more with its central axis vertical. In order to achieve high speed the materials of construction for the rotating components have to be of a high strength to density ratio and the rotor assembly, and hence its individual components, have to be manufactured to very close tolerances in order to minimize the unbalance. In contrast to other centrifuges, the gas centrifuge for uranium enrichment is characterized by having within the rotor chamber a rotating disc-shaped baffle(s) and a stationary tube arrangement for feeding and extracting the UF<sub>6</sub> gas and featuring at least 3 separate channels, of which 2 are connected to scoops extending from the rotor axis towards the periphery of the rotor chamber. Also contained within the vacuum environment are a number of critical items which do not rotate and which although they are especially designed are not difficult to fabricate

nor are they fabricated out of unique materials. A centrifuge facility however requires a large number of these components, so that quantities can provide an important indication of end use.

### **5.1.1.** Rotating components

### (a) Complete rotor assemblies:

Thin-walled cylinders, or a number of interconnected thin-walled cylinders, manufactured from one or more of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section. If interconnected, the cylinders are joined together by flexible bellows or rings as described in section 5.1.1.(c) following. The rotor is fitted with an internal baffle(s) and end caps, as described in section 5.1.1.(d) and (e) following, if in final form. However the complete assembly may be delivered only partly assembled.

## (b) Rotor tubes:

Especially designed or prepared thin-walled cylinders with thickness of 12 mm (0.5 in) or less, a diameter of between 75 mm (3 in) and 400 mm (16 in), and manufactured from one or more of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section.

# (c) Rings or Bellows:

Components especially designed or prepared to give localized support to the rotor tube or to join together a number of rotor tubes. The bellows is a short cylinder of wall

3 mm (0.12 in) or less, a diameter of between 75 mm (3 in) and 400 mm (16 in), having a convolute, and manufactured from one of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section.

# (d) Baffles:

Disc-shaped components of between 75 mm (3 in) and 400 mm (16 in) diameter especially designed or prepared to be mounted inside the centrifuge rotor tube, in order to isolate the take-off chamber from the main separation chamber and, in some cases, to assist the UF<sub>6</sub> gas circulation within the main separation chamber of the rotor tube, and manufactured from one of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section.

# (e) Top caps/Bottom caps:

Disc-shaped components of between 75 mm (3 in) and 400 mm (16 in) diameter especially designed or prepared to fit to the ends of the rotor tube, and so contain the UF<sub>6</sub> within the rotor tube, and in some cases to support, retain or contain as an integrated part an element of the upper bearing (top cap) or to carry the rotating

elements of the motor and lower bearing (bottom cap), and manufactured from one of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section.

### **EXPLANATORY NOTE**

The materials used for centrifuge rotating components are:

- (a) Maraging steel capable of an ultimate tensile strength of  $2.05 \times 10^9 \text{ N/m}^2$  (300,000 psi) or more;
- (b) Aluminium alloys capable of an ultimate tensile strength of 0.46 X 10<sup>9</sup> N/m<sup>2</sup> (67,000 psi) or more;
- (c) Filamentary materials suitable for use in composite structures and having a specific modulus of 3.18 X 10<sup>6</sup> m or greater and a specific ultimate tensile strength of 7.62 X 10<sup>4</sup> m or greater ('Specific Modulus' is the Young's Modulus in N/m<sup>2</sup> divided by the specific

greater ('Specific Modulus' is the Young's Modulus in  $N/m^2$  divided by the specific weight in  $N/m^3$ ; 'Specific Ultimate Tensile Strength' is the ultimate tensile strength in  $N/m^2$  divided by the specific weight in  $N/m^3$ ).

# **5.1.2.** Static components

(a) Magnetic suspension bearings:

Especially designed or prepared bearing assemblies consisting of an annular magnet suspended within a housing containing a damping medium. The housing will be manufactured from a UF<sub>6</sub>-resistant material (see EXPLANATORY NOTE to Section 5.2.). The magnet couples with a pole piece or a second magnet fitted to the top cap described in Section 5.1.1.(e). The magnet may be ring-shaped with a relation between outer and inner diameter smaller or equal to 1.6:1. The magnet may be in a form having an initial permeability of 0.15 H/m (120,000 in CGS units) or more, or a remanence of 98.5% or more, or an energy product of greater than 80 kJ/m<sup>3</sup> (10<sup>7</sup> gauss-oersteds). In addition to the usual material properties, it is a prerequisite that the deviation of the magnetic axes from the geometrical axes is limited to very small tolerances (lower than 0.1 mm or 0.004 in) or that homogeneity of the material of the magnet is specially called for.

# (b) Bearings/Dampers:

Especially designed or prepared bearings comprising a pivot/cup assembly mounted on a damper. The pivot is normally a hardened steel shaft with a hemisphere at one end with a means of attachment to the bottom cap described in section 5.1.1.(e) at the other. The shaft may however have a hydrodynamic bearing attached. The cup is pellet-shaped with a hemispherical indentation in one surface. These components are often supplied separately to the damper.

### (c) Molecular pumps:

Especially designed or prepared cylinders having internally machined or extruded helical grooves and internally machined bores. Typical dimensions are as follows: 75 mm (3 in) to 400 mm (16 in) internal diameter, 10 mm (0.4 in) or more wall thickness, with the length equal to or greater than the diameter. The grooves are typically rectangular in cross-section and 2 mm (0.08 in) or more in depth.

### (d) Motor stators:

Especially designed or prepared ring-shaped stators for high speed multiphase AC hysteresis (or reluctance) motors for synchronous operation within a vacuum in the frequency range of 600 – 2000 Hz and a power range of 50 - 1000 VA. The stators consist of multi-phase windings on a laminated low loss iron core comprised of thin layers typically 2.0 mm (0.08 in) thick or less.

### (e) Centrifuge housing/recipients:

Components especially designed or prepared to contain the rotor tube assembly of a gas centrifuge. The housing consists of a rigid cylinder of wall thickness up to 30 mm (1.2 in) with precision machined ends to locate the bearings and with one or more flanges for mounting. The machined ends are parallel to each other and perpendicular to the cylinder's longitudinal axis to within 0.05 degrees or less. The housing may also be a honeycomb type structure to accommodate several rotor tubes. The housings are made of or protected by materials resistant to corrosion by  $UF_6$ .

# (f) Scoops:

Especially designed or prepared tubes of up to 12 mm (0.5 in) internal diameter for the extraction of UF<sub>6</sub> gas from within the rotor tube by a Pitot tube action (that is, with an aperture facing into the circumferential gas flow within the rotor tube, for example by bending the end of a radially disposed tube) and capable of being fixed to the central gas extraction system. The tubes are made of or protected by materials resistant to corrosion by UF<sub>6</sub>.

# **5.2.** Especially designed or prepared auxiliary systems, equipment and components for gas centrifuge enrichment plants

### INTRODUCTORY NOTE

The auxiliary systems, equipment and components for a gas centrifuge enrichment plant are the systems of plant needed to feed UF<sub>6</sub> to the centrifuges, to link the individual centrifuges to each other to form cascades (or stages) to allow for progressively higher enrichments and to extract the 'product' and 'tails' UF<sub>6</sub> from the centrifuges, together with the equipment required to drive the centrifuges or to control the plant.

Normally UF<sub>6</sub> is evaporated from the solid using heated autoclaves and is distributed in gaseous form to the centrifuges by way of cascade header pipework. The 'product' and 'tails' UF<sub>6</sub> gaseous streams flowing from the centrifuges are also passed by way of cascade header pipework to cold traps (operating at about 203 K (-70°C)) where they are condensed prior to onward transfer into suitable containers for transportation or storage. Because an enrichment plant consists of many thousands of centrifuges arranged in cascades there are many kilometers of cascade header pipework, incorporating thousands of welds with a substantial amount of repetition of layout. The equipment, components and piping systems are fabricated to very high vacuum and cleanliness standards.

# 5.2.1. Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems including:

Feed autoclaves (or stations), used for passing UF<sub>6</sub> to the centrifuge cascades at up to

100 kPa (15 psi) and at a rate of 1 kg/h or more;

Desublimers (or cold traps) used to remove UF $_6$  from the cascades at up to 3 kPa (0.5 psi) pressure. The desublimers are capable of being chilled to 203 K (-70°C) and heated to

343 K (70°C);

Product' and 'Tails' stations used for trapping UF<sub>6</sub> into containers.

This plant, equipment and pipework is wholly made of or lined with UF<sub>6</sub>-resistant materials (see EXPLANATORY NOTE to this section) and is fabricated to very high vacuum and cleanliness standards.

### **5.2.2.** Machine header piping systems

Especially designed or prepared piping systems and header systems for handling UF<sub>6</sub> within the centrifuge cascades. The piping network is normally of the 'triple' header system with each centrifuge connected to each of the headers. There is thus a substantial amount of repetition in its form. It is wholly made of UF<sub>6</sub>-resistant materials (see EXPLANATORY NOTE to this section) and is fabricated to very high vacuum and cleanliness standards.

# **5.2.3** Special shut-off and control valves

Especially designed or prepared bellows-sealed valves, manual or automated, shut-off or control, made of or protected by materials resistant to corrosion by  $UF_6$ , with a diameter of 10 to 160 mm, for use in main or auxiliary systems of gas centrifuge enrichment plants.

# 5.2.4. UF<sub>6</sub> mass spectrometers/ion sources

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking 'on-line' samples of feed, product or tails, from UF<sub>6</sub> gas streams and having all of the following characteristics:

- 1. Unit resolution for atomic mass unit greater than 320;
- 2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
- 3. Electron bombardment ionization sources:
- 4. Having a collector system suitable for isotopic analysis.

# 5.2.5. Frequency changers

Frequency changers (also known as converters or invertors) especially designed or prepared to supply motor stators as defined under 5.1.2.(d), or parts, components and sub-assemblies of such frequency changers having all of the following characteristics:

- 1. A multiphase output of 600 to 2000 Hz;
- 2. High stability (with frequency control better than 0.1%);
- 3. Low harmonic distortion (less than 2%); and
- 4. An efficiency of greater than 80%.

### **EXPLANATORY NOTE**

The items listed above either come into direct contact with the UF<sub>6</sub> process gas or directly control the centrifuges and the passage of the gas from centrifuge to centrifuge and cascade to cascade.

Materials resistant to corrosion by UF<sub>6</sub> include stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel.

# **5.3.** Especially designed or prepared assemblies and components for use in gaseous diffusion enrichment

# INTRODUCTORY NOTE

In the gaseous diffusion method of uranium isotope separation, the main technological assembly is a special porous gaseous diffusion barrier, heat exchanger for cooling the gas (which is heated by the process of compression), seal valves and control valves, and pipelines. Inasmuch as gaseous diffusion technology uses uranium hexafluoride (UF<sub>6</sub>), all equipment, pipeline and instrumentation surfaces (that come in contact with the gas) must be made of materials that remain stable in contact with UF<sub>6</sub>. A gaseous diffusion facility requires a number of these assemblies, so that quantities can provide an important indication of end use.

# 5.3.1. Gaseous diffusion barriers

- (a) Especially designed or prepared thin, porous filters, with a pore size of 100 1,000 Å (angstroms), a thickness of 5 mm (0.2 in) or less, and for tubular forms, a diameter of 25 mm (1 in) or less, made of metallic, polymer or ceramic materials resistant to corrosion by UF<sub>6</sub>, and
- (b) especially prepared compounds or powders for the manufacture of such filters. Such compounds and powders include nickel or alloys containing 60% or more nickel, aluminium oxide, or UF<sub>6</sub>-resistant fully fluorinated hydrocarbon polymers having a purity of 99.9% or more, a particle size less than 10 microns, and a high degree of particle size uniformity, which are especially prepared for the manufacture of gaseous diffusion barriers.

# 5.3.2. Diffuser housings

Especially designed or prepared hermetically sealed cylindrical vessels greater than 300 mm (12 in) in diameter and greater than 900 mm (35 in) in length, or rectangular vessels of comparable dimensions, which have an inlet connection and two outlet connections all of which are greater than 50 mm (2 in) in diameter, for containing the gaseous diffusion barrier, made of or lined with UF<sub>6</sub>-resistant materials and designed for horizontal or vertical installation.

# **5.3.3.** Compressors and gas blowers

Especially designed or prepared axial, centrifugal, or positive displacement compressors, or gas blowers with a suction volume capacity of 1 m $^3$ /min or more of UF<sub>6</sub>, and with a discharge pressure of up to several hundred kPa (100 psi), designed for long-term operation in the UF<sub>6</sub> environment with or without an electrical motor of appropriate power, as well as separate assemblies of such compressors and gas blowers. These compressors and gas blowers have a pressure ratio between 2:1 and 6:1 and are made of, or lined with, materials resistant to UF<sub>6</sub>.

# **5.3.4.** Rotary shaft seals

Especially designed or prepared vacuum seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor or the gas blower rotor with the driver motor so as to ensure a reliable seal against in-leaking of air into the inner chamber of the compressor or gas blower which is filled with UF<sub>6</sub>. Such seals are normally designed for a buffer gas in-leakage rate of less than 1000 cm<sup>3</sup>/min (60 in<sup>3</sup>/min).

# 5.3.5. Heat exchangers for cooling UF<sub>6</sub>

Especially designed or prepared heat exchangers made of or lined with UF<sub>6</sub>-resistant materials (except stainless steel) or with copper or any combination of those metals, and intended for a leakage pressure change rate of less than 10 Pa (0.0015 psi) per hour under a pressure difference of 100 kPa (15 psi).

# 5.4. Especially designed or prepared auxiliary systems, equipment and components for use in gaseous diffusion enrichment

### INTRODUCTORY NOTE

The auxiliary systems, equipment and components for gaseous diffusion enrichment plants are the systems of plant needed to feed UF<sub>6</sub> to the gaseous diffusion assembly, to link the individual assemblies to each other to form cascades (or stages) to allow for progressively higher enrichments and to extract the "product" and "tails" UF<sub>6</sub> from the diffusion cascades. Because of the high inertial properties of diffusion cascades, any interruption in their operation, and especially their shut-down, leads to serious consequences. Therefore, a strict and constant maintenance of vacuum in all technological systems, automatic protection from accidents, and precise automated regulation of the gas flow is of importance in a gaseous diffusion plant. All this leads to a need to equip the plant with a large number of special measuring, regulating and controlling systems.

Normally UF $_6$  is evaporated from cylinders placed within autoclaves and is distributed in gaseous form to the entry point by way of cascade header pipework. The "product" and "tails" UF $_6$  gaseous streams flowing from exit points are passed by way of cascade header pipework to either cold traps or to compression stations where the UF $_6$  gas is liquefied prior to onward transfer into suitable containers for transportation or storage. Because a gaseous diffusion enrichment plant consists of a large number of gaseous diffusion assemblies arranged in cascades, there are many kilometers of cascade header pipework, incorporating thousands of welds with substantial amounts of repetition of layout. The equipment, components and piping systems are fabricated to very high vacuum and cleanliness standards.

### **5.4.1.** Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems, capable of operating at pressures of 300 kPa (45 psi) or less, including:

Feed autoclaves (or systems), used for passing UF<sub>6</sub> to the gaseous diffusion cascades;

Desublimers (or cold traps) used to remove UF<sub>6</sub> from diffusion cascades;

Liquefaction stations where  $UF_6$  gas from the cascade is compressed and cooled to form liquid  $UF_6$ ;

"Product" or "tails" stations used for transferring UF<sub>6</sub> into containers.

# 5.4.2. Header piping systems

Especially designed or prepared piping systems and header systems for handling  $UF_6$  within the gaseous diffusion cascades. This piping network is normally of the "double" header system with each cell connected to each of the headers.

### **5.4.3.** Vacuum systems

- (a) Especially designed or prepared large vacuum manifolds, vacuum headers and vacuum pumps having a suction capacity of 5 m<sup>3</sup>/min (175 ft<sup>3</sup>/min) or more.
- (b) Vacuum pumps especially designed for service in UF<sub>6</sub>-bearing atmospheres made of, or lined with, aluminium, nickel, or alloys bearing more than 60% nickel. These pumps may be either rotary or positive, may have displacement and fluorocarbon seals, and may have special working fluids present.

## **5.4.4.** Special shut-off and control valves

Especially designed or prepared manual or automated shut-off and control bellows valves made of UF<sub>6</sub>-resistant materials with a diameter of 40 to 1500 mm (1.5 to 59 in) for installation in main and auxiliary systems of gaseous diffusion enrichment plants.

# 5.4.5. $UF_6$ mass spectrometers/ion sources

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking "on-line" samples of feed, product or tails, from UF<sub>6</sub> gas streams and having all of the following characteristics:

- 1. Unit resolution for atomic mass unit greater than 320;
- 2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
- 3. Electron bombardment ionization sources;
- 4. Collector system suitable for isotopic analysis.

### **EXPLANATORY NOTE**

The items listed above either come into direct contact with the UF<sub>6</sub> process gas or directly control the flow within the cascade. All surfaces which come into contact with the process gas are wholly made of, or lined with, UF<sub>6</sub>-resistant materials. For the purposes of the sections relating to gaseous diffusion items the materials resistant to corrosion by UF<sub>6</sub> include stainless steel, aluminium, aluminium alloys, aluminium oxide, nickel or alloys containing 60% or more nickel and UF<sub>6</sub>-resistant fully fluorinated hydrocarbon polymers.

# 5.5. Especially designed or prepared systems, equipment and components for use in aerodynamic enrichment plants

### INTRODUCTORY NOTE

In aerodynamic enrichment processes, a mixture of gaseous UF<sub>6</sub> and light gas (hydrogen or helium) is compressed and then passed through separating elements wherein isotopic separation is accomplished by the generation of high centrifugal forces over a curved-wall geometry. Two processes of this type have been successfully developed: the separation nozzle process and the vortex tube process. For both processes the main components of a separation stage include cylindrical vessels housing the special separation elements (nozzles or vortex tubes), gas compressors and heat exchangers to remove the heat of compression. An aerodynamic plant requires a number of these stages, so that quantities can provide an important indication of end use. Since aerodynamic processes use UF<sub>6</sub>, all equipment, pipeline and instrumentation surfaces (that come in contact with the gas) must be made of materials that remain stable in contact with UF<sub>6</sub>.

### **EXPLANATORY NOTE**

The items listed in this section either come into direct contact with the UF<sub>6</sub> process gas or directly control the flow within the cascade. All surfaces which come into contact with the process gas are wholly made of or protected by UF<sub>6</sub>-resistant materials. For the purposes of the section relating to aerodynamic enrichment items, the materials resistant to corrosion by UF<sub>6</sub> include copper, stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel and UF<sub>6</sub>-resistant fully fluorinated hydrocarbon polymers.

### **5.5.1.** Separation nozzles

Especially designed or prepared separation nozzles and assemblies thereof. The separation nozzles consist of slit-shaped, curved channels having a radius of curvature less than 1 mm (typically 0.1 to 0.05 mm), resistant to corrosion by UF<sub>6</sub> and having a knife-edge within the nozzle that separates the gas flowing through the nozzle into two fractions.

### 5.5.2. Vortex tubes

Especially designed or prepared vortex tubes and assemblies thereof. The vortex tubes are cylindrical or tapered, made of or protected by materials resistant to corrosion by UF<sub>6</sub>, having a diameter of between 0.5 cm and 4 cm, a length to diameter ratio of 20:1 or less and with one or more tangential inlets. The tubes may be equipped with nozzle-type appendages at either or both ends.

### **EXPLANATORY NOTE**

The feed gas enters the vortex tube tangentially at one end or through swirl vanes or at numerous tangential positions along the periphery of the tube.

### **5.5.3.** Compressors and gas blowers

Especially designed or prepared axial, centrifugal or positive displacement compressors or gas blowers made of or protected by materials resistant to corrosion by  $UF_6$  and with a suction volume capacity of 2 m<sup>3</sup>/min or more of  $UF_6$ /carrier gas (hydrogen or helium) mixture.

### **EXPLANATORY NOTE**

These compressors and gas blowers typically have a pressure ratio between 1.2:1 and 6:1.

### 5.5.4. Rotary shaft seals

Especially designed or prepared rotary shaft seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor rotor or the gas blower rotor with the driver motor so as to ensure a reliable seal against out-leakage of process gas or in-leakage of air or seal gas into the inner chamber of the compressor or gas blower which is filled with a UF<sub>6</sub>/carrier gas mixture.

# 5.5.5. Heat exchangers for gas cooling

Especially designed or prepared heat exchangers made of or protected by materials resistant to corrosion by UF<sub>6</sub>.

### **5.5.6.** Separation element housings

Especially designed or prepared separation element housings, made of or protected by materials resistant to corrosion by UF<sub>6</sub>, for containing vortex tubes or separation nozzles.

# **EXPLANATORY NOTE**

These housings may be cylindrical vessels greater than 300 mm in diameter and greater than 900 mm in length, or may be rectangular vessels of comparable dimensions, and may be designed for horizontal or vertical installation.

### 5.5.7. Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems or equipment for enrichment plants made of or protected by materials resistant to corrosion by UF<sub>6</sub>, including:

- (a) Feed autoclaves, ovens, or systems used for passing UF<sub>6</sub> to the enrichment process;
- (b) Desublimers (or cold traps) used to remove UF<sub>6</sub> from the enrichment process for subsequent transfer upon heating;
- (c) Solidification or liquefaction stations used to remove UF<sub>6</sub> from the enrichment process by compressing and converting UF<sub>6</sub> to a liquid or solid form;

(d) 'Product' or 'tails' stations used for transferring UF<sub>6</sub> into containers.

### 5.5.8. Header piping systems

Especially designed or prepared header piping systems, made of or protected by materials resistant to corrosion by UF<sub>6</sub>, for handling UF<sub>6</sub> within the aerodynamic cascades. This piping network is normally of the 'double' header design with each stage or group of stages connected to each of the headers.

# 5.5.9. Vacuum systems and pumps

- (a) Especially designed or prepared vacuum systems having a suction capacity of 5 m $^3$ /min or more, consisting of vacuum manifolds, vacuum headers and vacuum pumps, and designed for service in UF $_6$ -bearing atmospheres,
- (b) Vacuum pumps especially designed or prepared for service in UF<sub>6</sub>-bearing atmospheres and made of or protected by materials resistant to corrosion by UF<sub>6</sub>. These pumps may use fluorocarbon seals and special working fluids.

# 5.5.10. Special shut-off and control valves

Especially designed or prepared manual or automated shut-off and control bellows valves made of or protected by materials resistant to corrosion by UF<sub>6</sub> with a diameter of

40 to 1500 mm for installation in main and auxiliary systems of aerodynamic enrichment plants.

# 5.5.11. UF<sub>6</sub> mass spectrometers/Ion sources

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking 'on-line' samples of feed, 'product' or 'tails', from UF<sub>6</sub> gas streams and having all of the following characteristics:

- 1. Unit resolution for mass greater than 320;
- 2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
- 3. Electron bombardment ionization sources;
- 4. Collector system suitable for isotopic analysis.

#### 5.5.12. UF<sub>6</sub>/carrier gas separation systems

Especially designed or prepared process systems for separating UF<sub>6</sub> from carrier gas (hydrogen or helium).

#### **EXPLANATORY NOTE**

These systems are designed to reduce the UF<sub>6</sub> content in the carrier gas to 1 ppm or less and may incorporate equipment such as:

- (a) Cryogenic heat exchangers and cryoseparators capable of temperatures of -120°C or less, or
- (b) Cryogenic refrigeration units capable of temperatures of -120°C or less, or
- (c) Separation nozzle or vortex tube units for the separation of UF<sub>6</sub> from carrier gas, or
- (d) UF<sub>6</sub> cold traps capable of temperatures of -20°C or less.

# 5.6. Especially designed or prepared systems, equipment and components for use in chemical exchange or ion exchange enrichment plants.

#### INTRODUCTORY NOTE

The slight difference in mass between the isotopes of uranium causes small changes in chemical reaction equilibria that can be used as a basis for separation of the isotopes. Two processes have been successfully developed: liquid-liquid chemical exchange and solid-liquid ion exchange.

In the liquid-liquid chemical exchange process, immiscible liquid phases (aqueous and organic) are countercurrently contacted to give the cascading effect of thousands of separation stages. The aqueous phase consists of uranium chloride in hydrochloric acid solution; the organic phase consists of an extractant containing uranium chloride in an organic solvent. The contactors employed in the separation cascade can be liquid-liquid exchange columns (such as pulsed columns with sieve plates) or liquid centrifugal contactors. Chemical conversions (oxidation and reduction) are required at both ends of the separation cascade in order to provide for the reflux requirements at each end. A major design concern is to avoid contamination of the process streams with certain metal ions. Plastic, plastic-lined (including use of fluorocarbon polymers) and/or glass-lined columns and piping are therefore used.

In the solid-liquid ion-exchange process, enrichment is accomplished by uranium adsorption/desorption on a special, very fast-acting, ion-exchange resin or adsorbent. A solution of uranium in hydrochloric acid and other chemical agents is passed through cylindrical enrichment columns containing packed beds of the adsorbent. For a continuous process, a reflux system is necessary to release the uranium from the adsorbent back into the liquid flow so that 'product' and 'tails' can be collected. This is accomplished with the use of suitable reduction/oxidation chemical agents that are fully regenerated in separate external circuits and that may be partially regenerated within the isotopic separation columns themselves. The presence of hot concentrated hydrochloric acid solutions in the process requires that the equipment be made of or protected by special corrosion-resistant materials.

#### **5.6.1.** Liquid-liquid exchange columns (Chemical exchange)

Countercurrent liquid-liquid exchange columns having mechanical power input (i.e., pulsed columns with sieve plates, reciprocating plate columns, and columns with internal turbine mixers), especially designed or prepared for uranium enrichment using the chemical exchange process. For corrosion resistance to concentrated hydrochloric acid solutions, these columns and their internals are made of or protected by suitable plastic materials (such as fluorocarbon polymers) or glass. The stage residence time of the columns is designed to be short (30 seconds or less).

#### **5.6.2.** Liquid-liquid centrifugal contactors (Chemical exchange)

Liquid-liquid centrifugal contactors especially designed or prepared for uranium enrichment using the chemical exchange process. Such contactors use rotation to achieve dispersion of the organic and aqueous streams and then centrifugal force to separate the phases. For corrosion resistance to concentrated hydrochloric acid

solutions, the contactors are made of or are lined with suitable plastic materials (such as fluorocarbon polymers) or are lined with glass. The stage residence time of the centrifugal contactors is designed to be short (30 seconds or less).

#### **5.6.3.** Uranium reduction systems and equipment (Chemical exchange)

(a) Especially designed or prepared electrochemical reduction cells to reduce uranium from one valence state to another for uranium enrichment using the chemical exchange process. The cell materials in contact with process solutions must be corrosion resistant to concentrated hydrochloric acid solutions.

#### **EXPLANATORY NOTE**

The cell cathodic compartment must be designed to prevent re-oxidation of uranium to its higher valence state. To keep the uranium in the cathodic compartment, the cell may have an impervious diaphragm membrane constructed of special cation exchange material. The cathode consists of a suitable solid conductor such as graphite.

(b) Especially designed or prepared systems at the product end of the cascade for taking the U<sup>+4</sup> out of the organic stream, adjusting the acid concentration and feeding to the electrochemical reduction cells.

#### **EXPLANATORY NOTE**

These systems consist of solvent extraction equipment for stripping the U<sup>+4</sup> from the organic stream into an aqueous solution, evaporation and/or other equipment to accomplish solution pH adjustment and control, and pumps or other transfer devices for feeding to the electrochemical reduction cells. A major design concern is to avoid contamination of the aqueous stream with certain metal ions. Consequently, for those parts in contact with the process stream, the system is constructed of equipment made of or protected by suitable materials (such as glass, fluorocarbon polymers, polyphenyl sulfate, polyether sulfone, and resinimpregnated graphite).

#### **5.6.4.** Feed preparation systems (Chemical exchange)

Especially designed or prepared systems for producing high-purity uranium chloride feed solutions for chemical exchange uranium isotope separation plants.

#### **EXPLANATORY NOTE**

These systems consist of dissolution, solvent extraction and/or ion exchange equipment for purification and electrolytic cells for reducing the uranium  $U^{+6}$  or  $U^{+4}$  to  $U^{+3}$ . These systems produce uranium chloride solutions having only a few parts per million of metallic impurities such as chromium, iron, vanadium, molybdenum and other bivalent or higher multi-valent cations. Materials of construction for portions of the system processing high-purity  $U^{+3}$  include glass, fluorocarbon polymers, polyphenyl sulfate or polyether sulfone plastic-lined and resin-impregnated graphite.

#### **5.6.5.** Uranium oxidation systems (Chemical exchange)

Especially designed or prepared systems for oxidation of  $U^{+3}$  to  $U^{+4}$  for return to the uranium isotope separation cascade in the chemical exchange enrichment process.

#### **EXPLANATORY NOTE**

These systems may incorporate equipment such as:

- (a) Equipment for contacting chlorine and oxygen with the aqueous effluent from the isotope separation equipment and extracting the resultant U<sup>+4</sup> into the stripped organic stream returning from the product end of the cascade,
- (b) Equipment that separates water from hydrochloric acid so that the water and the concentrated hydrochloric acid may be reintroduced to the process at the proper locations.

#### **5.6.6.** Fast-reacting ion exchange resins/adsorbents (Ion exchange)

Fast-reacting ion-exchange resins or adsorbents especially designed or prepared for uranium enrichment using the ion exchange process, including porous macroreticular resins, and/or pellicular structures in which the active chemical exchange groups are limited to a coating on the surface of an inactive porous support structure, and other composite structures in any suitable form including particles or fibers. These ion exchange resins/adsorbents have diameters of 0.2 mm or less and must be chemically resistant to concentrated hydrochloric acid solutions as well as physically strong enough so as not to degrade in the exchange columns. The resins/adsorbents are especially designed to achieve very fast uranium isotope exchange kinetics (exchange rate half-time of less than 10 seconds) and are capable of operating at a temperature in the range of 100°C to 200°C.

#### **5.6.7.** Ion exchange columns (Ion exchange)

Cylindrical columns greater than 1000 mm in diameter for containing and supporting packed beds of ion exchange resin/adsorbent, especially designed or prepared for uranium enrichment using the ion exchange process. These columns are made of or protected by materials (such as titanium or fluorocarbon plastics) resistant to corrosion by concentrated hydrochloric acid solutions and are capable of operating at a temperature in the range of 100°C to 200°C and pressures above 0.7 MPa (102 psi).

#### **5.6.8.** Ion exchange reflux systems (Ion exchange)

- (a) Especially designed or prepared chemical or electrochemical reduction systems for regeneration of the chemical reducing agent(s) used in ion exchange uranium enrichment cascades.
- (b) Especially designed or prepared chemical or electrochemical oxidation systems for regeneration of the chemical oxidizing agent(s) used in ion exchange uranium enrichment cascades.

#### **EXPLANATORY NOTE**

The ion exchange enrichment process may use, for example, trivalent titanium  $(Ti^{+3})$  as a reducing cation in which case the reduction system would regenerate  $Ti^{+3}$  by reducing  $Ti^{+4}$ .

The process may use, for example, trivalent iron  $(Fe^{+3})$  as an oxidant in which case the oxidation system would regenerate  $Fe^{+3}$  by oxidizing  $Fe^{+2}$ .

# 5.7. Especially designed or prepared systems, equipment and components for use in laser-based enrichment plants.

#### INTRODUCTORY NOTE

Present systems for enrichment processes using lasers fall into two categories: those in which the process medium is atomic uranium vapor and those in which the process medium is the vapor of a uranium compound. Common nomenclature for such processes include: first category - atomic vapor laser isotope separation (AVLIS or SILVA); second category - molecular laser isotope separation (MLIS or MOLIS) and chemical reaction by isotope selective laser activation (CRISLA). The systems, equipment and components for laser enrichment plants embrace: (a) devices to feed uranium-metal vapor (for selective photo-ionization) or devices to feed the vapor of a uranium compound (for photo-dissociation or chemical activation); (b) devices to collect enriched and depleted uranium metal as 'product' and 'tails' in the first category, and devices to collect dissociated or reacted compounds as 'product' and unaffected material as 'tails' in the second category; (c) process laser systems to selectively excite the uranium-235 species; and (d) feed preparation and product conversion equipment. The complexity of the spectroscopy of uranium atoms and compounds may require incorporation of any of a number of available laser technologies.

#### **EXPLANATORY NOTE**

Many of the items listed in this section come into direct contact with uranium metal vapor or liquid or with process gas consisting of UF<sub>6</sub> or a mixture of UF<sub>6</sub> and other gases. All surfaces that come into contact with the uranium or UF<sub>6</sub> are wholly made of or protected by corrosion-resistant materials. For the purposes of the section relating to laser-based enrichment items, the materials resistant to corrosion by the vapor or liquid of uranium metal or uranium alloys include yttria-coated graphite and tantalum; and the materials resistant to corrosion by UF<sub>6</sub> include copper, stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel and UF<sub>6</sub>-resistant fully fluorinated hydrocarbon polymers.

#### **5.7.1.** Uranium vaporization systems (AVLIS)

Especially designed or prepared uranium vaporization systems which contain high-power strip or scanning electron beam guns with a delivered power on the target of more than 2.5 kW/cm.

#### **5.7.2.** Liquid uranium metal handling systems (AVLIS)

Especially designed or prepared liquid metal handling systems for molten uranium or uranium alloys, consisting of crucibles and cooling equipment for the crucibles.

#### EXPLANATORY NOTE

The crucibles and other parts of this system that come into contact with molten uranium or uranium alloys are made of or protected by materials of suitable corrosion and heat resistance. Suitable materials include tantalum, yttria-coated graphite,

graphite coated with other rare earth oxides (see INFCIRC/254/Part 2 - (as amended)) or mixtures thereof.

#### 5.7.3. Uranium metal 'product' and 'tails' collector assemblies (AVLIS)

Especially designed or prepared 'product' and 'tails' collector assemblies for uranium metal in liquid or solid form.

#### **EXPLANATORY NOTE**

Components for these assemblies are made of or protected by materials resistant to the heat and corrosion of uranium metal vapor or liquid (such as yttria-coated graphite or tantalum) and may include pipes, valves, fittings, 'gutters', feed-throughs, heat exchangers and collector plates for magnetic, electrostatic or other separation methods.

#### **5.7.4.** Separator module housings (AVLIS)

Especially designed or prepared cylindrical or rectangular vessels for containing the uranium metal vapor source, the electron beam gun, and the "product' and 'tails' collectors.

#### **EXPLANATORY NOTE**

These housings have multiplicity of ports for electrical and water feed-throughs, laser beam windows, vacuum pump connections and instrumentation diagnostics and monitoring. They have provisions for opening and closure to allow refurbishment of internal components.

#### 5.7.5. Supersonic expansion nozzles (MLIS)

Especially designed or prepared supersonic expansion nozzles for cooling mixtures of  $UF_6$  and carrier gas to 150 K or less and which are corrosion resistant to  $UF_6$ .

#### **5.7.6.** Uranium pentafluoride product collectors (MLIS)

Especially designed or prepared uranium pentafluoride (UF<sub>5</sub>) solid product collectors consisting of filter, impact, or cyclone-type collectors, or combinations thereof, and which are corrosion resistant to the UF<sub>5</sub>/UF<sub>6</sub> environment.

#### 5.7.7. UF<sub>6</sub>/carrier gas compressors (MLIS)

Especially designed or prepared compressors for  $UF_6$ /carrier gas mixtures, designed for long term operation in a  $UF_6$  environment. The components of these compressors that come into contact with process gas are made of or protected by materials resistant to corrosion by  $UF_6$ .

#### **5.7.8.** Rotary shaft seals (MLIS)

Especially designed or prepared rotary shaft seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor rotor with the driver motor so as to ensure a reliable seal against out-leakage of process gas or in-leakage of air or seal gas into the inner chamber of the compressor which is filled with a  $UF_6$ /carrier gas mixture.

#### **5.7.9.** Fluorination systems (MLIS)

Especially designed or prepared systems for fluorinating UF<sub>5</sub> (solid) to UF<sub>6</sub> (gas).

#### **EXPLANATORY NOTE**

These systems are designed to fluorinate the collected UF $_5$  powder to UF $_6$  for subsequent collection in product containers or for transfer as feed to MLIS units for additional enrichment. In one approach, the fluorination reaction may be accomplished within the isotope separation system to react and recover directly off the 'product' collectors. In another approach, the UF $_5$  powder may be removed/transferred from the 'product' collectors into a suitable reaction vessel (e.g., fluidized-bed reactor, screw reactor or flame tower) for fluorination. In both approaches, equipment for storage and transfer of fluorine (or other suitable fluorinating agents) and for collection and transfer of UF $_6$  are used.

#### **5.7.10.** UF<sub>6</sub> mass spectrometers/ion sources (MLIS)

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking 'on-line' samples of feed, 'product' or 'tails', from UF<sub>6</sub> gas streams and having all of the following characteristics:

- 1. Unit resolution for mass greater than 320;
- 2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
- 3. Electron bombardment ionization sources;
- 4. Collector system suitable for isotopic analysis.

#### 5.7.11. Feed systems/product and tails withdrawal systems (MLIS)

Especially designed or prepared process systems or equipment for enrichment plants made of or protected by materials resistant to corrosion by UF<sub>6</sub>, including:

- (a) Feed autoclaves, ovens, or systems used for passing UF<sub>6</sub> to the enrichment process;
- (b) Desublimers (or cold traps) used to remove UF<sub>6</sub> from the enrichment process for subsequent transfer upon heating;
- (c) Solidification or liquefaction stations used to remove UF<sub>6</sub> from the enrichment process by compressing and converting UF<sub>6</sub> to a liquid or solid form;

(d) 'Product' or 'tails' stations used for transferring UF<sub>6</sub> into containers.

#### 5.7.12. UF<sub>6</sub>/carrier gas separation systems (MLIS)

Especially designed or prepared process systems for separating UF<sub>6</sub> from carrier gas. The carrier gas may be nitrogen, argon, or other gas.

#### **EXPLANATORY NOTE**

These systems may incorporate equipment such as:

- (a) Cryogenic heat exchangers or cryoseparators capable of temperatures of -120°C or less, or
- (b) Cryogenic refrigeration units capable of temperatures of -120°C or less, or
- (c) UF<sub>6</sub> cold traps capable of temperatures of -20°C or less.

#### 5.7.13. Laser systems (AVLIS, MLIS and CRISLA)

Lasers or laser systems especially designed or prepared for the separation of uranium isotopes.

#### **EXPLANATORY NOTE**

The lasers and laser components of importance in laser-based enrichment processes include those identified in INFCIRC/254/Part 2 - (as amended). The laser system for the AVLIS process usually consists of two lasers: a copper vapor laser and a dye laser. The laser system for MLIS usually consists of a CO<sub>2</sub> or excimer laser and a multi-pass optical cell with revolving mirrors at both ends. Lasers or laser systems for both processes require a spectrum frequency stabilizer for operation over extended periods of time.

# 5.8. Especially designed or prepared systems, equipment and components for use in plasma separation enrichment plants.

#### INTRODUCTORY NOTE

In the plasma separation process, a plasma of uranium ions passes through an electric field tuned to the <sup>235</sup>U ion resonance frequency so that they preferentially absorb energy and increase the diameter of their corkscrew-like orbits. Ions with a large-diameter path are trapped to produce a product enriched in <sup>235</sup>U. The plasma, which is made by ionizing uranium vapor, is contained in a vacuum chamber with a high-strength magnetic field produced by a superconducting magnet. The main technological systems of the process include the uranium plasma generation system, the separator module with superconducting magnet (see INFCIRC/254/Part 2 - (as amended)), and metal removal systems for the collection of 'product' and 'tails'.

#### **5.8.1.** Microwave power sources and antennae

Especially designed or prepared microwave power sources and antennae for producing or accelerating ions and having the following characteristics: greater than 30 GHz frequency and greater than 50 kW mean power output for ion production.

#### 5.8.2. Ion excitation coils

Especially designed or prepared radio frequency ion excitation coils for frequencies of more than 100 kHz and capable of handling more than 40 kW mean power.

#### **5.8.3.** Uranium plasma generation systems

Especially designed or prepared systems for the generation of uranium plasma, which may contain high-power strip or scanning electron beam guns with a delivered power on the target of more than  $2.5~\mathrm{kW/cm}$ .

#### **5.8.4.** Liquid uranium metal handling systems

Especially designed or prepared liquid metal handling systems for molten uranium or uranium alloys, consisting of crucibles and cooling equipment for the crucibles.

#### **EXPLANATORY NOTE**

The crucibles and other parts of this system that come into contact with molten uranium or uranium alloys are made of or protected by materials of suitable corrosion and heat resistance. Suitable materials include tantalum, yttria-coated graphite, graphite coated with other rare earth oxides (see INFCIRC/254/Part 2 - (as amended)) or mixtures thereof.

#### 5.8.5. Uranium metal 'product' and 'tails' collector assemblies

Especially designed or prepared 'product' and 'tails' collector assemblies for uranium metal in solid form. These collector assemblies are made of or protected by materials resistant to the heat and corrosion of uranium metal vapor, such as yttria-coated graphite or tantalum.

#### **5.8.6.** Separator module housings

Cylindrical vessels especially designed or prepared for use in plasma separation enrichment plants for containing the uranium plasma source, radio-frequency drive coil and the 'product' and 'tails' collectors.

#### **EXPLANATORY NOTE**

These housings have a multiplicity of ports for electrical feed-throughs, diffusion pump connections and instrumentation diagnostics and monitoring. They have provisions for opening and closure to allow for refurbishment of internal components and are constructed of a suitable non-magnetic material such as stainless steel.

# 5.9. Especially designed or prepared systems, equipment and components for use in electromagnetic enrichment plants.

#### INTRODUCTORY NOTE

In the electromagnetic process, uranium metal ions produced by ionization of a salt feed material (typically UCl<sub>4</sub>) are accelerated and passed through a magnetic field that has the effect of causing the ions of different isotopes to follow different paths. The major components of an electromagnetic isotope separator include: a magnetic field for ion-beam diversion/separation of the isotopes, an ion source with its acceleration system, and a collection system for the separated ions. Auxiliary systems for the process include the magnet power supply system, the ion source high-voltage power supply system, the vacuum system, and extensive chemical handling systems for recovery of product and cleaning/recycling of components.

#### **5.9.1.** Electromagnetic isotope separators

Electromagnetic isotope separators especially designed or prepared for the separation of uranium isotopes, and equipment and components therefor, including:

#### (a) Ion sources

Especially designed or prepared single or multiple uranium ion sources consisting of a vapor source, ionizer, and beam accelerator, constructed of suitable materials such as graphite, stainless steel, or copper, and capable of providing a total ion beam current of 50 mA or greater.

#### (b) Ion collectors

Collector plates consisting of two or more slits and pockets especially designed or prepared for collection of enriched and depleted uranium ion beams and constructed of suitable materials such as graphite or stainless steel.

#### (c) Vacuum housings

Especially designed or prepared vacuum housings for uranium electromagnetic separators, constructed of suitable non-magnetic materials such as stainless steel and designed for operation at pressures of 0.1 Pa or lower.

#### **EXPLANATORY NOTE**

The housings are specially designed to contain the ion sources, collector plates and water-cooled liners and have provision for diffusion pump connections and opening and closure for removal and reinstallation of these components.

#### (d) Magnet pole pieces

Especially designed or prepared magnet pole pieces having a diameter greater than 2 m used to maintain a constant magnetic field within an electromagnetic isotope separator and to transfer the magnetic field between adjoining separators.

#### 5.9.2. High voltage power supplies

Especially designed or prepared high-voltage power supplies for ion sources, having all of the following characteristics: capable of continuous operation, output voltage of 20,000 V or greater, output current of 1 A or greater, and voltage regulation of better than 0.01% over a time period of 8 hours.

#### 5.9.3. Magnet power supplies

Especially designed or prepared high-power, direct current magnet power supplies having all of the following characteristics: capable of continuously producing a current output of 500 A or greater at a voltage of 100 V or greater and with a current or voltage regulation better than 0.01% over a period of 8 hours.

# 6. Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor

#### INTRODUCTORY NOTE

Heavy water can be produced by a variety of processes. However, the two processes that have proven to be commercially viable are the water-hydrogen sulphide exchange process (GS process) and the ammonia-hydrogen exchange process.

The GS process is based upon the exchange of hydrogen and deuterium between water and hydrogen sulphide within a series of towers which are operated with the top section cold and the bottom section hot. Water flows down the towers while the hydrogen sulphide gas circulates from the bottom to the top of the towers. A series of perforated trays are used to promote mixing between the gas and the water. Deuterium migrates to the water at low temperatures and to the hydrogen sulphide at high temperatures. Gas or water, enriched in deuterium, is removed from the first stage towers at the junction of the hot and cold sections and the process is repeated in subsequent stage towers. The product of the last stage, water enriched up to 30% in deuterium, is sent to a distillation unit to produce reactor grade heavy water; i.e., 99.75% deuterium oxide.

The ammonia-hydrogen exchange process can extract deuterium from synthesis gas through contact with liquid ammonia in the presence of a catalyst. The synthesis gas is fed into exchange towers and to an ammonia converter. Inside the towers the gas flows from the bottom to the top while the liquid ammonia flows from the top to the bottom. The deuterium is stripped from the hydrogen in the synthesis gas and concentrated in the ammonia. The ammonia then flows into an ammonia cracker at the bottom of the tower while the gas flows into an ammonia converter at the top. Further enrichment takes place in subsequent stages and reactor grade heavy water is produced through final distillation. The synthesis gas feed can be provided by an ammonia plant that, in turn, can be constructed in association with a heavy water ammonia-hydrogen exchange plant. The ammonia-hydrogen exchange process can also use ordinary water as a feed source of deuterium.

Many of the key equipment items for heavy water production plants using GS or the ammonia-hydrogen exchange processes are common to several segments of the chemical and petroleum industries. This is particularly so for small plants using the GS process. However, few of the items are available "off-the-shelf". The GS and ammonia-hydrogen processes require the handling of large quantities of flammable, corrosive and toxic fluids at elevated pressures. Accordingly, in establishing the design and operating standards for plants and equipment using these processes, careful attention to the materials selection and specifications is required to ensure long service life with high safety and reliability factors. The choice of scale is primarily a function of economics and need. Thus, most of the equipment items would be prepared according to the requirements of the customer.

Finally, it should be noted that, in both the GS and the ammonia-hydrogen exchange processes, items of equipment which individually are not especially designed or prepared for heavy water production can be assembled into systems which are especially designed or prepared for producing heavy water. The catalyst production

system used in the ammonia-hydrogen exchange process and water distillation systems used for the final concentration of heavy water to reactor-grade in either process are examples of such systems.

The items of equipment which are especially designed or prepared for the production of heavy water utilizing either the water-hydrogen sulphide exchange process or the ammonia-hydrogen exchange process include the following:

#### 6.1. Water - Hydrogen Sulphide Exchange Towers

Exchange towers fabricated from fine carbon steel (such as ASTM A516) with diameters of 6 m (20 ft) to 9 m (30 ft), capable of operating at pressures greater than or equal to 2 MPa (300 psi) and with a corrosion allowance of 6 mm or greater, especially designed or prepared for heavy water production utilizing the waterhydrogen sulphide exchange process.

#### **6.2.** Blowers and Compressors

Single stage, low head (i.e., 0.2 MPa or 30 psi) centrifugal blowers or compressors for hydrogen-sulphide gas circulation (i.e., gas containing more than 70%  $H_2S$ ) especially designed or prepared for heavy water production utilizing the water-hydrogen sulphide exchange process. These blowers or compressors have a throughput capacity greater than or equal to 56 m³/second (120,000 SCFM) while operating at pressures greater than or equal to 1.8 MPa (260 psi) suction and have seals designed for wet  $H_2S$  service.

#### **6.3.** Ammonia-Hydrogen Exchange Towers

Ammonia-hydrogen exchange towers greater than or equal to 35 m (114.3 ft) in height with diameters of 1.5 m (4.9 ft) to 2.5 m (8.2 ft) capable of operating at pressures greater than 15 MPa (2225 psi) especially designed or prepared for heavy water production utilizing the ammonia-hydrogen exchange process. These towers also have at least one flanged, axial opening of the same diameter as the cylindrical part through which the tower internals can be inserted or withdrawn.

#### **6.4.** Tower Internals and Stage Pumps

Tower internals and stage pumps especially designed or prepared for towers for heavy water production utilizing the ammonia-hydrogen exchange process. Tower internals include especially designed stage contactors which promote intimate gas/liquid contact. Stage pumps include especially designed submersible pumps for circulation of liquid ammonia within a contacting stage internal to the stage towers.

#### 6.5. Ammonia Crackers

Ammonia crackers with operating pressures greater than or equal to 3 MPa (450 psi) especially designed or prepared for heavy water production utilizing the ammoniahydrogen exchange process.

#### 6.6. Infrared Absorption Analyzers

Infrared absorption analyzers capable of "on-line" hydrogen/deuterium ratio analysis where deuterium concentrations are equal to or greater than 90%.

#### 6.7. Catalytic Burners

Catalytic burners for the conversion of enriched deuterium gas into heavy water especially designed or prepared for heavy water production utilizing the ammoniahydrogen exchange process.

#### 6.8. Complete heavy water upgrade systems or columns therefor

Complete heavy water upgrade systems, or columns therefor, especially designed or prepared for the upgrade of heavy water to reactor-grade deuterium concentration.

#### **EXPLANATORY NOTE**

These systems, which usually employ water distillation to separate heavy water from light water, are especially designed or prepared to produce reactor-grade heavy water (i.e., typically 99.75% deuterium oxide) from heavy water feedstock of lesser concentration.

# 7. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in sections 4 and 5 respectively, and equipment especially designed or prepared therefor

#### **EXPORTS**

The export of the whole set of major items within this boundary will take place only in accordance with the procedures of the Guidelines. All of the plants, systems, and especially designed or prepared equipment within this boundary can be used for the processing, production, or use of special fissionable material.

# 7.1. Plants for the conversion of uranium and equipment especially designed or prepared therefor

#### INTRODUCTORY NOTE

Uranium conversion plants and systems may perform one or more transformations from one uranium chemical species to another, including: conversion of uranium ore concentrates to UO<sub>3</sub>, conversion of UO<sub>3</sub> to UO<sub>2</sub>, conversion of uranium oxides to UF<sub>4</sub>, UF<sub>6</sub>, or UCl<sub>4</sub>, conversion of UF<sub>4</sub> to UF<sub>6</sub>, conversion of UF<sub>6</sub> to UF<sub>4</sub>, conversion of UF<sub>4</sub> to uranium metal, and conversion of uranium fluorides to UO2. Many of the key equipment items for uranium conversion plants are common to several segments of the chemical process industry. For example, the types of equipment employed in these processes may include: furnaces, rotary kilns, fluidized bed reactors, flame tower reactors, liquid centrifuges, distillation columns and liquid-liquid extraction columns. However, few of the items are available "off-the-shelf"; most would be prepared according to the requirements and specifications of the customer. In some instances, special design and construction considerations are required to address the corrosive properties of some of the chemicals handled (HF, F<sub>2</sub>, CIF<sub>3</sub>, and uranium fluorides) as well as nuclear criticality concerns. Finally, it should be noted that, in all of the uranium conversion processes, items of equipment which individually are not especially designed or prepared for uranium conversion can be assembled into systems which are especially designed or prepared for use in uranium conversion.

# 7.1.1. Especially designed or prepared systems for the conversion of uranium ore concentrates to $UO_3$

#### **EXPLANATORY NOTE**

Conversion of uranium ore concentrates to UO<sub>3</sub> can be performed by first dissolving the ore in nitric acid and extracting purified uranyl nitrate using a solvent such as tributyl phosphate. Next, the uranyl nitrate is converted to UO<sub>3</sub> either by concentration and denitration or by neutralization with gaseous ammonia to produce ammounium diuranate with subsequent filtering, drying, and calcining.

#### 7.1.2. Especially designed or prepared systems for the conversion of $UO_3$ to $UF_6$

#### **EXPLANATORY NOTE**

Conversion of UO<sub>3</sub> to UF<sub>6</sub> can be performed directly by fluorination. The process requires a source of fluorine gas or chlorine trifluoride.

#### 7.1.3. Especially designed or prepared systems for the conversion of UO<sub>3</sub> to UO<sub>2</sub>

#### **EXPLANATORY NOTE**

Conversion of UO<sub>3</sub> to UO<sub>2</sub> can be performed through reduction of UO<sub>3</sub> with cracked ammonia gas or hydrogen.

#### 7.1.4. Especially designed or prepared systems for the conversion of UO<sub>2</sub> to UF<sub>4</sub>

#### **EXPLANATORY NOTE**

Conversion of UO<sub>2</sub> to UF<sub>4</sub> can be performed by reacting UO<sub>2</sub> with hydrogen fluoride gas (HF) at 300-500°C.

#### 7.1.5. Especially designed or prepared systems for the conversion of UF<sub>4</sub> to UF<sub>6</sub>

#### **EXPLANATORY NOTE**

Conversion of UF<sub>4</sub> to UF<sub>6</sub> is performed by exothermic reaction with fluorine in a tower reactor. UF<sub>6</sub> is condensed from the hot effluent gases by passing the effluent stream through a cold trap cooled to  $-10^{\circ}$ C. The process requires a source of fluorine gas.

#### 7.1.6. Especially designed or prepared systems for the conversion of UF<sub>4</sub> to U metal

#### **EXPLANATORY NOTE**

Conversion of UF<sub>4</sub> to U metal is performed by reduction with magnesium (large batches) or calcium (small batches). The reaction is carried out at temperatures above the melting point of uranium (1130  $^{\circ}$ C).

#### 7.1.7. Especially designed or prepared systems for the conversion of UF<sub>6</sub> to UO<sub>2</sub>

#### **EXPLANATORY NOTE**

Conversion of UF $_6$  to UO $_2$  can be performed by one of three processes. In the first, UF $_6$  is reduced and hydrolyzed to UO $_2$  using hydrogen and steam. In the second, UF $_6$  is hydrolyzed by solution in water, ammonia is added to precipitate ammonium diuranate, and the diuranate is reduced to UO $_2$  with hydrogen at 820°C. In the third process, gaseous UF $_6$ , CO $_2$ , and NH $_3$  are combined in water, precipitating ammonium uranyl carbonate. The ammonium uranyl carbonate is combined with steam and hydrogen at 500-600°C to yield UO $_2$ .

UF<sub>6</sub> to UO<sub>2</sub> conversion is often performed as the first stage of a fuel fabrication plant.

#### 7.1.8. Especially designed or prepared systems for the conversion of UF<sub>6</sub> to UF<sub>4</sub>

#### **EXPLANATORY NOTE**

Conversion of UF<sub>6</sub> to UF<sub>4</sub> is performed by reduction with hydrogen.

#### 7.1.9. Especially designed or prepared systems for the conversion of UO<sub>2</sub> to UCl<sub>4</sub>

#### **EXPLANATORY NOTE**

Conversion of UO<sub>2</sub> to UCl<sub>4</sub> can be performed by one of two processes. In the first, UO<sub>2</sub> is reacted with carbon tetrachloride (CCl<sub>4</sub>) at approximately 400°C. In the second, UO<sub>2</sub> is reacted at approximately 700°C in the presence of carbon black (CAS 1333-86-4), carbon monoxide, and chlorine to yield UCl<sub>4</sub>.

# 7.2. Plants for the conversion of plutonium and equipment especially designed or prepared therefor

#### INTRODUCTORY NOTE

Plutonium conversion plants and systems perform one or more transformations from one plutonium chemical species to another, including: conversion of plutonium nitrate to PuO<sub>2</sub>, conversion of PuO<sub>2</sub> to PuF<sub>4</sub>, and conversion of PuF<sub>4</sub> to plutonium metal. Plutonium conversion plants are usually associated with reprocessing facilities, but may also be associated with plutonium fuel fabrication facilities. Many of the key equipment items for plutonium conversion plants are common to several segments of the chemical process industry. For example, the types of equipment employed in these processes may include: furnaces, rotary kilns, fluidized bed reactors, flame tower reactors, liquid centrifuges, distillation columns and liquid-liquid extraction columns. Hot cells, glove boxes and remote manipulators may also be required. However, few of the items are available "off-the-shelf"; most would be prepared according to the requirements and specifications of the customer. Particular care in designing for the special radiological, toxicity and criticality hazards associated with plutonium is essential. In some instances, special design and construction considerations are required to address the corrosive properties of some of the chemicals handled (e.g. HF). Finally, it should be noted that, for all plutonium conversion processes, items of equipment which individually are not especially designed or prepared for plutonium conversion can be assembled into systems which are especially designed or prepared for use in plutonium conversion.

# 7.2.1. Especially designed or prepared systems for the conversion of plutonium nitrate to oxide

#### **EXPLANATORY NOTE**

The main functions involved in this process are: process feed storage and adjustment, precipitation and solid/liquor separation, calcination, product handling, ventilation, waste management, and process control. The process systems are particularly adapted

so as to avoid criticality and radiation effects and to minimize toxicity hazards. In most reprocessing facilities, this process involves the conversion of plutonium nitrate to plutonium dioxide. Other processes can involve the precipitation of plutonium oxalate or plutonium peroxide.

#### 7.2.2. Especially designed or prepared systems for plutonium metal production

#### **EXPLANATORY NOTE**

This process usually involves the fluorination of plutonium dioxide, normally with highly corrosive hydrogen fluoride, to produce plutonium fluoride which is subsequently reduced using high purity calcium metal to produce metallic plutonium and a calcium fluoride slag. The main functions involved in this process are fluorination (e.g. involving equipment fabricated or lined with a precious metal), metal reduction (e.g. employing ceramic crucibles), slag recovery, product handling, ventilation, waste management and process control. The process systems are particularly adapted so as to avoid criticality and radiation effects and to minimize toxicity hazards. Other processes include the fluorination of plutonium oxalate or plutonium peroxide followed by a reduction to metal.

#### ANNEX C

#### CRITERIA FOR LEVELS OF PHYSICAL PROTECTION

- 1. The purpose of physical protection of nuclear materials is to prevent unauthorized use and handling of these materials. Paragraph 3(a) of the Guidelines document calls for agreement among suppliers on the levels of protection to be ensured in relation to the type of materials, and equipment and facilities containing these materials, taking account of international recommendations.
- 2. Paragraph 3(b) of the Guidelines document states that implementation of measures of physical protection in the recipient country is the responsibility of the Government of that country. However, the levels of physical protection on which these measures have to be based should be the subject of an agreement between supplier and recipient. In this context these requirements should apply to all States.
- 3. The document INFCIRC/225 of the International Atomic Energy Agency entitled "The Physical Protection of Nuclear Material" and similar documents which from time to time are prepared by international groups of experts and updated as appropriate to account for changes in the state of the art and state of knowledge with regard to physical protection of nuclear material are a useful basis for guiding recipient States in designing a system of physical protection measures and procedures.
- 4. The categorization of nuclear material presented in the attached table or as it may be updated from time to time by mutual agreement of suppliers shall serve as the agreed basis for designating specific levels of physical protection in relation to the type of materials, and equipment and facilities containing these materials, pursuant to paragraph 3(a) and 3(b) of the Guidelines document.
- 5. The agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as follows:

#### **CATEGORY III**

Use and Storage within an area to which access in controlled.

**Transportation** under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

#### **CATEGORY II**

**Use and Storage** within a protected area to which access is controlled, i.e., an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

**Transportation** under special precautions including prior arrangements among sender, recipient, and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

#### **CATEGORY I**

Materials in this category shall be protected with highly reliable systems against unauthorized use as follows:

**Use and storage** within a highly protected area, i.e., a protected area as defined for Category II above, to which, in addition, access is restricted to person whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

**Transportation** under special precautions as identified above for transportation of Category II and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

6. Suppliers should request identification by recipients of those agencies or authorities having responsibility for ensuring that levels of protection are adequately met and having responsibility for internally co-ordinating response/recovery operations in the event of unauthorized use or handling of protected materials. Suppliers and recipients should also designate points of contact within their national authorities to co-operate on matters of out-of-country transportation and other matters of mutual concern.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

			Category	
Material	Form	I	II	III
1. Plutonium*[a]	Unirradiated*[ <b>b</b> ]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <b>*[c]</b>
2. Uranium-235	Unirradiated*[b]			
		5 kg or	Less than 5 kg but more than 1 kg	1 kg or less*[ $\mathbf{c}$ ]
	- uranium enriched to $20\% 235 \mathrm{U}$ or more	more		
	- uranium enriched to $10\%~235\mathrm{U}$ but less than $20\%$	1	10 kg or more	Less than 10
				$kg^*[c]$
	- uranium enriched above natural, but less than 10% $235 \mathrm{U*[d]}$	1		10 kg or more
3. Uranium-233	Unirradiated*[b]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <b>*[c]</b>
4. Irradiated fuel			Depleted or natural uranium, thorium or low-enriched fuel (less than 10% fissile content)*[e][f]	

<sup>[</sup>a] As identified in the Trigger List.

<sup>[</sup>b] Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metre unshielded.

<sup>[</sup>c] Less than a radiologically significant quantity should be exempted.

- Natural uranium, depleted uranium, and thorium and quantities of uranium enriched to less than 10% not falling in Category III should be protected in accordance with prudent management practice. **[**p]
- Although this level of protection is recommended, it would be open to States, upon evaluation of the specific circumstances, to assign a different category of physical protection. **e**
- Other fuel which by virtue of its original fissile material content is classified as Category I or II before irradiation may be reduced one category levels while the radiation level from the fuel exceed 100 rads/hour at tone metre unshielded.

# Comparison Table of Changes to the Guidelines for Nuclear Transfers (INFCIRC/254/Part 1)

Old (Revision 10)	New (Revision 11)
SUPPORTING ACTIVITIES	SUPPORTING ACTIVITIES
:	Support for access to nuclear material for peaceful uses
	these guidelines, facilitate access to nuclear material for the peaceful uses of nuclear energy, and encourage, within the scope of Article IV of the NPT, recipients to take the fullest possible advantage of the international commercial market and other available international mechanisms for nuclear fuel services while not undermining the global fuel market.
Physical security	Physical security
12. Suppliers should promote international co-operation in the areas of physical security through the exchange of physical security information, protection of nuclear materials in transit, and recovery of stolen nuclear materials and equipment. Suppliers should promote broadest adherence to the respective international instruments, inter alia, to the Convention on the Physical Protection of Nuclear Material, as well as implementation of INFCIRC/225, as amended from time to time. Suppliers recognize the importance of these activities and other relevant IAEA activities in preventing the proliferation of nuclear weapons and countering the threat of nuclear terrorism.	areas of physical security through the exchange of physical security information, protection of nuclear materials in transit, and recovery of stolen nuclear materials and equipment. Suppliers should promote broadest adherence to the respective international instruments, inter alia, to the Convention on the Physical Protection of Nuclear Material, as well as implementation of INFCIRC/225, as amended from time to time. Suppliers recognize the importance of these activities and other relevant IAEA activities in preventing the proliferation of nuclear weapons and countering the threat of nuclear terrorism.

	Change for affacting IAEA actions as
Support to effective talka safeguaius	Support for effective there safeguatus
13. Suppliers should make special efforts in support of effective implementation of IAEA safeguards. Suppliers should also support the Agency's efforts to assist Member States in the improvement of their national systems of accounting and control of nuclear material and to increase the technical effectiveness of safeguards.	implementation of IAEA safeguards. Suppliers should also support the Agency's efforts to assist Member States in the improvement of their national systems of accounting and control of nuclear material and to increase the technical effectiveness of safeguards.
Similarly, they should make every effort to support the IAEA in increasing further the adequacy of safeguards in the light of technical developments and the rapidly growing number of nuclear facilities, and to support appropriate initiatives aimed at improving the effectiveness of IAEA safeguards.	Similarly, they should make every effort to support the IAEA in increasing further the adequacy of safeguards in the light of technical developments and the rapidly growing number of nuclear facilities, and to support appropriate initiatives aimed at improving the effectiveness of IAEA safeguards.
e the designers and makers of struct them in such a way as to of safeguards and to enhance also into consideration the risk of should promote protection of of trigger list installations, and ssity of doing so. Suppliers also of including safety and nongring and construction of trigger	L5. Suppliers should encourage the designers and makers of trigger list facilities to construct them in such a way as to facilitate the application of safeguards and to enhance physical protection, taking also into consideration the risk of terrorist attacks. Suppliers should promote protection of information on the design of trigger list installations, and stress to recipients the necessity of doing so. Suppliers also recognize the importance of including safety and non-proliferation features in designing and construction of trigger list facilities.
Export Controls E	Export Controls

15. Suppliers should, where appropriate, stress to recipients the need to subject transferred trigger list items and related technology and trigger list items derived from facilities originally transferred by the supplier or with the help of equipment or technology originally transferred by the supplier to export controls as outlined in UNSC Resolution 1540. Suppliers are encouraged to offer assistance to recipients to fulfil their respective obligations under UNSC Resolution 1540 where appropriate and feasible.

16. Suppliers should, where appropriate, stress to recipients the need to subject transferred trigger list items and related technology and trigger list items derived from facilities originally transferred by the supplier or with the help of equipment or technology originally transferred by the supplier to export controls as outlined in UNSC Resolution 1540. Suppliers are encouraged to offer assistance to recipients to fulfil their respective obligations under UNSC Resolution 1540 where appropriate and feasible.

Consultations	
Consultations	

- regular channels on matters connected with the implementation of these Guidelines.
- (b) Suppliers should consult, as each deems appropriate, with to ensure that any transfer does not contribute to risks of other governments concerned on specific sensitive cases, conflict or instability.
- (c) Without prejudice to sub-paragraphs (d) to (f) below:
- promptly through diplomatic channels in order to determine and assess the reality and extent of the alleged violation. Suppliers are also encouraged to In the event that one or more suppliers believe that there has been a violation of supplier/recipient understanding resulting from these Guidelines, particularly in the case of an explosion of a nuclear device, or illegal termination or violation of IAEA safeguards by a recipient, suppliers should consult consult where nuclear material or nuclear fuel cycles activity undeclared to the IAEA or a nuclear explosive activity is revealed.
- Pending the early outcome of such consultations, suppliers will not act in a manner that could prejudice any measure that may be adopted by other suppliers concerning their current contacts with that recipient. Each supplier should also consider suspending transfers ı

- 16. (a) Suppliers should maintain contact and consult through | 17. (a) Suppliers should maintain contact and consult through regular channels on matters connected with the Implementation of these Guidelines
- to ensure that any transfer does not contribute to risks of (b) Suppliers should consult, as each deems appropriate, with other governments concerned on specific sensitive cases, conflict or instability.
- (c) Without prejudice to sub-paragraphs (d) to (f) below:
- promptly through diplomatic channels in order to determine and assess the reality and extent of the alleged violation. Suppliers are also encouraged to consult where nuclear material or nuclear fuel cycles particularly in the case of an explosion of a nuclear safeguards by a recipient, suppliers should consult activity undeclared to the IAEA or a nuclear explosive In the event that one or more suppliers believe that there has been a violation of supplier/recipient understanding resulting from these Guidelines, device, or illegal termination or violation of IAEA activity is revealed.
- suppliers will not act in a manner that could prejudice any measure that may be adopted by other suppliers concerning their current contacts with that recipient. Each supplier should also consider suspending transfers Pending the early outcome of such consultations,

of Trigger List items while consultations under 16(c) are ongoing, pending supplier agreement on an appropriate response.

- Upon the findings of such consultations, the suppliers, bearing in mind Article XII of the IAEA Statute, should agree on an appropriate response and possible action, which could include the termination of nuclear transfers to that recipient.
- (d) If a recipient is reported by the IAEA to be in breach of its obligation to comply with

its safeguards agreement, suppliers should consider the suspension of the transfer of

Trigger List items to that State whilst it is under investigation by the IAEA. For the

purposes of this paragraph, "breach" refers only to serious breaches of proliferation concern;

(e) Suppliers support the suspension of transfers of Trigger List items to States that violate

their nuclear non-proliferation and safeguards obligations, recognising that the

responsibility and authority for such decisions rests with national governments or the

United Nations Security Council. In particular, this is applicable in situations where the IAEA Board of Governors takes any of the following actions:

- finds, under Article XII.C of the Statute, that there has been non-compliance in the recipient, or requires a

of Trigger List items while consultations under 16(c) are ongoing, pending supplier agreement on an appropriate response.

- Upon the findings of such consultations, the suppliers, bearing in mind Article XII of the IAEA Statute, should agree on an appropriate response and possible action, which could include the termination of nuclear transfers to that recipient.
- (d) If a recipient is reported by the IAEA to be in breach of its obligation to comply with

its safeguards agreement, suppliers should consider the suspension of the transfer of

Trigger List items to that State whilst it is under investigation by the IAEA. For the

purposes of this paragraph, "breach" refers only to serious breaches of proliferation concern;

(e) Suppliers support the suspension of transfers of Trigger List items to States that violate

their nuclear non-proliferation and safeguards obligations, recognising that the responsibility and authority for such decisions rests with

national governments or the United Nations Security Council. In particular, this is applicable in situations where the IAEA Board of

Governors takes any of the following actions:

- finds, under Article XII.C of the Statute, that there has

been non-compliance in the recipient, or requires a

recipient to take specific actions to bring itself into compliance with its safeguards obligations;	recipient to take specific actions to bring itself into compliance with its safeguards obligations;
<ul> <li>Decides that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded, including situations where actions taken by a recipient have made the IAEA unable to carry out its safeguards mission in that State.</li> </ul>	<ul> <li>Decides that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded, including situations where actions taken by a recipient have made the IAEA unable to carry out its safeguards mission in that State.</li> </ul>
An extraordinary Plenary meeting will take place within one month of the Board of Governors' action, at which suppliers will review the situation, compare national policies and decide on an appropriate response.	An extraordinary Plenary meeting will take place within one month of the Board of Governors' action, at which suppliers will review the situation, compare national policies and decide on an appropriate response.
<ul><li>(f) The provisions of subparagraph (e) above do not apply to transfers under paragraph 4</li><li>(b) of the Guidelines.</li></ul>	<ul><li>(f) The provisions of subparagraph (e) above do not apply to transfers under paragraph 4</li><li>(b) of the Guidelines.</li></ul>
17. Unanimous consent is required for any changes in these Guidelines, including any which might result from the reconsideration mentioned in paragraph 5.	18. Unanimous consent is required for any changes in these Guidelines, including any which might result from the reconsideration mentioned in paragraph 5.



#### Information Circular

INFCIRC/254/Rev.8/Part 2a

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### Communication Received from Certain Member States Regarding Guidelines for Transfers of Nuclear-related Dual-use Equipment, Material, Software and Related Technology

- 1. The Agency has received a Note Verbale from the Permanent Mission of Hungary, dated 14 June 2010, in which it requests that the Agency circulate to all Member States a letter of 7 May 2010 from the Chairman of the Nuclear Suppliers Group, Ambassador Ms. Györgyi Martin Zanathy, to the Director General, on behalf of the Governments of Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxemburg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America, providing further information on those Governments' Guidelines for Nuclear Transfers.
- 2. In the light of the wish expressed in the above-mentioned Note Verbale, the text of the Note Verbale, as well as the letter and attachments thereto, are hereby reproduced for the information of all Member States.

<sup>&</sup>lt;sup>a</sup> INFCIRC/254/Part 1, as amended, contains Guidelines for the export of nuclear material, equipment and technology.

<sup>&</sup>lt;sup>1</sup> The European Commission participates as an observer.



PERMANENT MISSION OF THE REPUBLIC OF HUNGARY TO THE UNITED NATIONS OFFICE AND OTHER INTERNATIONAL ORGANIZATIONS IN VIENNA

Ref. No.:

39/2010

The Permanent Mission of the Republic of Hungary to the United Nations Office and Other International Organizations in Vienna presents its compliments to the International Atomic Energy Agency (IAEA) and has the honour to forward the attached letter, dated 07 May 2010 by Ambassador Györgyi Martin Zanathy, Chairperson of the Nuclear Suppliers Group (NSG), regarding the agreed amendments to document INFCIRC/254/Rev.7/Part 2, including its Annexes, to be conveyed to the Director General of the IAEA, Mr. Yukiya Amano.

The Permanent Mission of the Republic of Hungary to the United Nations Office and Other International Organizations in Vienna hereby requests that the abovementioned amendments to document INFCIRC/254/Rev.7/Part 2, including its Annexes be circulated among the Member States of the IAEA.

The Permanent Mission of the Republic of Hungary to the United Nations Office and Other International Organizations in Vienna avails itself of this opportunity to renew to the IAEA the assurances of its highest consideration.

Vienna, 14 June 2010

International Atomic Energy Agency

Vienna



#### CHAIRMAN OF THE NUCLEAR SUPPLIERS GROUP

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Tel: +36 1 458 1135 Fax: +36 1 457 5039 E-mail: bpnf@kum.hu

Budapest, 07 May 2010

On behalf of the Governments of Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxemburg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and United States<sup>1</sup>, I have the honour to refer to all previous relevant communications from these Governments concerning their decisions to act in accordance with the Guidelines for Nuclear Transfers currently published as document INFCIRC/254/Rev.7/Part 2, including its Annexes.

These Governments have decided to amend the Part 2 Guidelines, in order to more clearly define the standard of implementation that all Participating Governments of the Nuclear Suppliers Group (NSG) regard as essential for the fulfillment of the Guidelines, as follows:

- NSG Part 2 entry 1.B.3.a has been modified to implement the most up-to-date international standard, International Organization for Standardization (ISO) 10360-2(2009). The new text retains a one-dimensional length measurement error parameter and the same value for that error parameter for establishing export control thresholds. This control is based on the tested actual performance of the machine rather than the manufacturer's specification. Furthermore, controls on two-dimensional machines are retained. Thus, the scope of nuclear proliferation controls on dimensional inspection machines of 1.B.3.a is unchanged by the new text.
- The existing technical note 1 for NSG Part 2 entry 1.B.3.d. has been deleted since it refers to the deleted VDI/VDE standard. Existing technical note 2 is now the new technical note 1.

<sup>&</sup>lt;sup>1</sup> The European Commission participates as an observer.

In the interest of clarity, the complete text of the modified Guidelines and its Annexes is reproduced in the attachment, as well as a "Comparison Table of Changes to the Guidelines for Nuclear Transfers (INFCIRC/254/Rev.7/Part 2)."

These Governments have decided to act in accordance with the Guidelines so revised and to implement them in accordance with their respective national legislation.

In reaching this decision, these Governments are fully aware of the need to contribute to economic development while avoiding contributing in any way to a proliferation of nuclear weapons or other nuclear explosive devices or the diversion to acts of nuclear terrorism, and of the need to separate the issue of non-proliferation or non-diversion assurances from that of commercial competition.

Insofar as trade within the European Union is concerned, the Governments that are Member States of the European Union will implement this decision in the light of their commitments as Member States of the Union.

I would be grateful if you would bring this Note and its attachment, INFCIRC/254/Rev.8/Part 2 and the Comparison Table, to the attention of all Member States of the IAEA.

On behalf of the above Governments I wish to avail myself of this opportunity to renew to you the assurances of the Governments' highest consideration.

Yours sincerely,

H.E. Ms. Györgyi Martin Zanathy Chairman of the Nuclear Suppliers Group

H.E. Mr. Yukiya AMANO Director General International Atomic Energy Agency Vienna

#### GUIDELINES FOR TRANSFERS OF NUCLEAR-RELATED DUAL-USE EQUIPMENT, MATERIALS, SOFTWARE, AND RELATED TECHNOLOGY

#### **OBJECTIVE**

1. With the objective of averting the proliferation of nuclear weapons and preventing acts of nuclear terrorism, suppliers have had under consideration procedures in relation to the transfer of certain equipment, materials, software, and related technology that could make a major contribution to a "nuclear explosive activity," an "unsafeguarded nuclear fuel-cycle activity" or acts of nuclear terrorism. In this connection, suppliers have agreed on the following principles, common definitions, and an export control list of equipment, materials, software, and related technology. The Guidelines are not designed to impede international co-operation as long as such co-operation will not contribute to a nuclear explosive activity, an unsafeguarded nuclear fuel-cycle activity or acts of nuclear terrorism. Suppliers intend to implement the Guidelines in accordance with national legislation and relevant international commitments.

#### **BASIC PRINCIPLE**

- 2. Suppliers should not authorize transfers of equipment, materials, software, or related technology identified in the Annex:
  - for use in a non-nuclear-weapon state in a nuclear explosive activity or an unsafeguarded nuclear fuel-cycle activity, or
  - in general, when there is an unacceptable risk of diversion to such an activity, or when the transfers are contrary to the objective of averting the proliferation of nuclear weapons, or
  - when there is an unacceptable risk of diversion to acts of nuclear terrorism.

#### **EXPLANATION OF TERMS**

- 3. (a) "Nuclear explosive activity" includes research on or development, design, manufacture, construction, testing or maintenance of any nuclear explosive device or components or subsystems of such a device.
  - (b) "Unsafeguarded nuclear fuel-cycle activity" includes research on or development, design, manufacture, construction, operation or maintenance of any reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, plant for the separation of isotopes of source or special fissionable material, or separate storage installation, where there is no obligation to accept International Atomic Energy Agency (IAEA) safeguards at the relevant facility or installation, existing or future, when it contains any source or special fissionable material; or of any heavy water production plant where there is no obligation to accept IAEA safeguards on any nuclear material produced by or used in connection with any heavy water produced therefrom; or where any such obligation is not met.

#### ESTABLISHMENT OF EXPORT LICENSING PROCEDURES

- 4. Suppliers should have in place legal measures to ensure the effective implementation of the Guidelines, including export licensing regulations, enforcement measures, and penalties for violations. In considering whether to authorize transfers, suppliers should exercise prudence in order to carry out the Basic Principle and should take relevant factors into account, including:
  - (a) Whether the recipient state is a party to the Nuclear Non-Proliferation Treaty (NPT) or to the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco), or to a similar international legally-binding nuclear non-proliferation agreement, and has an IAEA safeguards agreement in force applicable to all its peaceful nuclear activities;
  - (b) Whether any recipient state that is not party to the NPT, Treaty of Tlatelolco, or a similar international legally-binding nuclear non-proliferation agreement has any facilities or installations listed in paragraph 3(b) above that are operational or being designed or constructed that are not, or will not be, subject to IAEA safeguards;
  - (c) Whether the equipment, materials, software, or related technology to be transferred is appropriate for the stated end-use and whether that stated end-use is appropriate for the end-user;
  - (d) Whether the equipment, materials, software, or related technology to be transferred is to be used in research on or development, design, manufacture, construction, operation, or maintenance of any reprocessing or enrichment facility;
  - (e) Whether governmental actions, statements, and policies of the recipient state are supportive of nuclear non-proliferation and whether the recipient state is in compliance with its international obligations in the field of non-proliferation;
  - (f) Whether the recipients have been engaged in clandestine or illegal procurement activities; and
  - (g) Whether a transfer has not been authorized to the end-user or whether the end-user has diverted for purposes inconsistent with the Guidelines any transfer previously authorized.
  - (h) Whether there is reason to believe that there is a risk of diversion to acts of nuclear terrorism.
  - (i) Whether there is a risk of retransfers of equipment, material, software, or related technology identified in the Annex or of transfers of any replica thereof contrary to the Basic Principle, as a result of a failure by the recipient State to develop and maintain appropriate, effective national export and transshipment controls, as identified by UNSC Resolution 1540.
- 5. Suppliers should ensure that their national legislation requires an authorisation for the transfer of items not listed in the Annex if the items in question are or may be intended, in their entirety or in part, for use in connection with a "nuclear explosive activity."

Suppliers will implement such an authorisation requirement in accordance with their domestic licensing practices.

Suppliers are encouraged to share information on "catch all" denials.

### **CONDITIONS FOR TRANSFERS**

- 6. In the process of determining that the transfer will not pose any unacceptable risk of diversion, in accordance with the Basic Principle and to meet the objectives of the Guidelines, the supplier should obtain, before authorizing the transfer and in a manner consistent with its national law and practices, the following:
  - (a) a statement from the end-user specifying the uses and end-use locations of the proposed transfers; and
  - (b) an assurance explicitly stating that the proposed transfer or any replica thereof will not be used in any nuclear explosive activity or unsafeguarded nuclear fuel-cycle activity.

# **CONSENT RIGHTS OVER RETRANSFERS**

7. Before authorizing the transfer of equipment, materials, software, or related technology identified in the Annex to a country not adhering to the Guidelines, suppliers should obtain assurances that their consent will be secured, in a manner consistent with their national law and practices, prior to any retransfer to a third country of the equipment, materials, software, or related technology, or any replica thereof.

# **CONCLUDING PROVISIONS**

- 8. The supplier reserves to itself discretion as to the application of the Guidelines to other items of significance in addition to those identified in the Annex, and as to the application of other conditions for transfer that it may consider necessary in addition to those provided for in paragraph 5 of the Guidelines.
- 9. In furtherance of the effective implementation of the Guidelines, suppliers should, as necessary and appropriate, exchange relevant information and consult with other states adhering to the Guidelines.
- 10. In the interest of international peace and security, the adherence of all states to the Guidelines would be welcome.

# **ANNEX**

# LIST OF NUCLEAR-RELATED DUAL-USE EQUIPMENT, MATERIALS, SOFTWARE, AND RELATED TECHNOLOGY

### **ANNEX**

Note: The International System of Units (SI) is used in this Annex. In all cases the physical quantity defined in SI units should be considered the official recommended control value. However, some machine tool parameters are given in their customary units, which are not SI.

Commonly used abbreviations (and their prefixes denoting size) in this Annex are as follows:

```
Α
       --- ampere(s)
           becquerel(s)
Bq
^{\circ}C
       --- degree(s) Celsius
       --- chemical abstracts service
CAS
Ci
       --- curie(s)
       --- centimeter(s)
cm
dB
       --- decibel(s)
dBm
        --- decibel referred to 1 milliwatt
           gram(s); also, acceleration of gravity (9.81 m/s2)
GBq
       --- gigabecquerel(s)
GHz
       --- gigahertz
GPa
       --- gigapascal(s)
Gy
           gray
       --- hour(s)
h
Hz
       --- hertz
J
        --- joule(s)
K
       --- kelvin
keV
       --- thousand electron volt(s)
       --- kilogram(s)
kg
       --- kilohertz
kHz
       --- kilonewton(s)
kN
kPa
       --- kilopascal(s)
kV
       --- kilovolt(s)
kW
       --- kilowatt(s)
m
       --- meter(s)
mA
       --- milliampere(s)
MeV
       --- million electron volt(s)
MHz
       --- megahertz
ml
       --- milliliter(s)
       --- millimeter(s)
mm
MPa
       --- megapascal(s)
mPa
       --- millipascal(s)
MW
       --- megawatt(s)
       --- microfarad(s)
μF
μm
       --- micrometer(s)
μs
       --- microsecond(s)
N
       --- newton(s)
       --- nanometer(s)
nm
           nanosecond(s)
ns
           nanohenry(ies)
nΗ
ps
           picosecond(s)
RMS
           root mean square
           revolutions per minute
rpm
       --- second(s)
T
       --- tesla(s)
TIR
           total indicator reading
       --- volt(s)
```

W

--- watt(s)

### **GENERAL NOTE**

The following paragraphs are applied to the List of Nuclear-Related Dual-Use Equipment, Material, Software, and Related Technology.

- 1. The description of any item on the List includes that item in either new or second-hand condition.
- 2. When the description of any item on the List contains no qualifications or specifications, it is regarded as including all varieties of that item. Category captions are only for convenience in reference and do not affect the interpretation of item definitions.
- 3. The object of these controls should not be defeated by the transfer of any non-controlled item (including plants) containing one or more controlled components when the controlled component or components are the principal element of the item and can feasibly be removed or used for other purposes.

Note: In judging whether the controlled component or components are to be considered the principal element, governments should weigh the factors of quantity, value, and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the item being procured.

4. The object of these controls should not be defeated by the transfer of component parts. Each government will take such action as it can to achieve this aim and will continue to seek a workable definition for component parts, which could be used by all the suppliers.

### TECHNOLOGY CONTROLS

The transfer of "technology" is controlled according to the Guidelines and as described in each section of the Annex. "Technology" directly associated with any item in the Annex will be subject to as great a degree of scrutiny and control as will the item itself, to the extent permitted by national legislation.

The approval of any Annex item for export also authorizes the export to the same end user of the minimum "technology" required for the installation, operation, maintenance, and repair of the item.

Note: Controls on "technology" transfer do not apply to information "in the public domain" or to "basic scientific research".

### GENERAL SOFTWARE NOTE

The transfer of "software" is controlled according to the Guidelines and as described in the Annex.

Note: Controls on "software" transfers do not apply to "software" as follows:

- 1. Generally available to the public by being:
  - a. Sold from stock at retail selling points without restriction; and
  - b. Designed for installation by the user without further substantial support by the supplier;

or

2. "In the public domain".

### **DEFINITIONS**

# "Accuracy" --

Usually measured in terms of inaccuracy, defined as the maximum deviation, positive or negative, of an indicated value from an accepted standard or true value.

# "Angular position deviation" --

The maximum difference between angular position and the actual, very accurately measured angular position after the workpiece mount of the table has been turned out of its initial position. (Ref. VDI/VDE 2617 Draft: "Rotary table on coordinate measuring machines")

### "Basic scientific research" --

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena and observable facts, not primarily directed toward a specific practical aim or objective.

# "Contouring control" --

Two or more "numerically controlled" motions operating in accordance with instructions that specify the next required position and the required feed rates to that position. These feed rates are varied in relation to each other so that a desired contour is generated. (Ref. ISO 2806-1980 as amended)

# "Development" --

is related to all phases before "production" such as:

- design
- design research
- design analysis
- design concepts
- assembly and testing of prototypes
- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

"Fibrous or filamentary materials" --

means continuous 'monofilaments', 'yarns', 'rovings', 'tows' or 'tapes'.

# N.B.:

1. 'Filament' or 'monofilament' --

is the smallest increment of fiber, usually several µm in diameter.

2. 'Roving' --

is a bundle (typically 12-120) of approximately parallel 'strands'.

3. 'Strand' --

is a bundle of 'filaments' (typically over 200) arranged approximately parallel.

4. 'Tape' --

is a material constructed of interlaced or unidirectional 'filaments', 'strands', 'rovings', 'tows' or 'yarns', etc., usually preimpregnated with resin.

5. 'Tow' --

is a bundle of 'filaments', usually approximately parallel.

6. 'Yarn' --

is a bundle of twisted 'strands'.

'Filament' --

See "Fibrous or filamentary materials".

"In the public domain" --

"In the public domain", as it applies herein, means "technology" or "software" that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove "technology" or "software" from being "in the public domain".)

"Linearity" --

(Usually measured in terms of non-linearity) is the maximum deviation of the actual characteristic (average of upscale and downscale readings), positive or negative, from a straight line so positioned as to equalize and minimize the maximum deviations.

# "Measurement uncertainty" --

The characteristic parameter which specifies in what range around the output value the correct value of the measurable variable lies with a confidence level of 95%. It includes the uncorrected systematic deviations, the uncorrected backlash, and the random deviations. (Ref. VDI/VDE 2617)

# "Microprogram" --

A sequence of elementary instructions, maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction into an instruction register.

### 'Monofilament' --

See "Fibrous or filamentary materials".

### "Numerical control" --

The automatic control of a process performed by a device that makes use of numeric data usually introduced as the operation is in progress. (Ref. ISO 2382)

# "Positioning accuracy" --

of "numerically controlled" machine tools is to be determined and presented in accordance with Item 1.B.2., in conjunction with the requirements below:

- (a) Test conditions (ISO 230/2 (1988), paragraph 3):
  - (1) For 12 hours before and during measurements, the machine tool and accuracy measuring equipment will be kept at the same ambient temperature. During the premeasurement time, the slides of the machine will be continuously cycled identically to the way they will be cycled during the accuracy measurements;
  - (2) The machine shall be equipped with any mechanical, electronic, or software compensation to be exported with the machine;
  - (3) Accuracy of measuring equipment for the measurements shall be at least four times more accurate than the expected machine tool accuracy;
  - (4) Power supply for slide drives shall be as follows:
    - (i) Line voltage variation shall not be greater than  $\pm$  10% of nominal rated voltage;
    - (ii) Frequency variation shall not be greater than  $\pm 2$  Hz of normal frequency;
    - (iii) Lineouts or interrupted service are not permitted.

- (b) Test Program (paragraph 4):
  - (1) Feed rate (velocity of slides) during measurement shall be the rapid traverse rate;
    - N.B.: In the case of machine tools which generate optical quality surfaces, the feed rate shall be equal to or less than 50 mm per minute;
  - (2) Measurements shall be made in an incremental manner from one limit of the axis travel to the other without returning to the starting position for each move to the target position;
  - (3) Axes not being measured shall be retained at mid-travel during test of an axis.
- (c) Presentation of the test results (paragraph 2):

The results of the measurements must include:

- (1) "positioning accuracy" (A) and
- (2) The mean reversal error (B).

### "Production" --

means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

# "Program" --

A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

### "Resolution" --

The least increment of a measuring device; on digital instruments, the least significant bit. (Ref. ANSI B-89.1.12)

# "Roving" --

See "Fibrous or filamentary materials".

### "Software" --

A collection of one or more "programs" or "microprograms" fixed in any tangible medium of expression.

### 'Strand' --

See "Fibrous or filamentary materials".

# 'Tape" ---

See "Fibrous or filamentary materials".

## "Technical assistance" --

"Technical assistance" may take forms such as: instruction, skills, training, working knowledge, consulting services.

Note: "Technical assistance" may involve transfer of "technical data".

### "Technical data" --

"Technical data" may take forms such as blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

# "Technology" --

means specific information required for the "development", "production", or "use" of any item contained in the List. This information may take the form of "technical data" or "technical assistance".

### "Tow" --

See "Fibrous or filamentary materials".

## "Use" ---

Operation, installation (including on-site installation), maintenance (checking), repair, overhaul, and refurbishing.

# "Yarn" --

See "Fibrous or filamentary materials".

# 1. INDUSTRIAL EQUIPMENT

1.A.	A. EQUIPMENT, ASSEMBLIES AND COMPONENTS		
	1.A.1.	High-density radiation shielding windows	1 – 1
	1.A.2.	Radiation-hardened TV cameras, or lenses therefor	1 – 1
	1.A.3.	Robots, end-effectors' and control units	1 – 1
	1.A.4.	Remote manipulators	1 – 3
1.B.	B. TEST AND PRODUCTION EQUIPMENT		
	1.B.1.	Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels	1 – 3
	1.B.2.	Machine tools	1 - 4
	1.B.3.	Dimensional inspection machines, instruments, or systems	1 – 6
	1.B.4.	Controlled atmosphere induction furnaces, and power supplies therefor	1 - 7
	1.B.5.	Isostatic presses, and related equipment	1 - 7
	1.B.6.	Vibration test systems, equipment, and components	1 - 8
	1.B.7.	Vacuum or other controlled atmosphere metallurgical melting and casting furnaces and related equipment	1 – 8
1.C.	MA	TERIALS	1 – 9
1.D.	SOFTWARE		1 – 9
1.E.	TECHNOLOGY		1 - 9

2.	МАТ	ΓERIALS		
	2.A.	EQUIPMENT, ASSEMBLIES AND COMPONENTS		
		2.A.1.	Crucibles made of materials resistant to liquid actinide metals	2 - 1
		2.A.2.	Platinized catalysts	2 – 1
		2.A.3.	Composite structures in the forms of tubes	2 - 2
	2.B.	B. TEST AND PRODUCTION EQUIPMENT		
		2.B.1.	Tritium facilities or plants, and equipment therefor	2 - 2
		2.B.2.	Lithium isotope separation facilities or plants, and equipment therefor	2 - 2
	2.C.	C. MATERIALS		
		2.C.1.	Aluminium	2 - 2
		2.C.2.	Beryllium	2 - 3
		2.C.3.	Bismuth	2 - 3
		2.C.4.	Boron	2 - 3
		2.C.5.	Calcium	2 - 3
		2.C.6.	Chlorine trifluoride	2 - 3
		2.C.7.	Fibrous or filamentary materials, and prepregs	2 - 3
		2.C.8.	Hafnium	2 - 4
		2.C.9.	Lithium	2 - 4
		2.C.10.	Magnesium	2 - 4
		2.C.11.	Maraging steel	2 - 4
		2.C.12.	Radium-226	2 - 4
		2.C.13.	Titanium	2 - 5
		2.C.14.	Tungsten	2 - 5
		2.C.15.	Zirconium	2 - 5
		2.C.16.	Nickel powder and porous nickel metal	2 - 5
		2.C.17.	Tritium	2 – 6
		2.C.18.	Helium-3	2 – 6
		2.C.19.	Alpha-emitting radionuclides	2 - 6
	2.D.	SOF	TWARE	2 – 6

2.E.

TECHNOLOGY

2 - 6

# 3. URANIUM ISOTOPE SEPARATION EQUIPMENT AND COMPONENTS (Other Than Trigger List Items)

3.A.	EQUIPMENT, ASSEMBLIES AND COMPONENTS		
	3.A.1.	Frequency changers or generators	3 – 1
	3.A.2.	Lasers, laser amplifiers and oscillators	3 – 1
	3.A.3.	Valves	3 – 3
	3.A.4.	Superconducting solenoidal electromagnets	3 - 3
	3.A.5.	High-power direct current power supplies	3 - 3
	3.A.6.	High-voltage direct current power supplies	3 - 3
	3.A.7.	Pressure transducers	3 - 4
	3.A.8.	Vacuum pumps	3 - 4
3.B.	TES	ST AND PRODUCTION EQUIPMENT	
	3.B.1.	Electrolytic cells for fluorine production	3 – 4
	3.B.2.	Rotor fabrication or assembly equipment, rotor straightening equipment, bellows-forming mandrels and dies	3 – 4
	3.B.3.	Centrifugal multiplane balancing machines	3 - 5
	3.B.4.	Filament winding machines and related equipment	3 - 5
	3.B.5.	Electromagnetic isotope separators	3 – 6
	3.B.6.	Mass spectrometers	3 – 6
3.C.	MATERIALS		3 – 7
3.D.	SOFTWARE		3 – 7
3.E.	TECHNOLOGY		3 - 7

4.	4. HEAVY WATER PRODUCTION PLANT RELATED EQUIPMENT (Other Than Trigger List Items)			
	4.A.	EQU	JIPMENT, ASSEMBLIES AND COMPONENTS	
		4.A.1.	Specialized packings	4 - 1
		4.A.2.	Pumps	4 – 1
		4.A.3.	Turboexpanders or turboexpander-compressor sets	4 – 1
	4.B.	TES	T AND PRODUCTION EQUIPMENT	
		4.B.1.	Water-hydrogen sulfide exchange tray columns and internal contactors	4 – 1
		4.B.2.	Hydrogen-cryogenic distillation columns	4 - 2
		4.B.3.	Ammonia synthesis converters or synthesis units	4 - 2
	4.C.	MA	ΓERIALS	4 - 2
	4.D.	SOF	TWARE	4 - 2
	4.E.	TEC	HNOLOGY	4 - 2
5.	DEV	ICES	ASUREMENT EQUIPMENT FOR THE DEVELOPMENT OF NUCLEAR EX	KPLOSIVE
5.		ICES EQU	JIPMENT, ASSEMBLIES AND COMPONENTS	
5.	DEV	ICES		XPLOSIVE  5-1
5.	DEV	EQU 5.A.1.	JIPMENT, ASSEMBLIES AND COMPONENTS	
5.	DEV	EQU 5.A.1.	JIPMENT, ASSEMBLIES AND COMPONENTS Photomultiplier tubes	
5.	DEV	EQU 5.A.1. TES	JIPMENT, ASSEMBLIES AND COMPONENTS Photomultiplier tubes T AND PRODUCTION EQUIPMENT	5 – 1
5.	DEV	EQU 5.A.1. TES' 5.B.1.	JIPMENT, ASSEMBLIES AND COMPONENTS Photomultiplier tubes T AND PRODUCTION EQUIPMENT Flash X-ray generators or pulsed electron accelerators	5 – 1 5 – 1
5.	DEV	EQU 5.A.1. TES 5.B.1. 5.B.2.	JIPMENT, ASSEMBLIES AND COMPONENTS Photomultiplier tubes T AND PRODUCTION EQUIPMENT Flash X-ray generators or pulsed electron accelerators Multistage light gas guns or other high-velocity gun systems	5 - 1 $5 - 1$ $5 - 1$
5.	DEV	EQU 5.A.1. TES 5.B.1. 5.B.2. 5.B.3.	JIPMENT, ASSEMBLIES AND COMPONENTS Photomultiplier tubes  T AND PRODUCTION EQUIPMENT Flash X-ray generators or pulsed electron accelerators Multistage light gas guns or other high-velocity gun systems Mechanical rotating mirror cameras Electronic streak cameras, electronic framing cameras, tubes and	5-1 $5-1$ $5-1$ $5-2$
5.	DEV	EQU 5.A.1. TES 5.B.1. 5.B.2. 5.B.3. 5.B.4.	Photomultiplier tubes  T AND PRODUCTION EQUIPMENT  Flash X-ray generators or pulsed electron accelerators  Multistage light gas guns or other high-velocity gun systems  Mechanical rotating mirror cameras  Electronic streak cameras, electronic framing cameras, tubes and devices	5-1 $5-1$ $5-1$ $5-2$ $5-2$
5.	DEV	EQU 5.A.1. TES' 5.B.1. 5.B.2. 5.B.3. 5.B.4. 5.B.5. 5.B.6.	Photomultiplier tubes  T AND PRODUCTION EQUIPMENT  Flash X-ray generators or pulsed electron accelerators  Multistage light gas guns or other high-velocity gun systems  Mechanical rotating mirror cameras  Electronic streak cameras, electronic framing cameras, tubes and devices  Specialized instrumentation for hydrodynamic experiments	5-1 $5-1$ $5-1$ $5-2$ $5-2$
5.	5.A. 5.B.	EQU 5.A.1. TES 5.B.1. 5.B.2. 5.B.3. 5.B.4. 5.B.5. 5.B.6.	Photomultiplier tubes  T AND PRODUCTION EQUIPMENT  Flash X-ray generators or pulsed electron accelerators  Multistage light gas guns or other high-velocity gun systems  Mechanical rotating mirror cameras  Electronic streak cameras, electronic framing cameras, tubes and devices  Specialized instrumentation for hydrodynamic experiments  High-speed pulse generators	5-1 $5-1$ $5-1$ $5-2$ $5-2$ $5-2$ $5-3$

# 6. COMPONENTS FOR NUCLEAR EXPLOSIVE DEVICES

6.A.	A. EQUIPMENT, ASSEMBLIES AND COMPONENTS		
	6.A.1.	Detonators and multipoint initiation systems	6 – 1
	6.A.2.	Firing sets and equivalent high-current pulse generators	6 – 1
	6.A.3.	Switching devices	6 - 2
	6.A.4.	Pulse discharge capacitors	6 - 2
	6.A.5.	Neutron generator systems	6 - 3
6.B.	TEST	Γ AND PRODUCTION EQUIPMENT	6 – 3
6.C.	MATERIALS		
	6.C.1.	High explosive substances or mixtures	6 – 3
6.D.	SOF	ΓWARE	6 – 3
6.E.	TEC	HNOLOGY	6 - 3

# 1. INDUSTRIAL EQUIPMENT

# 1.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 1.A.1. High-density (lead glass or other) radiation shielding windows, having all of the following characteristics, and specially designed frames therefor:
  - a. A `cold area' greater than 0.09 m<sup>2</sup>;
  - b. A density greater than 3 g/cm<sup>3</sup>; and
  - c. A thickness of 100 mm or greater.

<u>Technical Note</u>: In Item 1.A.1.a. the term `cold area' means the viewing area of the window exposed to the lowest level of radiation in the design application.

1.A.2. Radiation-hardened TV cameras, or lenses therefor, specially designed or rated as radiation hardened to withstand a total radiation dose greater than  $5 \times 10^4$  Gy (silicon) without operational degradation.

<u>Technical Note:</u> The term Gy (silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionizing radiation.

- 1.A.3. 'Robots', 'end-effectors' and control units as follows:
  - a. 'Robots' or 'end-effectors' having either of the following characteristics:
    - 1. Specially designed to comply with national safety standards applicable to handling high explosives (for example, meeting electrical code ratings for high explosives); or
    - 2. Specially designed or rated as radiation hardened to withstand a total radiation dose greater than  $5 \times 10^4$  Gy (silicon) without operational degradation;

<u>Technical Note:</u> The term Gy (silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionizing radiation.

b. Control units specially designed for any of the 'robots' or 'end-effectors' specified in Item 1.A.3.a.

Note: Item 1.A.3. does not control 'robots' specially designed for non-nuclear industrial applications such as automobile paint-spraying booths.

Technical Notes: 1. 'Robots'

In Item 1.A.3. 'robot' means a manipulation mechanism, which may be of the continuous path or of the point-to-point variety, may use 'sensors', and has all of the following characteristics:

(a) is multifunctional;

- (b) is capable of positioning or orienting material, parts, tools, or special devices through variable movements in three-dimensional space;
- (c) incorporates three or more closed or open loop servo-devices which may include stepping motors; and
- (d) has 'user-accessible programmability' by means of teach/playback method or by means of an electronic computer which may be a programmable logic controller, i.e., without mechanical intervention.

## *N.B.1*:

In the above definition 'sensors' means detectors of a physical phenomenon, the output of which (after conversion into a signal that can be interpreted by a control unit) is able to generate "programs" or modify programmed instructions or numerical "program" data. This includes 'sensors' with machine vision, infrared imaging, acoustical imaging, tactile feel, inertial position measuring, optical or acoustic ranging or force or torque measuring capabilities.

### *N.B.2*:

In the above definition 'user-accessible programmability' means the facility allowing a user to insert, modify or replace "programs" by means other than:

- (a) a physical change in wiring or interconnections; or
- (b) the setting of function controls including entry of parameters.

### N.B.3:

*The above definition does not include the following devices:* 

- (a) Manipulation mechanisms which are only manually/teleoperator controllable;
- (b) Fixed sequence manipulation mechanisms which are automated moving devices operating according to mechanically fixed programmed motions. The "program" is mechanically limited by fixed stops, such as pins or cams. The sequence of motions and the selection of paths or angles are not variable or changeable by mechanical, electronic, or electrical means;
- (c) Mechanically controlled variable sequence manipulation mechanisms which are automated moving devices operating according to mechanically fixed programmed motions. The "program" is mechanically limited by fixed, but adjustable, stops such as pins or cams. The sequence of motions and the selection of paths or angles are variable within the fixed "program" pattern. Variations or modifications of the "program" pattern (e.g.,

- changes of pins or exchanges of cams) in one or more motion axes are accomplished only through mechanical operations;
- (d) Non-servo-controlled variable sequence manipulation mechanisms which are automated moving devices, operating according to mechanically fixed programmed motions. The "program" is variable but the sequence proceeds only by the binary signal from mechanically fixed electrical binary devices or adjustable stops;
- (e) Stacker cranes defined as Cartesian coordinate manipulator systems manufactured as an integral part of a vertical array of storage bins and designed to access the contents of those bins for storage or retrieval.

### 2. 'End-effectors'

In Item 1.A.3. 'end-effectors' are grippers, 'active tooling units', and any other tooling that is attached to the baseplate on the end of a 'robot' manipulator arm.

### *N.B.*:

In the above definition 'active tooling units' is a device for applying motive power, process energy or sensing to the workpiece.

- 1.A.4. Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells, having either of the following characteristics:
  - a. A capability of penetrating 0.6 m or more of hot cell wall (through-the-wall operation); or
  - b. A capability of bridging over the top of a hot cell wall with a thickness of 0.6 m or more (over-the-wall operation).

<u>Technical Note</u>: Remote manipulators provide translation of human operator actions to a remote operating arm and terminal fixture. They may be of a master/slave type or operated by joystick or keypad.

# 1.B. TEST AND PRODUCTION EQUIPMENT

- 1.B.1. Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels, as follows:
  - a. Machines having both of the following characteristics:
    - 1. Three or more rollers (active or guiding); and
    - 2. Which, according to the manufacturer's technical specification, can be equipped with "numerical control" units or a computer control;

b. Rotor-forming mandrels designed to form cylindrical rotors of inside diameter between 75 and 400 mm.

Note: Item 1.B.1.a. includes machines which have only a single roller designed to deform metal plus two auxiliary rollers which support the mandrel, but do not participate directly in the deformation process.

1.B.2. Machine tools, as follows, and any combination thereof, for removing or cutting metals, ceramics, or composites, which, according to the manufacturer's technical specifications, can be equipped with electronic devices for simultaneous "contouring control" in two or more axes:

N.B.: For "numerical control" units controlled by their associated "software", see Item 1.D.3.

- a. Machine tools for turning, that have "positioning accuracies" with all compensations available better (less) than 6 μm according to ISO 230/2 (1988) along any linear axis (overall positioning) for machines capable of machining diameters greater than 35 mm;
  - Note: Item 1.B.2.a. does not control bar machines (Swissturn), limited to machining only bar feed thru, if maximum bar diameter is equal to or less than 42 mm and there is no capability of mounting chucks. Machines may have drilling and/or milling capabilities for machining parts with diameters less than 42 mm.
- b. Machine tools for milling, having any of the following characteristics:
  - 1. "Positioning accuracies" with all compensations available better (less) than 6 μm according to ISO 230/2 (1988) along any linear axis (overall positioning);
  - 2. Two or more contouring rotary axes; or
  - 3. Five or more axes which can be coordinated simultaneously for "contouring control."

<u>Note:</u> Item 1.B.2.b. does not control milling machines having both of the following characteristics:

- 1. X-axis travel greater than 2 m; and
- 2. Overall "positioning accuracy" on the x-axis worse (more) than 30  $\mu$ m according to ISO 230/2 (1988).
- c. Machine tools for grinding, having any of the following characteristics:
  - 1. "Positioning accuracies" with all compensations available better (less) than 4 μm according to ISO 230/2 (1988) along any linear axis (overall positioning);
  - 2. Two or more contouring rotary axes; or
  - 3 Five or more axes which can be coordinated simultaneously for "contouring control."

Note: Item 1.B.2.c. does not control grinding machines as follows:

1. Cylindrical external, internal, and external-internal grinding machines having all the following characteristics:

- a. Limited to a maximum workpiece capacity of 150 mm outside diameter or length; and
- b. Axes limited to x, z and c.
- 2. Jig grinders that do not have a z-axis or a w-axis with an overall positioning accuracy less (better) than 4 microns. Positioning accuracy is according to ISO 230/2 (1988).
- d. Non-wire type Electrical Discharge Machines (EDM) that have two or more contouring rotary axes and that can be coordinated simultaneously for "contouring control".
- Notes: 1. Stated "positioning accuracy" levels derived under the following procedures from measurements made according to ISO 230/2 (1988) or national equivalents may be used for each machine tool model if provided to, and accepted by, national authorities instead of individual machine tests.

Stated "positioning accuracy" are to be derived as follows:

- a. Select five machines of a model to be evaluated;
- b. Measure the linear axis accuracies according to ISO 230/2 (1988);
- c. Determine the accuracy values (A) for each axis of each machine. The method of calculating the accuracy value is described in the ISO 230/2 (1988) standard;
- d. Determine the average accuracy value of each axis. This average value becomes the stated "positioning accuracy" of each axis for the model  $(\hat{A}_x, \hat{A}_y...)$ ;
- e. Since Item 1.B.2. refers to each linear axis, there will be as many stated "positioning accuracy" values as there are linear axes;
- f. If any axis of a machine tool not controlled by Items 1.B.2.a., 1.B.2.b., or 1.B.2.c. has a stated "positioning accuracy" of 6  $\mu$ m or better (less) for grinding machines, and 8  $\mu$ m or better (less) for milling and turning machines, both according to ISO 230/2 (1988), then the builder should be required to reaffirm the accuracy level once every eighteen months.
- 2. Item 1.B.2. does not control special purpose machine tools limited to the manufacture of any of the following parts:
  - a. Gears
  - b. Crankshafts or cam shafts
  - c. Tools or cutters
  - d. Extruder worms

<u>Technical Notes:</u>
1. Axis nomenclature shall be in accordance with International Standard ISO 841, "Numerical Control Machines - Axis and Motion Nomenclature".

- 2. Not counted in the total number of contouring axes are secondary parallel contouring axes (e.g., the w-axis on horizontal boring mills or a secondary rotary axis the centerline of which is parallel to the primary rotary axis).
- 3. Rotary axes do not necessarily have to rotate over 360 degrees. A rotary axis can be driven by a linear device, e.g., a screw or a rack-and-pinion.
- 4. For the purposes of 1.B.2. the number of axes which can be coordinated simultaneously for "contouring control" is the number of axes along or around which, during processing of the workpiece, simultaneous and interrelated motions are performed between the workpiece and a tool. This does not include any additional axes along or around which other relative motions within the machine are performed, such as:
  - a. Wheel-dressing systems in grinding machines;
  - b Parallel rotary axes designed for mounting of separate workpieces;
  - c. Co-linear rotary axes designed for manipulating the same workpiece by holding it in a chuck from different ends.
- 5. A machine tool having at least 2 of the 3 turning, milling or grinding capabilities (e.g., a turning machine with milling capability) must be evaluated against each applicable entry, 1.B.2.a., 1.B.2.b. and 1.B.2.c.
- 6. Items 1.B.2.b.3 and 1.B.2.c.3 include machines based on a parallel linear kinematic design (e.g., hexapods) that have 5 or more axes none of which are rotary axes.
- 1.B.3. Dimensional inspection machines, instruments, or systems, as follows:
  - a. Computer controlled or numerically controlled coordinate measuring machines (CMM) having both of the following characteristics:
    - 1. Two or more axes; and
    - 2. A maximum permissible error of length measurement (E<sub>0</sub>, MPE) along any axis (one dimensional), identified as E<sub>0</sub>x, E<sub>0</sub>y, or E<sub>0</sub>z, equal to or less (better) than (1.25 + L/1000) µm (where L is the measured length in mm) at any point within the operating range of the machine (i.e., within the length of the axis), tested according to ISO 10360-2(2009).
  - b. Linear displacement measuring instruments, as follows:
    - 1. Non-contact type measuring systems with a "resolution" equal to or better (less) than  $0.2~\mu m$  within a measuring range up to 0.2~mm;
    - 2. Linear variable differential transformer (LVDT) systems having both of the following characteristics:
      - a. "Linearity" equal to or better (less) than 0.1% within a measuring range up to 5 mm; and
      - b. Drift equal to or better (less) than 0.1% per day at a standard ambient test room temperature  $\pm$  1 K;

- 3. Measuring systems having both of the following characteristics:
  - a. Contain a laser; and
  - b. Maintain for at least 12 hours, over a temperature range of  $\pm$  1 K around a standard temperature and a standard pressure:
    - 1. A "resolution" over their full scale of 0.1 μm or better; and
    - 2. With a "measurement uncertainty" equal to or better (less) than  $(0.2 + L/2000) \mu m$  (L is the measured length in millimeters);

Note: Item 1.B.3.b.3. does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine tools, dimensional inspection machines, or similar equipment.

<u>Technical Note</u>: In Item 1.B.3.b. 'linear displacement' means the change of distance between the measuring probe and the measured object.

c. Angular displacement measuring instruments having an "angular position deviation" equal to or better (less) than 0.00025°;

Note: Item 1.B.3.c. does not control optical instruments, such as autocollimators, using collimated light (e.g., laser light) to detect angular displacement of a mirror.

- d. Systems for simultaneous linear-angular inspection of hemishells, having both of the following characteristics:
  - 1. "Measurement uncertainty" along any linear axis equal to or better (less) than 3.5 μm per 5 mm; and
  - 2. "Angular position deviation" equal to or less than 0.02°.
- Notes: 1. Item 1.B.3. includes machine tools that can be used as measuring machines if they meet or exceed the criteria specified for the measuring machine function.
  - 2. Machines described in Item 1.B.3. are controlled if they exceed the threshold specified anywhere within their operating range.

<u>Technical Note:</u> All parameters of measurement values in this item represent plus/minus, i.e., not total band.

- 1.B.4. Controlled atmosphere (vacuum or inert gas) induction furnaces, and power supplies therefor, as follows:
  - a. Furnaces having all of the following characteristics:
    - 1. Capable of operation at temperatures above 1123 K (850 °C);
    - 2. Induction coils 600 mm or less in diameter; and
    - 3. Designed for power inputs of 5 kW or more;

Note: Item 1.B.4.a. does not control furnaces designed for the processing of semiconductor wafers.

b. Power supplies, with a specified output power of 5 kW or more, specially designed for

furnaces specified in Item 1.B.4.a.

- 1.B.5. Tsostatic presses, and related equipment, as follows:
  - a. Isostatic presses' having both of the following characteristics:
    - 1. Capable of achieving a maximum working pressure of 69 MPa or greater; and
    - 2. A chamber cavity with an inside diameter in excess of 152 mm;
  - b. Dies, molds, and controls specially designed for the 'isostatic presses' specified in Item 1.B.5.a.

### Technical Notes:

- 1. In Item 1.B.5. Tsostatic presses' means equipment capable of pressurizing a closed cavity through various media (gas, liquid, solid particles, etc.) to create equal pressure in all directions within the cavity upon a workpiece or material.
- 2. In Item 1.B.5. the inside chamber dimension is that of the chamber in which both the working temperature and the working pressure are achieved and does not include fixtures. That dimension will be the smaller of either the inside diameter of the pressure chamber or the inside diameter of the insulated furnace chamber, depending on which of the two chambers is located inside the other.
- 1.B.6. Vibration test systems, equipment, and components as follows:
  - a. Electrodynamic vibration test systems, having all of the following characteristics:
    - 1. Employing feedback or closed loop control techniques and incorporating a digital control unit;
    - 2. Capable of vibrating at 10 g RMS or more between 20 and 2000 Hz; and
    - 3. Capable of imparting forces of 50 kN or greater measured 'bare table';
  - b. Digital control units, combined with "software" specially designed for vibration testing, with a real-time bandwidth greater than 5 kHz and being designed for a system specified in Item 1.B.6.a.;
  - c. Vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force of 50 kN or greater measured 'bare table', which are usable for the systems specified in Item 1.B.6.a.;
  - d. Test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system capable of providing an effective combined force of 50 kN or greater, measured 'bare table', which are usable for the systems specified in Item 1.B.6.a.

<u>Technical Note:</u> In Item 1.B.6. 'bare table' means a flat table, or surface, with no fixtures or fittings.

- 1.B.7. Vacuum or other controlled atmosphere metallurgical melting and casting furnaces and related equipment, as follows:
  - a. Arc remelt and casting furnaces having both of the following characteristics:
    - 1. Consumable electrode capacities between 1000 and 20000 cm<sup>3</sup>; and

- 2. Capable of operating with melting temperatures above 1973 K (1700 °C);
- b. Electron beam melting furnaces and plasma atomization and melting furnaces, having both of the following characteristics:
  - 1. A power of 50 kW or greater; and
  - 2. Capable of operating with melting temperatures above 1473 K (1200 °C);
- c. Computer control and monitoring systems specially configured for any of the furnaces specified in Item 1.B.7.a. or 1.B.7.b.

### 1.C. MATERIALS

None.

### 1.D. SOFTWARE

1.D.1. "Software" specially designed for the "use" of equipment specified in Item 1.A.3., 1.B.1., 1.B.3., 1.B.5., 1.B.6.a., 1.B.6.b., 1.B.6.d. or 1.B.7.

<u>Note:</u> "Software" specially designed for systems specified in Item 1.B.3.d. includes "software" for simultaneous measurements of wall thickness and contour.

- 1.D.2. "Software" specially designed or modified for the "development", "production", or "use" of equipment specified in Item 1.B.2.
- 1.D.3. "Software" for any combination of electronic devices or system enabling such device(s) to function as a "numerical control" unit capable of controlling five or more interpolating axes that can be coordinated simultaneously for "contouring control".
  - Notes: 1. "Software" is controlled whether exported separately or residing in a "numerical control" unit or any electronic device or system.
    - 2. Item 1.D.3. does not control "software" specially designed or modified by the manufacturers of the control unit or machine tool to operate a machine tool that is not specified in Item 1.B.2.

## 1.E. TECHNOLOGY

1.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 1.A. through 1.D.

### 2. MATERIALS

# 2.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 2.A.1. Crucibles made of materials resistant to liquid actinide metals, as follows:
  - a. Crucibles having both of the following characteristics:
    - 1. A volume of between 150 cm<sup>3</sup> (150 ml) and 8000 cm<sup>3</sup> (8 liters); and
    - 2. Made of or coated with any of the following materials, having a purity of 98% or greater by weight:
      - a. Calcium fluoride (CaF<sub>2</sub>);
      - b. Calcium zirconate (metazirconate) (CaZrO3);
      - c. Cerium sulfide (Ce2S3);
      - d. Erbium oxide (erbia) (Er2O3);
      - e. Hafnium oxide (hafnia) (HfO2);
      - f. Magnesium oxide (MgO);
      - g. Nitrided niobium-titanium-tungsten alloy (approximately 50% Nb, 30% Ti, 20% W);
      - h. Yttrium oxide (yttria) (Y2O3); or
      - i. Zirconium oxide (zirconia) (ZrO2);
  - b. Crucibles having both of the following characteristics:
    - 1. A volume of between 50 cm3 (50 ml) and 2000 cm3 (2 liters); and
    - 2. Made of or lined with tantalum, having a purity of 99.9% or greater by weight;
  - c. Crucibles having all of the following characteristics:
    - 1. A volume of between 50 cm3 (50 ml) and 2000 cm3 (2 liters);
    - 2. Made of or lined with tantalum, having a purity of 98% or greater by weight; and
    - 3. Coated with tantalum carbide, nitride, boride, or any combination thereof.
- 2.A.2. Platinized catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water.

- 2.A.3. Composite structures in the form of tubes having both of the following characteristics:
  - a. An inside diameter of between 75 and 400 mm; and
  - b. Made with any of the "fibrous or filamentary materials" specified in Item 2.C.7.a. or carbon prepreg materials specified in Item 2.C.7.c.

# 2.B. TEST AND PRODUCTION EQUIPMENT

- 2.B.1. Tritium facilities or plants, and equipment therefor, as follows:
  - a. Facilities or plants for the production, recovery, extraction, concentration or handling of tritium;
  - b. Equipment for tritium facilities or plants, as follows:
    - 1. Hydrogen or helium refrigeration units capable of cooling to 23 K (-250 °C) or less, with heat removal capacity greater than 150 W;
    - 2. Hydrogen isotope storage or purification systems using metal hydrides as the storage or purification medium.
- 2.B.2. Lithium isotope separation facilities or plants, and equipment therefor, as follows:
  - a. Facilities or plants for the separation of lithium isotopes;
  - b. Equipment for the separation of lithium isotopes, as follows:
    - 1. Packed liquid-liquid exchange columns specially designed for lithium amalgams;
    - 2. Mercury or lithium amalgam pumps;
    - 3. Lithium amalgam electrolysis cells;
    - 4. Evaporators for concentrated lithium hydroxide solution.

### 2.C. MATERIALS

- 2.C.1. Aluminium alloys having both of the following characteristics:
  - a. 'Capable of' an ultimate tensile strength of 460 MPa or more at 293 K (20 °C); and
  - b. In the form of tubes or cylindrical solid forms (including forgings) with an outside diameter of more than 75 mm.

<u>Technical Note:</u> In Item 2.C.1. the phrase 'capable of' encompasses aluminium alloys before or after heat treatment.

2.C.2. Beryllium metal, alloys containing more than 50% beryllium by weight, beryllium compounds, manufactures thereof, and waste or scrap of any of the foregoing.

Note: Item 2.C.2. does not control the following:

- a. Metal windows for X-ray machines or for bore-hole logging devices;
- b. Oxide shapes in fabricated or semi-fabricated forms specially designed for electronic component parts or as substrates for electronic circuits;
- c. Beryl (silicate of beryllium and aluminium) in the form of emeralds or aquamarines.
- 2.C.3. Bismuth having both of the following characteristics:
  - a. A purity of 99.99% or greater by weight; and
  - b. Containing less than 10 parts per million by weight of silver.
- 2.C.4. Boron enriched in the boron-10 (<sup>10</sup>B) isotope to greater than its natural isotopic abundance, as follows: elemental boron, compounds, mixtures containing boron, manufactures thereof, waste or scrap of any of the foregoing.

<u>Note:</u> In Item 2.C.4. mixtures containing boron include boron loaded materials.

<u>Technical Note:</u> The natural isotopic abundance of boron-10 is approximately 18.5 weight percent (20 atom percent).

- 2.C.5. Calcium having both of the following characteristics:
  - a. Containing less than 1000 parts per million by weight of metallic impurities other than magnesium; and
  - b. Containing less than 10 parts per million by weight of boron.
- 2.C.6. Chlorine trifluoride (ClF<sub>3</sub>).
- 2.C.7. "Fibrous or filamentary materials", and prepregs, as follows:
  - a. Carbon or aramid "fibrous or filamentary materials" having either of the following characteristics:
    - 1. A 'specific modulus' of 12.7 x 10<sup>6</sup> m or greater; or
    - 2. A 'specific tensile strength' of 23.5 x 10<sup>4</sup> m or greater;

Note: Item 2.C.7.a. does not control aramid "fibrous or filamentary materials" having 0.25% or more by weight of an ester based fiber surface modifier.

- b. Glass "fibrous or filamentary materials" having both of the following characteristics:
  - 1. A 'specific modulus' of 3.18 x 10<sup>6</sup> m or greater; and

- 2. A 'specific tensile strength' of 7.62 x 10<sup>4</sup> m or greater;
- c. Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" with a width of 15 mm or less (prepregs), made from carbon or glass "fibrous or filamentary materials" specified in Item 2.C.7.a. or Item 2.C.7.b.

<u>Technical Note:</u> The resin forms the matrix of the composite.

Technical Notes:

- 1. In Item 2.C.7. 'Specific modulus' is the Young's modulus in  $N/m^2$  divided by the specific weight in  $N/m^3$  when measured at a temperature of  $296 \pm 2 \ K (23 \pm 2 \ ^{\circ}C)$  and a relative humidity of  $50 \pm 5\%$ .
- 2. In Item 2.C.7. 'Specific tensile strength' is the ultimate tensile strength in  $N/m^2$  divided by the specific weight in  $N/m^3$  when measured at a temperature of  $296 \pm 2$   $K(23 \pm 2$  °C) and a relative humidity of  $50 \pm 5\%$ .
- 2.C.8. Hafnium metal, alloys containing more than 60% hafnium by weight, hafnium compounds containing more than 60% hafnium by weight, manufactures thereof, and waste or scrap of any of the foregoing.
- 2.C.9. Lithium enriched in the lithium-6 (<sup>6</sup>Li) isotope to greater than its natural isotopic abundance and products or devices containing enriched lithium, as follows: elemental lithium, alloys, compounds, mixtures containing lithium, manufactures thereof, waste or scrap of any of the foregoing.

Note: Item 2.C.9. does not control thermoluminescent dosimeters.

<u>Technical Note:</u> The natural isotopic abundance of lithium-6 is approximately 6.5 weight percent (7.5 atom percent).

- 2.C.10. Magnesium having both of the following characteristics:
  - a. Containing less than 200 parts per million by weight of metallic impurities other than calcium; and
  - b. Containing less than 10 parts per million by weight of boron.
- 2.C.11. Maraging steel 'capable of' an ultimate tensile strength of 2050 MPa or more at 293 K (20 °C).

Note: Item 2.C.11. does not control forms in which all linear dimensions are 75 mm or less.

<u>Technical Note:</u> In Item 2.C.11. the phrase 'capable of' encompasses maraging steel before or after heat treatment.

2.C.12. Radium-226 (<sup>226</sup>Ra), radium-226 alloys, radium-226 compounds, mixtures containing radium-226, manufactures thereof, and products or devices containing any of the foregoing.

Note: Item 2.C.12. does not control the following:

- a. Medical applicators;
- b. A product or device containing less than 0.37 GBq of radium-226.

- 2.C.13. Titanium alloys having both of the following characteristics:
  - a. 'Capable of' an ultimate tensile strength of 900 MPa or more at 293 K (20 °C); and
  - b. In the form of tubes or cylindrical solid forms (including forgings) with an outside diameter of more than 75 mm.

<u>Technical Note:</u> In Item 2.C.13. the phrase 'capable of' encompasses titanium alloys before or after heat treatment.

- 2.C.14. Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight, having both of the following characteristics:
  - a. In forms with a hollow cylindrical symmetry (including cylinder segments) with an inside diameter between 100 and 300 mm; and
  - b. A mass greater than 20 kg.

<u>Note:</u> Item 2.C.14. does not control manufactures specially designed as weights or gamma-ray collimators.

2.C.15. Zirconium with a hafnium content of less than 1 part hafnium to 500 parts zirconium by weight, as follows: metal, alloys containing more than 50% zirconium by weight, compounds, manufactures thereof, waste or scrap of any of the foregoing.

Note: Item 2.C.15. does not control zirconium in the form of foil having a thickness of 0.10 mm or less.

- 2.C.16. Nickel powder and porous nickel metal, as follows:
  - <u>N.B.:</u> For nickel powders which are especially prepared for the manufacture of gaseous diffusion barriers see INFCIRC/254/Part 1 (as amended).
  - a. Nickel powder having both of the following characteristics:
    - 1. A nickel purity content of 99.0% or greater by weight; and
    - 2. A mean particle size of less than 10 µm measured by the ASTM B 330 standard;
  - b. Porous nickel metal produced from materials specified in Item 2.C.16.a.

Note: Item 2.C.16. does not control the following:

- a. Filamentary nickel powders;
- b. Single porous nickel metal sheets with an area of 1000 cm<sup>2</sup> per sheet or less.

<u>Technical Note:</u> Item 2.C.16.b. refers to porous metal formed by compacting and sintering the material in Item 2.C.16.a. to form a metal material with fine pores interconnected throughout the structure.

2.C.17. Tritium, tritium compounds, mixtures containing tritium in which the ratio of tritium to hydrogen atoms exceeds 1 part in 1000, and products or devices containing any of the foregoing.

Note: Item 2.C.17. does not control a product or device containing less than 1.48 x 10<sup>3</sup> GBq of tritium.

2.C.18. Helium-3 (<sup>3</sup>He), mixtures containing helium-3, and products or devices containing any of the foregoing.

Note: Item 2.C.18. does not control a product or device containing less than 1 g of helium-3.

- 2.C.19. Alpha-emitting radionuclides having an alpha half-life of 10 days or greater but less than 200 years, in the following forms:
  - a. Elemental;
  - b. Compounds having a total alpha activity of 37 GBq per kg or greater;
  - c. Mixtures having a total alpha activity of 37 GBq per kg or greater;
  - d. Products or devices containing any of the foregoing.

Note: Item 2.C.19. does not control a product or device containing less than 3.7 GBq of alpha activity.

### 2.D. SOFTWARE

None

### 2.E. TECHNOLOGY

2.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 2.A. through 2.D.

# 3. URANIUM ISOTOPE SEPARATION EQUIPMENT AND COMPONENTS (Other Than Trigger List Items)

# 3.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 3.A.1. Frequency changers or generators having all of the following characteristics:
  - <u>N.B.</u>: Frequency changers and generators especially designed or prepared for the gas centrifuge process are controlled under INFCIRC/254/Part 1 (as amended).
  - a. Multiphase output capable of providing a power of 40 W or greater;
  - b. Capable of operating in the frequency range between 600 and 2000 Hz;
  - c. Total harmonic distortion better (less) than 10%; and
  - d. Frequency control better (less) than 0.1%.

<u>Technical Note</u>: Frequency changers in Item 3.A.1. are also known as converters or inverters.

- 3.A.2. Lasers, laser amplifiers and oscillators as follows:
  - a. Copper vapor lasers having both of the following characteristics:
    - 1. Operating at wavelengths between 500 and 600 nm; and
    - 2. An average output power equal to or greater than 40 W;
  - b. Argon ion lasers having both of the following characteristics:
    - 1. Operating at wavelengths between 400 and 515 nm; and
    - 2. An average output power greater than 40 W;
  - c. Neodymium-doped (other than glass) lasers with an output wavelength between 1000 and 1100 nm having either of the following:
    - 1. Pulse-excited and Q-switched with a pulse duration equal to or greater than 1 ns, and having either of the following:
      - a. A single-transverse mode output with an average output power greater than 40 W; or
      - b. A multiple-transverse mode output with an average output power greater than 50 W;

or

2. Incorporating frequency doubling to give an output wavelength between 500 and 550 nm with an average output power of greater than 40 W;

- d. Tunable pulsed single-mode dye laser oscillators having all of the following characteristics:
  - 1. Operating at wavelengths between 300 and 800 nm;
  - 2. An average output power greater than 1 W;
  - 3. A repetition rate greater than 1 kHz; and
  - 4. Pulse width less than 100 ns;
- e. Tunable pulsed dye laser amplifiers and oscillators having all of the following characteristics:
  - 1. Operating at wavelengths between 300 and 800 nm;
  - 2. An average output power greater than 30 W;
  - 3. A repetition rate greater than 1 kHz; and
  - 4. Pulse width less than 100 ns;

Note: Item 3.A.2.e. does not control single mode oscillators.

- f. Alexandrite lasers having all of the following characteristics:
  - 1. Operating at wavelengths between 720 and 800 nm;
  - 2. A bandwidth of 0.005 nm or less;
  - 3. A repetition rate greater than 125 Hz; and
  - 4. An average output power greater than 30 W;
- g. Pulsed carbon dioxide lasers having all of the following characteristics:
  - 1. Operating at wavelengths between 9000 and 11000 nm;
  - 2. A repetition rate greater than 250 Hz;
  - 3. An average output power greater than 500 W; and
  - 4. Pulse width of less than 200 ns;

Note: Item 3.A.2.g. does not control the higher power (typically 1 to 5 kW) industrial  $CO_2$  lasers used in applications such as cutting and welding, as these latter lasers are either continuous wave or are pulsed with a pulse width greater than 200 ns.

- h. Pulsed excimer lasers (XeF, XeCl, KrF) having all of the following characteristics:
  - 1. Operating at wavelengths between 240 and 360 nm;
  - 2. A repetition rate greater than 250 Hz; and
  - 3. An average output power greater than 500 W;
- i. Para-hydrogen Raman shifters designed to operate at  $16 \mu m$  output wavelength and at a repetition rate greater than 250 Hz.
- 3.A.3. Valves having all of the following characteristics:
  - a. A nominal size of 5 mm or greater;
  - b. Having a bellows seal; and
  - c. Wholly made of or lined with aluminium, aluminium alloy, nickel, or nickel alloy containing more than 60% nickel by weight.

<u>Technical Note:</u> For valves with different inlet and outlet diameter, the nominal size parameter in Item 3.A.3.a. refers to the smallest diameter.

- 3.A.4. Superconducting solenoidal electromagnets having all of the following characteristics:
  - a. Capable of creating magnetic fields greater than 2 T;
  - b. A ratio of length to inner diameter greater than 2;
  - c. Inner diameter greater than 300 mm; and
  - d. Magnetic field uniform to better than 1% over the central 50% of the inner volume.

<u>Note</u>: Item 3.A.4. does not control magnets specially designed for and exported *as part of* medical nuclear magnetic resonance (NMR) imaging systems.

- N.B.: As part of, does not necessarily mean physical part in the same shipment. Separate shipments from different sources are allowed, provided the related export documents clearly specify the as part of relationship.
- 3.A.5. High-power direct current power supplies having both of the following characteristics:
  - a. Capable of continuously producing, over a time period of 8 hours, 100 V or greater with current output of 500 A or greater; and
  - b. Current or voltage stability better than 0.1% over a time period of 8 hours.
- 3.A.6. High-voltage direct current power supplies having both of the following characteristics:
  - a. Capable of continuously producing, over a time period of 8 hours, 20 kV or greater with current output of 1 A or greater; and

- b. Current or voltage stability better than 0.1% over a time period of 8 hours.
- 3.A.7. Pressure transducers capable of measuring absolute pressures at any point in the range 0 to 13 kPa and having both of the following characteristics:
  - a. Pressure sensing elements made of or protected by aluminium, aluminium alloy, nickel, or nickel alloy with more than 60% nickel by weight; and
  - b. Having either of the following characteristics:
    - 1. A full scale of less than 13 kPa and an "accuracy" of better than  $\pm$  1% of full scale; or
    - 2. A full scale of 13 kPa or greater and an "accuracy" of better than  $\pm$  130 Pa.

<u>Technical Notes:</u> 1. In Item 3.A.7. pressure transducers are devices that convert pressure measurements into an electrical signal.

- 2. In Item 3.A.7. "accuracy" includes non-linearity, hysteresis and repeatability at ambient temperature.
- 3.A.8. Vacuum pumps having all of the following characteristics:
  - a. Input throat size equal to or greater than 380 mm;
  - b. Pumping speed equal to or greater than 15 m<sup>3</sup>/s; and
  - c. Capable of producing an ultimate vacuum better than 13.3 mPa.

<u>Technical Notes</u>: 1. The pumping speed is determined at the measurement point with nitrogen gas or air.

- 2. The ultimate vacuum is determined at the input of the pump with the input of the pump blocked off.
- 3.B. TEST AND PRODUCTION EQUIPMENT
- 3.B.1. Electrolytic cells for fluorine production with an output capacity greater than 250 g of fluorine per hour.
- 3.B.2. Rotor fabrication or assembly equipment, rotor straightening equipment, bellows-forming mandrels and dies, as follows:
  - a. Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps;

Note: Item 3.B.2.a. includes precision mandrels, clamps, and shrink fit machines.

b. Rotor straightening equipment for alignment of gas centrifuge rotor tube sections to a common axis;

<u>Technical Note</u>: In Item 3.B.2.b. such equipment normally consists of precision measuring

probes linked to a computer that subsequently controls the action of, for example, pneumatic rams used for aligning the rotor tube sections.

c. Bellows-forming mandrels and dies for producing single-convolution bellows.

<u>Technical Note</u>: The bellows referred to in Item 3.B.2.c. have all of the following characteristics:

- 1. Inside diameter between 75 and 400 mm;
- 2. Length equal to or greater than 12.7 mm;
- 3. Single convolution depth greater than 2 mm; and
- 4. Made of high-strength aluminium alloys, maraging steel, or high strength "fibrous or filamentary materials".
- 3.B.3. Centrifugal multiplane balancing machines, fixed or portable, horizontal or vertical, as follows:
  - a. Centrifugal balancing machines designed for balancing flexible rotors having a length of 600 mm or more and having all of the following characteristics:
    - 1. Swing or journal diameter greater than 75 mm;
    - 2. Mass capability of from 0.9 to 23 kg; and
    - 3. Capable of balancing speed of revolution greater than 5000 rpm;
  - b. Centrifugal balancing machines designed for balancing hollow cylindrical rotor components and having all of the following characteristics:
    - 1. Journal diameter greater than 75 mm;
    - 2. Mass capability of from 0.9 to 23 kg;
    - 3. Capable of balancing to a residual imbalance equal to or less than 0.010 kg x mm/kg per plane; and
    - 4. Belt drive type.
- 3.B.4. Filament winding machines and related equipment, as follows:
  - a. Filament winding machines having all of the following characteristics:
    - 1. Having motions for positioning, wrapping, and winding fibers coordinated and programmed in two or more axes;

- 2. Specially designed to fabricate composite structures or laminates from "fibrous or filamentary materials"; and
- 3. Capable of winding cylindrical rotors of diameter between 75 and 400 mm and lengths of 600 mm or greater;
- b. Coordinating and programming controls for the filament winding machines specified in Item 3.B.4.a.;
- c. Precision mandrels for the filament winding machines specified in Item 3.B.4.a.
- 3.B.5. Electromagnetic isotope separators designed for, or equipped with, single or multiple ion sources capable of providing a total ion beam current of 50 mA or greater.
  - Notes: 1. Item 3.B.5. includes separators capable of enriching stable isotopes as well as those for uranium.
    - N.B.: A separator capable of separating the isotopes of lead with a one-mass unit difference is inherently capable of enriching the isotopes of uranium with a three-unit mass difference.
    - 2. Item 3.B.5. includes separators with the ion sources and collectors both in the magnetic field and those configurations in which they are external to the field.

<u>Technical Note</u>: A single 50 mA ion source cannot produce more than 3 g of separated highly enriched uranium (HEU) per year from natural abundance feed.

- 3.B.6. Mass spectrometers capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, as follows, and ion sources therefor:
  - N.B.: Mass spectrometers especially designed or prepared for analyzing on-line samples of uranium hexafluoride are controlled under INFCIRC/254/Part 1 (as amended).
  - a. Inductively coupled plasma mass spectrometers (ICP/MS);
  - b. Glow discharge mass spectrometers (GDMS);
  - c. Thermal ionization mass spectrometers (TIMS);
  - d. Electron bombardment mass spectrometers which have a source chamber constructed from, lined with or plated with materials resistant to UF<sub>6</sub>;
  - e. Molecular beam mass spectrometers having either of the following characteristics:
    - 1. A source chamber constructed from, lined with or plated with stainless steel or molybdenum, and equipped with a cold trap capable of cooling to 193 K (-80  $^{\circ}$ C) or less; or
    - 2. A source chamber constructed from, lined with or plated with materials resistant to UF<sub>6</sub>;

f. Mass spectrometers equipped with a microfluorination ion source designed for actinides or actinide fluorides.

# 3.C. MATERIALS

None.

# 3.D. SOFTWARE

3.D.1. "Software" specially designed for the "use" of equipment specified in Item 3.B.3. or 3.B.4.

# 3.E. TECHNOLOGY

3.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 3.A. through 3.D.

## 4. HEAVY WATER PRODUCTION PLANT RELATED EQUIPMENT (Other Than Trigger List Items)

## 4.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 4.A.1. Specialized packings which may be used in separating heavy water from ordinary water, having both of the following characteristics:
  - a. Made of phosphor bronze mesh chemically treated to improve wettability; and
  - b. Designed to be used in vacuum distillation towers.
- 4.A.2. Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH<sub>2</sub>/NH<sub>3</sub>), having all of the following characteristics:
  - a. Airtight (i.e., hermetically sealed);
  - b. A capacity greater than 8.5 m<sup>3</sup>/h; and
  - c. Either of the following characteristics:
    - 1. For concentrated potassium amide solutions (1% or greater), an operating pressure of 1.5 to 60 MPa; or
    - 2. For dilute potassium amide solutions (less than 1%), an operating pressure of 20 to 60 MPa.
- 4.A.3. Turboexpanders or turboexpander-compressor sets having both of the following characteristics:
  - a. Designed for operation with an outlet temperature of 35 K (-238 °C) or less; and
  - b. Designed for a throughput of hydrogen gas of 1000 kg/h or greater.

## 4.B. TEST AND PRODUCTION EQUIPMENT

- 4.B.1. Water-hydrogen sulfide exchange tray columns and internal contactors, as follows:
  - N.B.: For columns which are especially designed or prepared for the production of heavy water, see INFCIRC/254/Part 1 (as amended).
  - a. Water-hydrogen sulfide exchange tray columns, having all of the following characteristics:
    - 1. Can operate at pressures of 2 MPa or greater;
    - 2. Constructed of carbon steel having an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; <u>and</u>
    - 3. With a diameter of 1.8 m or greater;

b. Internal contactors for the water-hydrogen sulfide exchange tray columns specified in Item 4.B.1.a.

Technical Note:

Internal contactors of the columns are segmented trays which have an effective assembled diameter of 1.8 m or greater; are designed to facilitate countercurrent contacting and are constructed of stainless steels with a carbon content of 0.03% or less. These may be sieve trays, valve trays, bubble cap trays or turbogrid trays.

- 4.B.2. Hydrogen-cryogenic distillation columns having all of the following characteristics:
  - a. Designed for operation at internal temperatures of 35 K (-238 °C) or less;
  - b. Designed for operation at internal pressures of 0.5 to 5 MPa;
  - c. Constructed of either:
    - 1. Stainless steel of the 300 series with low sulfur content and with an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; or
    - 2. Equivalent materials which are both cryogenic and H<sub>2</sub>-compatible; and
  - d. With internal diameters of 1 m or greater and effective lengths of 5 m or greater.
- 4.B.3. Ammonia synthesis converters or synthesis units, in which the synthesis gas (nitrogen and hydrogen) is withdrawn from an ammonia/hydrogen high-pressure exchange column and the synthesized ammonia is returned to said column.
- 4.C. MATERIALS

None.

4.D. SOFTWARE

None.

- 4.E. TECHNOLOGY
- 4.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 4.A. through 4.D.

## 5. TEST AND MEASUREMENT EQUIPMENT FOR THE DEVELOPMENT OF NUCLEAR EXPLOSIVE DEVICES

## 5.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 5.A.1. Photomultiplier tubes having both of the following characteristics:
  - a. Photocathode area of greater than 20 cm<sup>2</sup>; and
  - b. Anode pulse rise time of less than 1 ns.

## 5.B. TEST AND PRODUCTION EQUIPMENT

- 5.B.1. Flash X-ray generators or pulsed electron accelerators having either of the following sets of characteristics:
  - a. 1. An accelerator peak electron energy of 500 keV or greater but less than 25 MeV; and
    - 2. With a figure of merit (K) of 0.25 or greater; or
  - b. 1. An accelerator peak electron energy of 25 MeV or greater; and
    - 2. A peak power greater than 50 MW.

<u>Note</u>: Item 5.B.1. does not control accelerators that are component parts of devices designed for purposes other than electron beam or X-ray radiation (electron microscopy, for example) nor those designed for medical purposes.

#### Technical Notes:

- 1. The figure of merit K is defined as:  $K=1.7 \times 10^3 \text{ V}^{2.65} \text{ Q}$ . V is the peak electron energy in million electron volts. If the accelerator beam pulse duration is less than or equal to  $1 \mu s$ , then Q is the total accelerated charge in Coulombs. If the accelerator beam pulse duration is greater than  $1 \mu s$ , then Q is the maximum accelerated charge in  $1 \mu s$ . Q equals the integral of i with respect to t, over the lesser of  $1 \mu s$  or the time duration of the beam pulse ( $Q=\int idt$ ) where i is beam current in amperes and t is the time in seconds.
- 2.  $Peak\ power = (peak\ potential\ in\ volts)\ x\ (peak\ beam\ current\ in\ amperes).$
- 3. In machines based on microwave accelerating cavities, the time duration of the beam pulse is the lesser of 1 µs or the duration of the bunched beam packet resulting from one microwave modulator pulse.
- 4. In machines based on microwave accelerating cavities, the peak beam current is the average current in the time duration of a bunched beam packet.
- 5.B.2. Multistage light gas guns or other high-velocity gun systems (coil, electromagnetic, and electrothermal types, and other advanced systems) capable of accelerating projectiles to 2 km/s or greater.

- 5.B.3. Mechanical rotating mirror cameras, as follows, and specially designed components therefor:
  - a. Framing cameras with recording rates greater than 225000 frames per second;
  - b. Streak cameras with writing speeds greater than 0.5 mm/µs.

<u>Note</u>: In Item 5.B.3. components of such cameras include their synchronizing electronics units and rotor assemblies consisting of turbines, mirrors, and bearings.

- 5.B.4. Electronic streak cameras, electronic framing cameras, tubes and devices, as follows:
  - a. Electronic streak cameras capable of 50 ns or less time resolution;
  - b. Streak tubes for cameras specified in Item 5.B.4.a.;
  - c. Electronic (or electronically shuttered) framing cameras capable of 50 ns or less frame exposure time;
  - d. Framing tubes and solid-state imaging devices for use with cameras specified in Item 5.B.4.c., as follows:
    - 1. Proximity focused image intensifier tubes having the photocathode deposited on a transparent conductive coating to decrease photocathode sheet resistance;
    - 2. Gate silicon intensifier target (SIT) vidicon tubes, where a fast system allows gating the photoelectrons from the photocathode before they impinge on the SIT plate;
    - 3. Kerr or Pockels cell electro-optical shuttering;
    - 4. Other framing tubes and solid-state imaging devices having a fast image gating time of less than 50 ns specially designed for cameras specified in Item 5.B.4.c.
- 5.B.5. Specialized instrumentation for hydrodynamic experiments, as follows:
  - a. Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10  $\mu$ s;
  - b. Manganin gauges for pressures greater than 10 GPa;
  - c. Quartz pressure transducers for pressures greater than 10 GPa.

<u>Note</u>: Item 5.B.5.a. includes velocity interferometers such as VISARs (Velocity interferometer systems for any reflector) and DLIs (Doppler laser interferometers).

- 5.B.6. High-speed pulse generators having both of the following characteristics:
  - a. Output voltage greater than 6 V into a resistive load of less than 55 ohms; and
  - b. 'Pulse transition time' less than 500 ps.

<u>Technical Note:</u> In Item 5.B.6.b. 'pulse transition time' is defined as the time interval between 10% and 90% voltage amplitude.

5.C. MATERIALS

None.

5.D. SOFTWARE

None.

- 5.E. TECHNOLOGY
- 5.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 5.A. through 5.D.

## 6. COMPONENTS FOR NUCLEAR EXPLOSIVE DEVICES

## 6.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 6.A.1. Detonators and multipoint initiation systems, as follows:
  - a. Electrically driven explosive detonators, as follows:
    - 1. Exploding bridge (EB);
    - 2. Exploding bridge wire (EBW);
    - 3. Slapper;
    - 4. Exploding foil initiators (EFI);
  - b. Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm<sup>2</sup> from a single firing signal with an initiation timing spread over the surface of less than 2.5 μs.

<u>Note:</u> Item 6.A.1. does not control detonators using only primary explosives, such as lead azide.

#### Technical Note:

In Item 6.A.1. the detonators of concern all utilize a small electrical conductor (bridge, bridge wire, or foil) that explosively vaporizes when a fast, high-current electrical pulse is passed through it. In nonslapper types, the exploding conductor starts a chemical detonation in a contacting high-explosive material such as PETN (pentaerythritoltetranitrate). In slapper detonators, the explosive vaporization of the electrical conductor drives a flyer or slapper across a gap, and the impact of the slapper on an explosive starts a chemical detonation. The slapper in some designs is driven by magnetic force. The term exploding foil detonator may refer to either an EB or a slapper-type detonator. Also, the word initiator is sometimes used in place of the word detonator.

- 6.A.2. Firing sets and equivalent high-current pulse generators, as follows:
  - a. Explosive detonator firing sets designed to drive multiple controlled detonators specified by Item 6.A.1. above;
  - b. Modular electrical pulse generators (pulsers) having all of the following characteristics:
    - 1. Designed for portable, mobile, or ruggedized-use;
    - 2. Enclosed in a dust-tight enclosure;
    - 3. Capable of delivering their energy in less than 15 µs;
    - 4. Having an output greater than 100 A;
    - 5. Having a 'rise time' of less than 10 µs into loads of less than 40 ohms;

- 6. No dimension greater than 25.4 cm;
- 7. Weight less than 25 kg; and
- 8. Specified to operate over an extended temperature range of 223 to 373 K (-50 °C to 100 °C) or specified as suitable for aerospace applications.

Note: Item 6.A.2.b. includes xenon flashlamp drivers.

<u>Technical Note:</u> In Item 6.A.2.b.5. 'rise time' is defined as the time interval from 10% to 90% current amplitude when driving a resistive load.

## 6.A.3. Switching devices as follows:

- a. Cold-cathode tubes, whether gas filled or not, operating similarly to a spark gap, having all of the following characteristics:
  - 1. Containing three or more electrodes;
  - 2. Anode peak voltage rating of 2.5 kV or more;
  - 3. Anode peak current rating of 100 A or more; and
  - 4. Anode delay time of 10 μs or less;

Note: Item 6.A.3.a. includes gas krytron tubes and vacuum sprytron tubes.

- b. Triggered spark-gaps having both of the following characteristics:
  - 1. Anode delay time of 15 μs or less; and
  - 2. Rated for a peak current of 500 A or more;
- c. Modules or assemblies with a fast switching function having all of the following characteristics:
  - 1. Anode peak voltage rating greater than 2 kV;
  - 2. Anode peak current rating of 500 A or more; and
  - 3. Turn-on time of  $1 \mu s$  or less.
- 6.A.4. Pulse discharge capacitors having either of the following sets of characteristics:
  - a. 1. Voltage rating greater than 1.4 kV;
    - 2. Energy storage greater than 10 J;
    - 3. Capacitance greater than 0.5 µF; and
    - 4. Series inductance less than 50 nH; or

- b. 1. Voltage rating greater than 750 V;
  - 2. Capacitance greater than 0.25 µF; and
  - 3. Series inductance less than 10 nH.
- 6.A.5. Neutron generator systems, including tubes, having both of the following characteristics:
  - a. Designed for operation without an external vacuum system; and
  - b. Utilizing electrostatic acceleration to induce a tritium-deuterium nuclear reaction.
- 6.B. TEST AND PRODUCTION EQUIPMENT

None.

- 6.C. MATERIALS
- 6.C.1. High explosive substances or mixtures, containing more than 2 % by weight of any of the following:
  - a. Cyclotetramethylenetetranitramine (HMX) (CAS 2691-41-0);
  - b. Cyclotrimethylenetrinitramine (RDX) (CAS 121-82-4);
  - c. Triaminotrinitrobenzene (TATB) (CAS 3058-38-6);
  - d. Hexanitrostilbene (HNS) (CAS 20062-22-0); or
  - e. Any explosive with a crystal density greater than 1.8 g/cm<sup>3</sup> and having a detonation velocity greater than 8000 m/s.
- 6.D. SOFTWARE

None.

- 6.E. TECHNOLOGY
- 6.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 6.A. through 6.D.

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NSFERS (INFCIRC/254/Rev. 7/Part 2) New	1.B.3. Dimensional inspection machines, instruments, or systems, as follows:	a. Computer controlled or numerically controlled <del>dimensional inspection machines</del> <u>coordinate measuring machines (CMM)</u> having both of the following characteristics:	1. Two or more axes; <u>and</u>	2. A one dimensional length "measurement uncertainty" equal to or better (less) than (1.25 + L/1000) µm tested with a probe of an "accuracy" of better (less) than 0.2 µm (L is the measured length in millimeters) (Ref: VDI/VDE 2617 parts 1 and 2);	2. A maximum permissible error of length	measurement (Eo, MPE) along any axis (one dimensional), identified as Eox, Eoy, or Eoz, equal to or less (better) than (1.25 + L/1000) µm (where L is the measured length in mm) at any point within the	operating range of the machine (i.e., within the length of the axis), tested according to ISO 10360-2(2009).	b. Linear displacement measuring instruments, as follows:	1. Non-contact type measuring systems with a "resolution"	equal to or better (less) than 0.2 μm within a measuring range up to 0.2 mm;	2. Linear variable differential transformer (LVDT) systems having both of the following characteristics:	
COMPARISON TABLE OF CHANGES TO THE GUIDELINES FOR NUCLEAR TRANSFERS (INFCIRC/254/Rev. 7/Part 2) Old	1.B.3. Dimensional inspection machines, instruments, or systems, as follows:	<ul> <li>a. Computer controlled or numerically controlled dimensional inspection machines having both of the following characteristics:</li> </ul>	1. Two or more axes; and	<ol> <li>A one-dimensional length "measurement uncertainty" equal to or better (less) than (1.25 + L/1000) μm tested with a probe of an "accuracy" of better (less) than 0.2 μm (L is the measured length in millimeters) (Ref: VDI/VDE 2617 parts 1 and 2);</li> </ol>	b. Linear displacement measuring instruments, as follows:	<ol> <li>Non-contact type measuring systems with a "resolution" equal to or better (less) than 0.2 μm within a measuring range up to 0.2 mm;</li> </ol>	2. Linear variable differential transformer (LVDT) systems having both of the following characteristics:	a. "Linearity" equal to or better (less) than 0.1% within a measuring range up to 5 mm;	and	b. Drift equal to or better (less) than $0.1\%$ per day at a standard ambient test room temperature $\pm$ 1 K;	3. Measuring systems having both of the following characteristics:	a. Contain a laser; <u>and</u>

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New	<ul> <li>a. "Linearity" equal to or better (less) than 0.1% within a measuring range up to 5 mm;</li> <li>and</li> <li>b. Drift equal to or better (less) than 0.1% per day at a standard ambient test room temperature ± 1 K;</li> </ul>	<ol> <li>Measuring systems having both of the following characteristics:</li> <li>a. Contain a laser; and</li> </ol>	<ul> <li>b. Maintain for at least 12 hours, over a temperature range of ± 1 K around a standard temperature and a standard pressure:</li> <li>1. A "resolution" over their full scale of 0.1 um or</li> </ul>	<ul> <li>better; and</li> <li>2. With a "measurement uncertainty" equal to or better (less) than (0.2 + L/2000) μm (L is the measured length in millimeters);</li> </ul>	Item inte feec mov insp	Technical Note: In Item 1.B.3.b. 'linear displacement' means the change of distance between the measuring probe and the measured object.
Old	<ul> <li>b. Maintain for at least 12 hours, over a temperature range of ± 1 K around a standard temperature and a standard pressure:</li> <li>1. A "resolution" over their full scale of 0.1 μm or better; and</li> </ul>	<ol> <li>With a "measurement uncertainty" equal to or better (less) than (0.2 + L/2000) μm (L is the measured length in millimeters);</li> </ol>	Note: Item 1.B.3.b.3. does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine tools, dimensional inspection machines, or similar equipment.	Technical Note: In Item 1.B.3.b. 'linear displacement' means the change of distance between the measuring probe and the measured object.  c. Angular displacement measuring instruments having an "anoular nosition deviation" equal to or better (less) than		d. Systems for simultaneous linear-angular inspection of hemishells, having both of the following

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<ol> <li>"Measurement uncertainty" along any linear axis equal to or better (less) than 3.5 μm per 5 mm; <u>and</u></li> </ol>	c. Angular displacement measuring instruments having an "angular position deviation" equal to or better (less) than 0.00025°;
2. "Angular position deviation" equal to or less than $0.02^{\circ}$ .	Note: Item 1.B.3.c. does not control optical instruments.
Notes: 1. Item 1.B.3. includes machine tools that can be used as measuring machines if they meet or exceed the criteria specified for the measuring machine	
function.	d. Systems for simultaneous linear-angular inspection of
2. Machines described in Item 1.B.3. are controlled if they exceed the threshold specified	hemishells, having both of the following characteristics:
anywhere within then operating range.	1. "Measurement uncertainty" along any linear axis equal to or better (less) than 3.5 µm per 5 mm; and
<u>Technical Notes:</u> I. The probe used in determining the measurement uncertainty of a dimensional inspection system shall be	2. "Angular position deviation" equal to or less than 0.02°.
as described in VDI/VDE 2617 parts 2, 3 and 4.	Notes: 1. Item 1.B.3. includes machine tools that can be used as measuring machines if they meet or exceed the
2. All parameters of	criteria specified for the measuring machine function.
measurement values in this item represent plus/minus, i.e., not total band.	<ol> <li>Machines described in Item 1.B.3. are controlled if they exceed the threshold specified anywhere within their operating range.</li> </ol>
	Technical Notes:  - Heasurement uncertainty of a dimensional inspection system shall be as described in VDIVDE 2617 parts 2, 3 and 4.
	2. All parameters of

NSFERS (INFCIRC/254/Rev. 7/Part 2)	New	<u>measurement values in this</u> <u>item represent plus/minus,</u>	i.e., not total band.		
COMPARISON TABLE OF CHANGES TO THE GUIDELINES FOR NUCLEAR TRANSFERS (INFCIRC/254/Rev. 7/Part 2)	PIO				

United Nations S/2012/947



## **Security Council**

Distr.: General 20 December 2012

Original: English

# Letter dated 13 December 2012 from the Permanent Representative of the United States of America to the United Nations addressed to the President of the Security Council

I have the honour to forward to you a list of items, materials, equipment, goods and technology related to ballistic missile programmes (see annex). The annex provides an update of document S/2012/235. We anticipate referring to this document in further Security Council discussions.

I would be grateful if the present letter and its annex could be circulated as a document of the Security Council.

(Signed) Susan E. Rice





## Annex to the letter dated 13 December 2012 from the Permanent Representative of the United States of America to the United Nations addressed to the President of the Security Council

## Items, materials, equipment, goods and technology related to ballistic missile programmes

Changes to the list contained in the annex to document S/2010/263 are denoted by bold type in the following sections: 1 (introduction on the "General Technology Note"), 2 (definition of "payload" for space launch vehicles), 3 (terminology for "specially designed"), 2.A.1.c., 3.A.1., 3.A.4., 3.A.6., 3.E.1., 4.C.2.c., 4.C.2.d., 4.C.2.e., 4.C.6.c.2.l., 4.C.6.c.2.m., 6.C.8., 11.A.5., 15.B.2., 19.B.1. and 20.A.1.b.

## Contents

#### 1. INTRODUCTION

- (a) Category I and Category II items
- (b) Trade off "range" and "payload"
- (c) General Technology Note
- (d) General Software Note
- (e) Chemical Abstracts Service (CAS) Numbers

#### 2. DEFINITIONS

- "Accuracy"
- "Basic scientific research"
- "Development"
- "In the public domain"
- "Microcircuit"
- "Microprogrammes"
- "Payload"
  - Ballistic Missiles
  - Space Launch Vehicles
  - Sounding Rocket
  - Cruise Missiles
  - Other UAVs
- "Production"
- "Production equipment"
- "Production facilities"
- "Programmes"
- "Radiation hardened"
- "Range"
- "Software"
- "Technology"
- "Technical assistance"
- "Technical data"
- "Use"

## 3. TERMINOLOGY

- "Specially designed"
- "Designed or modified"
- "Usable in", "usable for", "usable as" or "capable of"
- "Modified"

## **CATEGORY I - ITEM 1**

## **COMPLETE DELIVERY SYSTEMS**

- 1.A.1 Complete rocket systems (≥300km "range" & ≥500kg "payload")
- 1.A.2 Complete unmanned aerial vehicle systems (UAVs) (≥300km "range" & ≥500kg "payload")
- 1.B.1. "Production facilities"
- 1.C. None
- 1.D.1. "Software"
- 1.D.2. "Software"
- 1.E.1. "Technology"

## **CATEGORY I - ITEM 2**

## COMPLETE SUBSYSTEMS USABLE FOR

## COMPLETE DELIVERY SYSTEMS

- 2.A.1. "Complete subsystems"
- 2.B.1. "Production facilities"
- 2.B.2. "Production equipment"
- 2.C. None
- 2.D.1. "Software"
- 2.D.2. "Software"
- 2.D.3. "Software"
- 2.D.4 "Software"
- 2.D.5. "Software"
- 2.D.6. "Software"
- 2.E.1. "Technology"

#### **CATEGORY II - ITEM 3**

## PROPULSION COMPONENTS AND EQUIPMENT

- 3.A.1. Turbojet and turbofan engines
- 3.A.2. Ramjet/scramjet/pulse jet/combined cycle engines
- 3.A.3. Rocket motor cases "insulation components and nozzles
- 3.A.4. Staging mechanisms, separation mechanisms and interstages
- 3.A.5. Liquid and slurry propellant (including oxidisers) control systems
- 3.A.6. Hybrid rocket motors
- 3.A.7. Radial ball bearings
- 3.A.8. Liquid propellant tanks
- 3.A.9. Turboprop engine systems
- 3.B.1. "Production facilities"
- 3.B.2. "Production equipment"
- 3.B.3. Flow-forming machines
- 3.C.1. 'Interior lining' usable for rocket motor cases
- 3.C.2. 'Insulation' material in bulk form usable for rocket motor cases
- 3.D.1. "Software"
- 3.D.2. "Software"
- 3.D.3. "Software"
- 3.E.1. "Technology"

## **CATEGORY II - ITEM 4**

## PROPELLANTS, CHEMICALS AND PROPELLANT PRODUCTION

#### 1 KOI LLLANT I KO

- 4.A. None
- 4.B.1. "Production equipment"
- 4.B.2. "Production equipment"
- 4.B.3.a. Batch mixers
  - b. Continuous mixers
  - c. Fluid energy mills
  - d. Metal powder "production equipment"
- 4.C.1. Composite and composite modified double base propellants
- 4.C.2. Fuel substances
  - a. Hydrazine
  - b. Hydrazine derivatives
  - c. Spherical aluminium powder
  - d. Zirconium, beryllium, magnesium and alloys
  - e. Boron and boron alloys
  - f. High energy density materials
- 4.C.3. Perchlorates, chlorates or chromates

- 4.C.4.a. Oxidiser substances liquid propellant rocket engines
  - b. Oxidiser substances solid propellant rocket motors
- 4.C.5. Polymeric substances
- 4.C.6. Other propellant additives and agents
  - a. Bonding agents
  - b. Curing reaction catalysts
  - c. Burning rate modifiers
  - d. Esters and plasticisers
  - e. Stabilisers
- 4.D.1. "Software"
- 4.E.1. "Technology"

#### **CATEGORY II - ITEM 5**

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#### **CATEGORY II - ITEM 6**

## PRODUCTION OF STRUCTURAL COMPOSITES, PYROLYTIC DEPOSITION AND

## DENSIFICATION, AND STRUCTURAL

#### **MATERIALS**

- 6.A.1. Composite structures, laminates and manufactures thereof
- 6.A.2. Resaturated pyrolised materials
- 6.B.1.a. Filament winding machines or fibre placement machines
  - b. Tape-laying machines
  - c. Multi-directional, multi-dimensional weaving machines or interlacing machines
  - d. Equipment designed or modified for the production of fibrous or filamentary materials
  - e. Equipment designed or modified for special fibre surface treatment
- 6.B.2. Nozzles
- 6.B.3. Isostatic presses
- 6.B.4. Chemical vapour deposition furnaces
- 6.B.5. Equipment and controls for the densification and pyrolysis process
- 6.C.1. Resin impregnated fibre prepregs and metal coated fibre preforms
- 6.C.2. Resaturated pyrolised materials
- 6.C.3. Fine grain graphites
- 6.C.4. Pyrolytic or fibrous reinforced graphites
- 6.C.5. Ceramic composite materials for missile radomes

6.C.6.	Silicon-carbide	materials

- 6.C.7. Tungsten molybdenum and alloys
- 6.C.8. Maraging steel
- 6.C.9. Titanium-stabilized duplex stainless steel
- 6.D.1. "Software"
- 6.D.2. "Software"
- 6.E.1. "Technology"
- 6.E.2. "Technical data"
- 6.E.3. "Technology"

#### **CATEGORY II - ITEM 7**

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#### **CATEGORY II - ITEM 8**

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#### **CATEGORY II - ITEM 9**

## **INSTRUMENTATION, NAVIGATION AND**

#### **DIRECTION FINDING**

- 9.A.1. Integrated flight instrument systems
- 9.A.2. Gyro-astro compasses
- 9.A.3. Linear accelerometers
- 9.A.4. All types of gyros
- 9.A.5. Accelerometers or gyros
- 9.A.6. Inertial or other equipment
- 9.A.7. 'Integrated navigation systems'9.A.8. Three axis magnetic heading sensors
- 9.B.1. "Production equipment", and other test, calibration and alignment equipment
- 9.B.2.a. Balancing machines
  - b. Indicator heads
  - c. Motion simulators/rate tables
  - d. Positioning tables
  - e. Centrifuges
- 9.C. None
- 9.D.1. "Software"
- 9.D.2. Integration "Software"
- 9.D.3. Integration "Software"
- 9.D.4. Integration "Software"
- 9.E.1. "Technology"

## **CATEGORY II - ITEM 10**

## FLIGHT CONTROL

- 10.A.1. Hydraulic, mechanical, electro-optical or electromechanical flight control systems
- 10.A.2. Attitude control equipment
- 10.A.3. Flight control servo-valves
- 10.B.1. Test calibration and alignment equipment

## 10.C. None

- 10.D.1. "Software"
- 10.E.1. Design "technology" for integration of air vehicle fuselage, propulsion system and lifting control surfaces
- 10.E.2. Design "technology" for integration of the flight control, guidance, and propulsion data into a flight management system
- 10.E.3. "Technology"

#### **CATEGORY II - ITEM 11**

#### AVIONICS

- 11.A.1. Radar and laser radar systems including altimeters
- 11.A.2. Passive sensors
- 11.A.3. Receiving equipment GNSS e.g. GPS, GLONASS or Galileo
- 11.A.4. Electronic assemblies and components

## 11.A.5. Umbilical and interstage electrical connectors

- 11.B. None
- 11.C. None
- 11.D.1. "Software"
- 11.D.2. "Software"
- 11.E.1. Design "technology"
- 11.E.2. "Technology"

#### **CATEGORY II - ITEM 12**

## LAUNCH SUPPORT

- 12.A.1. Apparatus and devices
- 12.A.2. Vehicles
- 12.A.3. Gravity meters (gravimeters), gravity gradiometers
- 12.A.4. Telemetry and telecontrol equipment, including ground equipment
- 12.A.5. Precision tracking systems
  - a. Tracking Systems
  - b. Range instrumentation radars
- 12.A.6. Thermal Batteries
- 12.B. None
- 12.C. None
- 12.D.1. "Software"
- 12.D.2. "Software"
- 12.D.3. "Software"
- 12.E.1. "Technology"

#### **CATEGORY II - ITEM 13**

## **COMPUTERS**

- 13.A.1. Analogue or digital computers or digital differential analysers
- 13.B. None
- 13.C. None
- 13.D. None
- 13.E.1. "Technology"

## **CATEGORY II - ITEM 14**

## ANALOGUE TO DIGITAL CONVERTERS

- 14.A.1. Analogue-to-digital converters
- 14.B. None
- 14.C. None
- 14.D. None
- 14.E.1. "Technology"

## **CATEGORY II - ITEM 15**

## **TEST FACILITIES AND EQUIPMENT**

- 15.A. None
- 15.B.1. Vibration test equipment
  - a. Vibration test systems
  - b. Digital controllers
  - c. Vibration thrusters (shaker units)
  - d. Test piece support structures and electronic units
- 15.B.2. Wind-tunnels
- 15.B.3. Test benches/stands
- 15.B.4. Environmental chambers
- 15.B.5. Accelerators
- 15.C. None
- 15.D.1. "Software"
- 15.E.1. "Technology"

## **CATEGORY II - ITEM 16**

## MODELLING-SIMULATION AND DESIGN

#### **INTEGRATION**

- 16.A.1. Hybrid (combined analogue/digital) computers
- 16.B. None
- 16.C. None
- 16.D.1. "Software"
- 16.E.1. "Technology"

## **CATEGORY II - ITEM 17**

#### **STEALTH**

- 17.A.1. Devices for reduced observables
- 17.B.1. Systems specially designed for radar cross section measurement

- 17.C.1. Materials for reduced observables
- 17.D.1. "Software"
- 17.E.1. "Technology"

#### **CATEGORY II - ITEM 18**

## **NUCLEAR EFFECTS PROTECTION**

- 18.A.1. "Radiation Hardened" "microcircuits"
- 18.A.2. 'Detectors'
- 18.A.3. Radomes
- 18.B. None
- 18.C. None
- 18.D. None
- 18.E.1. "Technology"

#### **CATEGORY II - ITEM 19**

## OTHER COMPLETE DELIVERY SYSTEMS

- 19.A.1. Complete rocket systems (≥ 300km range)
- 19.A.2. Complete UAV systems (≥ 300km range)
- 19.A 3. Complete UAV systems

## 19.B.1. "Production facilities"

- 19.C. None
- 19.D.1. "Software"
- 19.E.1. "Technology"

#### **CATEGORY II - ITEM 20**

## OTHER COMPLETE SUBSYSTEMS

- 20.A.1.a. Individual rocket stages
  - b. Solid propellant rocket motors, hybrid rocket motors or liquid propellant rocket engines
- 20.B.1. "Production facilities"
- 20.B.2. "Production equipment"
- 20.C. None
- 20.D.1 "Software"
- 20.D.2. "Software"
- 20.E.1. "Technology"

## UNITS, CONSTANTS, ACRONYMS AND ABBREVIATIONS USED IN THIS ANNEX

## TABLE OF CONVERSIONS

## STATEMENT OF UNDERSTANDING

## **Introduction, definitions, terminology**

## 1. INTRODUCTION

- (a) This Annex consists of two categories of items, which term includes equipment, materials, "software" or "technology". Category I items, all of which are in Annex Items 1 and 2, are those items of greatest sensitivity. If a Category I item is included in a system, that system will also be considered as Category I, except when the incorporated item cannot be separated, removed or duplicated. Category II items are those items in the Annex not designated Category I.
- (b) In reviewing the proposed applications for transfers of complete rocket and unmanned aerial vehicle systems described in Items 1 and 19, and of equipment, materials, "software" or "technology" which is listed in the Technical Annex, for potential use in such systems, the Government will take account of the ability to trade off "range" and "payload".

## (c) General Technology Note:

The transfer of "technology" directly associated with any goods controlled in the Annex is controlled according to the provisions in each Item to the extent permitted by national legislation. The approval of any Annex item for export also authorizes the export to the same end-user of the minimum "technology" required for the installation, operation, maintenance, **or** repair of the item.

## *Note:*

Controls do not apply to "technology" "in the public domain" or to "basic scientific research".

## (d) General Software Note:

The Annex does not control "software" which is either:

- 1. Generally available to the public by being:
  - a. Sold from stock at retail selling points without restriction, by means of:
    - 1. Over-the-counter transactions:
    - 2. Mail order transactions; or
    - 3. Telephone call transactions; and
  - b. Designed for installation by the user without further substantial support by the supplier; <u>or</u>
- 2. "In the public domain".

#### *Note*:

The General Software Note only applies to general purpose, mass market "software".

## (e) Chemical Abstracts Service (CAS) Numbers:

In some instances chemicals are listed by name and CAS number. Chemicals of the same structural formula (including hydrates) are controlled regardless of name or CAS number. CAS numbers are shown to assist in identifying whether a particular chemical or mixture is controlled, irrespective of nomenclature. CAS numbers cannot be used as unique identifiers because some forms of the listed chemical have different CAS numbers, and mixtures containing a listed chemical may also have different CAS numbers.

## 2. <u>DEFINITIONS</u>

For the purpose of this Annex, the following definitions apply:

## "Accuracy"

Usually measured in terms of inaccuracy, means the maximum deviation, positive or negative, of an indicated value from an accepted standard or true value.

#### "Basic scientific research"

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

## "Development"

Is related to all phases prior to "production" such as:

- design
- design research
- design analysis
- design concepts
- assembly and testing of prototypes
- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

## "In the public domain"

This means "software" or "technology" which has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove "software" or "technology" from being "in the public domain".)

## "Microcircuit"

A device in which a number of passive and/or active elements are considered as indivisibly associated on or within a continuous structure to perform the function of a circuit.

## "Microprogrammes"

A sequence of elementary instructions maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction register.

## "Payload"

The total mass that can be carried or delivered by the specified rocket system or unmanned aerial vehicle (UAV) system that is not used to maintain flight.

## *Note:*

The particular equipment, subsystems, or components to be included in the "payload" depends on the type and configuration of the vehicle under consideration.

## **Technical Notes:**

## 1. Ballistic Missiles

- a. "Payload" for systems with separating re-entry vehicles (RVs) includes:
  - 1. The RVs, including:
    - a. Dedicated guidance, navigation, and control equipment;
    - b. Dedicated countermeasures equipment;
  - 2. Munitions of any type (e.g. explosive or non-explosive);
  - 3. Supporting structures and deployment mechanisms for the munitions (e.g. hardware used to attach to, or separate the RV from, the bus/post-boost vehicle) that can be removed without violating the structural integrity of the vehicle;
  - 4. Mechanisms and devices for safing, arming, fuzing or firing;
  - 5. Any other countermeasures equipment (e.g. decoys, jammers or chaff dispensers) that separate from the RV bus/post-boost vehicle;
  - 6. The bus/post-boost vehicle or attitude control/velocity trim module not including systems/subsystems essential to the operation of the other stages.
- b. "Payload" for systems with non-separating re-entry vehicles includes:
  - 1. Munitions of any type (e.g. explosive or non-explosive);
  - 2. Supporting structures and deployment mechanisms for the munitions that can be removed without violating the structural integrity of the vehicle;
  - 3. Mechanisms and devices for safing, arming, fuzing or firing;
  - 4. Any countermeasures equipment (e.g. decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle.

## 2. Space Launch Vehicles

"Payload" includes:

- a. Spacecraft (single or multiple), including satellites;
- **b.** Spacecraft-to-launch vehicle adapters including, if applicable, apogee/perigee kick motors or similar manoeuvering systems.

## 3. Sounding Rockets

- "Payload" includes:
- a. Equipment required for a mission, such as data gathering, recording or transmitting devices for mission-specific data;
- b. Recovery equipment (e.g. parachutes) that can be removed without violating the structural integrity of the vehicle.

#### 4. Cruise Missiles

- "Payload" includes:
- a. Munitions of any type (e.g. explosive or non-explosive);
- b. Supporting structures and deployment mechanisms for the munitions that can be removed without violating the structural integrity of the vehicle;
- c. Mechanisms and devices for safing, arming, fuzing or firing;
- d. Countermeasures equipment (e.g. decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle;
- e. Signature alteration equipment that can be removed without violating the structural integrity of the vehicle.

## 5. Other UAVs

## "Payload" includes:

- a. Munitions of any type (e.g. explosive or non-explosive);
- b. Mechanisms and devices for safing, arming, fuzing or firing;
- c. Countermeasures equipment (e.g. decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle;
- d. Signature alteration equipment that can be removed without violating the structural integrity of the vehicle;
- e. Equipment required for a mission such as data gathering, recording or transmitting devices for mission-specific data and supporting structures that can be removed without violating the structural integrity of the vehicle;
- f. Recovery equipment (e.g. parachutes) that can be removed without violating the structural integrity of the vehicle.
- g. Munitions supporting structures and deployment mechanisms that can be removed without violating the structural integrity of the vehicle.

## "Production"

Means all production phases such as:

- production engineering
- manufacture
- integration
- assembly (mounting)

- inspection
- testing
- quality assurance

## "Production equipment"

Means tooling, templates, jigs, mandrels, moulds, dies, fixtures, alignment mechanisms, test equipment, other machinery and components therefor, limited to those specially designed or modified for "development" or for one or more phases of "production".

#### "Production facilities"

Means "production equipment" and specially designed "software" therefor integrated into installations for "development" or for one or more phases of "production".

## "Programmes"

A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

## "Radiation hardened"

Means that the component or equipment is designed or rated to withstand radiation levels which meet or exceed a total irradiation dose of  $5 \times 10^5$  rads (Si).

#### "Range"

The maximum distance that the specified rocket system or unmanned aerial vehicle (UAV) system is capable of travelling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth.

## Technical Notes:

- 1. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining "range".
- 2. The "range" for both rocket systems and UAV systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links or other external constraints.
- 3. For rocket systems, the "range" will be determined using the trajectory that maximises "range", assuming ICAO standard atmosphere with zero wind.
- 4. For UAV systems, the "range" will be determined for a one-way distance using the most fuel-efficient flight profile (e.g. cruise speed and altitude), assuming ICAO standard atmosphere with zero wind.

## "Software"

A collection of one or more "programmes", or "micro-programmes", fixed in any tangible medium of expression.

## "Technology"

Means specific information which is required for the "development", "production" or "use" of a product. The information may take the form of "technical data" or "technical assistance".

## "Technical assistance"

May take forms such as:

- instruction
- skills
- training
- working knowledge
- consulting services

## "Technical data"

May take forms such as:

- blueprints
- plans
- diagrams
- models
- formulae
- engineering designs and specifications
- manuals and instructions written or recorded on other media or devices such as:
  - disk
  - tape
  - read-only memories

## "Use"

## Means:

- operation
- installation (including on-site installation)
- maintenance
- repair
- overhaul
- refurbishing

## 3. TERMINOLOGY

Where the following terms appear in the text, they are to be understood according to the explanations below:

- (a) "Specially designed" describes equipment, parts, components, **materials** or "software" which, as a result of "development", have unique properties that distinguish them for certain predetermined purposes. For example, a piece of equipment that is "specially designed" for use in a missile will only be considered so if it has no other function or use. Similarly, a piece of manufacturing equipment that is "specially designed" to produce a certain type of component will only be considered such if it is not capable of producing other types of components.
- (b) "Designed or modified" describes equipment, parts or components which, as a result of "development," or modification, have specified properties that make them fit for a particular application. "Designed or modified" equipment, parts, components or "software" can be used for other applications. For example, a titanium coated pump designed for a missile may be used with corrosive fluids other than propellants.
- (c) "Usable in", "usable for", "usable as" or "capable of" describes equipment, parts, components, materials or "software" which are suitable for a particular purpose. There is no need for the equipment, parts, components or "software" to have been configured, modified or specified for the particular purpose. For example, any military specification memory circuit would be "capable of" operation in a guidance system.
- (d) "Modified" in the context of "software" describes "software" which has been intentionally changed such that it has properties that make it fit for specified purposes or applications. Its properties may also make it suitable for purposes or applications other than those for which it was "modified".

## Category I; Item 1

#### **CATEGORY I**

## ITEM 1 COMPLETE DELIVERY SYSTEMS

- 1.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 1.A.1. Complete rocket systems (including ballistic missile systems, space launch vehicles, and sounding rockets) capable of delivering at least a 500 kg "payload" to a "range" of at least 300 km.
- 1.A.2. Complete unmanned aerial vehicle systems (including cruise missile systems, target drones and reconnaissance drones) capable of delivering at least a 500 kg "payload" to a "range" of at least 300 km.
- 1.B. TEST AND PRODUCTION EQUIPMENT
- 1.B.1. "Production facilities" specially designed for the systems specified in 1.A.
- 1.C. MATERIALS

None.

- 1.D. SOFTWARE
- 1.D.1. "Software" specially designed or modified for the "use" of "production facilities" specified in 1.B.
- 1.D.2. "Software" which coordinates the function of more than one subsystem, specially designed or modified for "use" in systems specified in 1.A.
- 1.E. TECHNOLOGY
- 1.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 1.A., 1.B., or 1.D.

## Category I; Item 2

## ITEM 2 COMPLETE SUBSYSTEMS USABLE FOR COMPLETE DELIVERY SYSTEMS

## 2.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 2.A.1. Complete subsystems usable in the systems specified in 1.A., as follows:
  - a. Individual rocket stages usable in the systems specified in 1.A.;
  - b. Re-entry vehicles, and equipment designed or modified therefor, usable in the systems specified in 1.A., as follows, except as provided in the Note below 2.A.1. for those designed for non-weapon payloads:
    - 1. Heat shields, and components therefor, fabricated of ceramic or ablative materials;
    - 2. Heat sinks and components therefor, fabricated of light-weight, high heat capacity materials;
    - 3. Electronic equipment specially designed for re-entry vehicles;
  - c. Solid propellant rocket motors, **hybrid rocket motors** or liquid propellant rocket engines, usable in the systems specified in 1.A., having a total impulse capacity equal to or greater than  $1.1 \times 10^6$  Ns;

### *Note:*

Liquid propellant apogee engines and station-keeping engines specified in 2.A.1.c., designed or modified for use on satellites, may be treated as Category II, if the subsystem is exported subject to end-use statements and quantity limits appropriate for the excepted end-use stated above, when having a vacuum thrust not greater than 1kN.

d. 'Guidance sets', usable in the systems specified in 1.A., capable of achieving system accuracy of 3.33% or less of the "range" (e.g. a 'CEP' of 10 km or less at a "range" of 300 km), except as provided in the Note below 2.A.1. for those designed for missiles with a "range" under 300 km or manned aircraft;

## Technical Notes:

1. A 'guidance set' integrates the process of measuring and computing a vehicle's position and velocity (i.e. navigation) with that of computing and sending commands to the vehicle's flight control systems to correct the trajectory.

- 2. 'CEP' (circle of equal probability) is a measure of accuracy, defined as the radius of the circle centred at the target, at a specific range, in which 50% of the payloads impact.
- e. Thrust vector control sub-systems, usable in the systems specified in 1.A., except as provided in the Note below 2.A.1. for those designed for rocket systems that do not exceed the "range"/"payload" capability of systems specified in 1.A.;

## Technical Note:

- 2.A.1.e. includes the following methods of achieving thrust vector control:
- a. Flexible nozzle;
- b. Fluid or secondary gas injection;
- c. Movable engine or nozzle;
- d. Deflection of exhaust gas stream (jet vanes or probes);
- e. Use of thrust tabs.
- f. Weapon or warhead safing, arming, fuzing, and firing mechanisms, usable in the systems specified in 1.A., except as provided in the Note below 2.A.1. for those designed for systems other than those specified in 1.A.

#### *Note:*

The exceptions in 2.A.1.b., 2.A.1.d., 2.A.1.e. and 2.A.1.f. above may be treated as Category II if the subsystem is exported subject to end-use statements and quantity limits appropriate for the excepted end-use stated above.

- 2.B. TEST AND PRODUCTION EQUIPMENT
- 2.B.1. "Production facilities" specially designed for the subsystems specified in 2.A.
- 2.B.2. "Production equipment" specially designed for the subsystems specified in 2.A.
- 2.C. MATERIALS

None.

- 2.D. SOFTWARE
- 2.D.1. "Software" specially designed or modified for the "use" of "production facilities" specified in 2.B.1.
- 2.D.2. "Software" specially designed or modified for the "use" of rocket motors or engines specified in 2.A.1.c.

2.D.3. "Software", specially designed or modified for the "use" of 'guidance sets' specified in 2.A.1.d.

## *Note:*

- 2.D.3. includes "software", specially designed or modified to enhance the performance of 'guidance sets' to achieve or exceed the accuracy specified in 2.A.1.d.
- 2.D.4. "Software" specially designed or modified for the "use" of subsystems or equipment specified in 2.A.1.b.3.
- 2.D.5. "Software" specially designed or modified for the "use" of systems in 2.A.1.e.
- 2.D.6. "Software" specially designed or modified for the "use" of systems in 2.A.1.f.

## *Note:*

Subject to end-use statements appropriate for the excepted end-use, "software" controlled by 2.D.2. - 2.D.6. may be treated as Category II as follows:

- 1. Under 2.D.2. if specially designed or modified for liquid propellant apogee engines, designed or modified for satellite applications as specified in the Note to 2.A.1.c.;
- 2. Under 2.D.3. if designed for missiles with a "range" of under 300 km or manned aircraft;
- 3. Under 2.D.4. if specially designed or modified for re-entry vehicles designed for non-weapon payloads;
- 4. Under 2.D.5. if designed for rocket systems that do not exceed the "range" "payload" capability of systems specified in 1.A.;
- 5. Under 2.D.6. if designed for systems other than those specified in 1.A.

## 2.E. TECHNOLOGY

2.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 2.A., 2.B. or 2.D.

## Category II; Item 3

## **CATEGORY II**

## ITEM 3 PROPULSION COMPONENTS AND EQUIPMENT

- 3.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 3.A.1. Turbojet and turbofan engines, as follows:
  - a. Engines having both of the following characteristics:
    - 1. 'Maximum thrust value' greater than 400 N (achieved un-installed) excluding civil certified engines with a 'maximum thrust value' greater than 8.89 kN (achieved un-installed); and
    - 2. Specific fuel consumption of 0.15 kg N<sup>-1</sup> h<sup>-1</sup> or less (at maximum continuous power at sea level static and standard conditions);

## **Technical Note:**

- In 3.A.1.a.1., 'maximum thrust value' is the manufacturer's demonstrated maximum thrust for the engine type un-installed. The civil type certified thrust value will be equal to or less than the manufacturer's demonstrated maximum thrust for the engine type.
- b. Engines designed or modified for systems specified in 1.A. or 19.A.2., regardless of thrust or specific fuel consumption.

#### *Note:*

Engines specified in 3.A.1. may be exported as part of a manned aircraft or in quantities appropriate for replacement parts for a manned aircraft.

3.A.2. Ramjet/scramjet/pulse jet/'combined cycle engines', including devices to regulate combustion, and specially designed components therefor, usable in the systems specified in 1.A. or 19.A.2.

## **Technical Note:**

In Item 3.A.2., 'combined cycle engines' are the engines that employ two or more cycles of the following types of engines: gas-turbine engine (turbojet, turboprop, turbofan and turboshaft), ramjet, scramjet, pulse jet, pulse detonation engine, rocket motor (liquid/solid-propellant and hybrid).

3.A.3. Rocket motor cases, 'insulation' components and nozzles therefor, usable in the systems specified in 1.A. or 19.A.1.

#### Technical Note:

In 3.A.3. 'insulation' intended to be applied to the components of a rocket motor, i.e. the case, nozzle inlets, case closures, includes cured or semi-cured compounded rubber components comprising sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps.

## *Note:*

Refer to 3.C.2. for 'insulation' material in bulk or sheet form.

3.A.4. Staging mechanisms, separation mechanisms, and interstages therefor, usable in the systems specified in 1.A.

## Notes:

#### See also Item 11.A.5.

3.A.5. Liquid and slurry propellant (including oxidisers) control systems, and specially designed components therefor, usable in the systems specified in 1.A., designed or modified to operate in vibration environments greater than 10 g rms between 20 Hz and 2 kHz.

## *Notes:*

- 1. The only servo valves and pumps specified in 3.A.5. are the following:
  - a. Servo valves designed for flow rates equal to or greater than 24 litres per minute, at an absolute pressure equal to or greater than 7 MPa, that have an actuator response time of less than 100 ms.
  - b. Pumps, for liquid propellants, with shaft speeds equal to or greater than 8,000 rpm or with discharge pressures equal to or greater than 7 MPa.
- 2. Systems and components specified in 3.A.5. may be exported as part of a satellite.
- 3.A.6. Specially designed components for hybrid rocket motors specified in 2.A.1.c. and 20.A.1.b.
- 3.A.7. Radial ball bearings having all tolerances specified in accordance with ISO 492 Tolerance Class 2 (or ANSI/ABMA Std 20 Tolerance Class ABEC-9 or other national equivalents), or better and having all the following characteristics:
  - a. An inner ring bore diameter between 12 and 50 mm;
  - b. An outer ring outside diameter between 25 and 100 mm; and
  - c. A width between 10 and 20 mm.

- 3.A.8. Liquid propellant tanks specially designed for the propellants controlled in Item 4.C. or other liquid propellants used in the systems specified in 1.A.1.
- 3.A.9. 'Turboprop engine systems' specially designed for the systems in 1.A.2. or 19.A.2., and specially designed components therefor, having a maximum power greater than 10 kW (achieved uninstalled at sea level standard conditions), excluding civil certified engines.

## **Technical Note:**

For the purposes of Item 3.A.9., a 'turboprop engine system' incorporates all of the following:

- a. Turboshaft engine; and
- b. Power transmission system to transfer the power to a propeller.
- 3.B. TEST AND PRODUCTION EQUIPMENT
- 3.B.1. "Production facilities" specially designed for equipment or materials specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6., 3.A.8., 3.A.9. or 3.C.
- 3.B.2. "Production equipment" specially designed for equipment or materials specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6., 3.A.8., 3.A.9. or 3.C.
- 3.B.3. Flow-forming machines, and specially designed components therefor, which:
  - a. According to the manufacturers technical specification can be equipped with numerical control units or a computer control, even when not equipped with such units at delivery; and
  - b. Have more than two axes which can be co-ordinated simultaneously for contouring control.

#### *Note:*

This item does not include machines that are not usable in the "production" of propulsion components and equipment (e.g. motor cases) for systems specified in 1.A.

## Technical Note:

Machines combining the function of spin-forming and flow-forming are, for the purpose of this item, regarded as flow-forming machines.

#### 3.C. MATERIALS

3.C.1. 'Interior lining' usable for rocket motor cases in the systems specified in 1.A. or specially designed for systems specified in 19.A.1. or 19.A.2.

#### Technical Note:

- In 3.C.1. 'interior lining' suited for the bond interface between the solid propellant and the case or insulating liner is usually a liquid polymer based dispersion of refractory or insulating materials e.g. carbon filled HTPB or other polymer with added curing agents to be sprayed or screeded over a case interior.
- 3.C.2. 'Insulation' material in bulk form usable for rocket motor cases in the systems specified in 1.A. or specially designed for systems specified in 19.A.1. or 19.A.2.

## Technical Note:

In 3.C.2. 'insulation' intended to be applied to the components of a rocket motor, i.e. the case, nozzle inlets, case closures, includes cured or semi-cured compounded rubber sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps specified in 3.A.3.

#### 3.D. SOFTWARE

- 3.D.1. "Software" specially designed or modified for the "use" of "production facilities" and flow forming machines specified in 3.B.1. or 3.B.3.
- 3.D.2. "Software" specially designed or modified for the "use" of equipment specified in 3.A.1., 3.A.2., 3.A.4., 3.A.5., 3.A.6. or 3.A.9.

#### Notes:

- 1. "Software" specially designed or modified for the "use" of engines specified in 3.A.1. may be exported as part of a manned aircraft or as replacement "software" therefor.
- 2. "Software" specially designed or modified for the "use" of propellant control systems specified in 3.A.5. may be exported as part of a satellite or as replacement "software" therefor.
- 3.D.3. "Software" specially designed or modified for the "development" of equipment specified in 3.A.2., 3.A.3. or 3.A.4.

## 3.E. TECHNOLOGY

3.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6., **3.A.8.**, 3.A.9., 3.B., 3.C. or 3.D.

## Category II; Item 4

## ITEM 4 PROPELLANTS, CHEMICALS AND PROPELLANT PRODUCTION

4.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

None.

- 4.B. TEST AND PRODUCTION EQUIPMENT
- 4.B.1. "Production equipment", and specially designed components therefor, for the "production", handling or acceptance testing of liquid propellants or propellant constituents specified in 4.C.
- 4.B.2. "Production equipment", other than that described in 4.B.3., and specially designed components therefor, for the production, handling, mixing, curing, casting, pressing, machining, extruding or acceptance testing of solid propellants or propellant constituents specified in 4.C.
- 4.B.3. Equipment as follows, and specially designed components therefor:
  - a. Batch mixers with provision for mixing under vacuum in the range of zero to 13.326 kPa and with temperature control capability of the mixing chamber and having all of the following:
    - 1. A total volumetric capacity of 110 litres or more; and
    - 2. At least one mixing/kneading shaft mounted off centre;
  - b. Continuous mixers with provision for mixing under vacuum in the range of zero to 13.326 kPa and with a temperature control capability of the mixing chamber having any of the following:
    - 1. Two or more mixing/kneading shafts; or
    - 2. A single rotating shaft which oscillates and having kneading teeth/pins on the shaft as well as inside the casing of the mixing chamber;
  - c. Fluid energy mills usable for grinding or milling substances specified in 4.C.;
  - d. Metal powder "production equipment" usable for the "production", in a controlled environment, of spherical or atomised materials specified in 4.C.2.c., 4.C.2.d. or 4.C.2.e.

## *Note:*

#### 4.B.3.d. includes:

- a. Plasma generators (high frequency arc-jet) usable for obtaining sputtered or spherical metallic powders with organization of the process in an argon-water environment;
- b. Electroburst equipment usable for obtaining sputtered or spherical metallic powders with organization of the process in an argon-water environment;
- c. Equipment usable for the "production" of spherical aluminium powders by powdering a melt in an inert medium (e.g. nitrogen).

#### Notes:

- 1. The only batch mixers, continuous mixers, usable for solid propellants or propellants constituents specified in 4.C., and fluid energy mills specified in 4.B., are those specified in 4.B.3.
- 2. Forms of metal powder "production equipment" not specified in 4.B.3.d. are to be evaluated in accordance with 4.B.2.

## 4.C. MATERIALS

- 4.C.1. Composite and composite modified double base propellants.
- 4.C.2. Fuel substances as follows:
  - a. Hydrazine (CAS 302-01-2) with a concentration of more than 70%;
  - b. Hydrazine derivatives as follows:
    - 1. Monomethylhydrazine (MMH) (CAS 60-34-4);
    - 2. Unsymmetrical dimethylhydrazine (UDMH) (CAS 57-14-7);
    - 3. Hydrazine mononitrate;
    - 4. Trimethylhydrazine (CAS 1741-01-1);
    - 5. Tetramethylhydrazine (CAS 6415-12-9);
    - 6. N,N diallylhydrazine;
    - 7. Allylhydrazine (CAS 7422-78-8);
    - 8. Ethylene dihydrazine;
    - 9. Monomethylhydrazine dinitrate;
    - 10. Unsymmetrical dimethylhydrazine nitrate;
    - 11. Hydrazinium azide (CAS 14546-44-2);
    - 12. Dimethylhydrazinium azide;
    - 13. Hydrazinium dinitrate:
    - 14. Diimido oxalic acid dihydrazine (CAS 3457-37-2);

- 15. 2-hydroxyethylhydrazine nitrate (HEHN);
- 16. Hydrazinium perchlorate (CAS 27978-54-7);
- 17. Hydrazinium diperchlorate (CAS 13812-39-0);
- 18. Methylhydrazine nitrate (MHN);
- 19. Diethylhydrazine nitrate (DEHN);
- 20. 3,6-dihydrazino tetrazine nitrate (DHTN);

## Technical note:

- 3,6-dihydrazino tetrazine nitrate is also referred to as 1,4-dihydrazine nitrate
- c. Spherical **or spheroidal** aluminium powder (CAS 7429-90-5) **in particle size** of less than 200 x 10<sup>-6</sup> m (200 μm) and an aluminium content of 97% by weight or more, if at least 10% of the total weight is made up of particles of less than 63 μm, according to ISO 2591:1988 or national equivalents;

## **Technical Note:**

A particle size of 63  $\mu$ m (ISO R-565) corresponds to 250 mesh (Tyler) or 230 mesh (ASTM standard E-11).

d. Metal powders of any of the following: zirconium (CAS 7440-67-7), beryllium (CAS 7440-41-7), magnesium (CAS 7439-95-4) or alloys of these, if at least 90% of the total particles by particle volume or weight are made up of particles of less than 60  $\mu$ m (determined by measurement techniques such as using a sieve, laser diffraction or optical scanning), whether spherical, atomised, spheroidal, flaked or ground, consisting of 97% by weight or more of any of the above mentioned metals;

## Note:

In a multimodal particle distribution (e.g. mixtures of different grain sizes) in which one or more modes are controlled, the entire powder mixture is controlled.

## <u>Technical Note:</u>

The natural content of hafnium (CAS 7440-58-6) in the zirconium (typically 2% to 7%) is counted with the zirconium.

e. Metal powders of either boron (CAS 7740-42-8) or boron alloys with a boron content of 85% or more by weight, if at least 90% of the total particles by particle volume or weight are made up of particles of less than 60 µm

(determined by measurement techniques such as using a sieve, laser diffraction or optical scanning), whether spherical, atomised, spheroidal, flaked or ground;

#### *Note:*

In a multimodal particle distribution (e.g. mixtures of different grain sizes) in which one or more modes are controlled, the entire powder mixture is controlled.

- f. High energy density materials, usable in the systems specified in 1.A. or 19.A., as follows:
  - 1. Mixed fuels that incorporate both solid and liquid fuels, such as boron slurry, having a mass- based energy density of 40 x 10<sup>6</sup> J/kg or greater;
  - 2. Other high energy density fuels and fuel additives (e.g., cubane, ionic solutions, JP-10) having a volume-based energy density of 37.5 x 10<sup>9</sup> J/m<sup>3</sup> or greater, measured at 20°C and one atmosphere (101.325 kPa) pressure.

#### *Note:*

Item 4.C.2.f.2. does not control fossil refined fuels and biofuels produced from vegetables, including fuels for engines certified for use in civil aviation, unless specifically formulated for systems specified in 1.A. or 19.A.

#### 4.C.3. Oxidisers/Fuels as follows:

Perchlorates, chlorates or chromates mixed with powdered metals or other high energy fuel components.

#### 4.C.4. Oxidiser substances as follows:

- a. Oxidiser substances usable in liquid propellant rocket engines as follows:
  - 1. Dinitrogen trioxide (CAS 10544-73-7);
  - 2. Nitrogen dioxide (CAS 10102-44-0) / dinitrogen tetroxide (CAS 10544-72-6);
  - 3. Dinitrogen pentoxide (CAS 10102-03-1):
  - 4. Mixed Oxides of Nitrogen (MON);
  - 5. Inhibited Red Fuming Nitric Acid (IRFNA) (CAS 8007-58-7);
  - 6. Compounds composed of fluorine and one or more of other halogens, oxygen or nitrogen;

#### *Note:*

Item 4.C.4.a.6. does not control Nitrogen Trifluoride (NF<sub>3</sub>) (CAS 7783-54-2) in a gaseous state as it is not usable for missile applications.

#### Technical Note:

Mixed Oxides of Nitrogen (MON) are solutions of Nitric Oxide (NO) in Dinitrogen Tetroxide/Nitrogen Dioxide ( $N_2O_4/NO_2$ ) that can be used in missile systems. There are a range of compositions that can be denoted as MONi or MONij where i and j are integers representing the percentage of Nitric Oxide in the mixture (e.g. MON3 contains 3% Nitric Oxide, MON25 25% Nitric Oxide. An upper limit is MON40, 40% by weight).

- b. Oxidiser substances usable in solid propellant rocket motors as follows:
  - 1. Ammonium perchlorate (AP) (CAS 7790-98-9);
  - 2. Ammonium dinitramide (ADN) (CAS 140456-78-6);
  - 3. Nitro-amines (cyclotetramethylene tetranitramine (HMX) (CAS 2691-41-0); cyclotrimethylene trinitramine (RDX) (CAS 121-82-4);
  - 4. Hydrazinium nitroformate (HNF) (CAS 20773-28-8);
  - 5. 2,4,6,8,10,12-Hexanitrohexaazaisowurtzitane (CL-20) (CAS 135285-90-4).

#### 4.C.5. Polymeric substances, as follows:

- a. Carboxy terminated polybutadiene (including carboxyl terminated polybutadiene) (CTPB);
- b. Hydroxy terminated polybutadiene (including hydroxyl terminated polybutadiene) (HTPB);
- c. Glycidyl azide polymer (GAP);
- d. Polybutadiene Acrylic Acid (PBAA);
- e. Polybutadiene Acrylic Acid Acrylonitrile (PBAN);
- f. Polytetrahydrofuran polyethylene glycol (TPEG).

#### <u>Technical Note:</u>

Polytetrahydrofuran polyethylene glycol (TPEG) is a block co-polymer of poly 1,4-Butanediol and polyethylene glycol (PEG).

- 4.C.6. Other propellant additives and agents as follows:
  - a. Bonding agents as follows:
    - 1. Tris (1-(2-methyl)aziridinyl) phosphine oxide (MAPO) (CAS 57-39-6);
    - 2. 1,1',1"-trimesoyl-tris(2-ethylaziridine) (HX-868, BITA) (CAS 7722-73-8);

- 3. Tepanol (HX-878), reaction product of tetraethlylenepentamine, acrylonitrile and glycidol (CAS 68412-46-4);
- 4. Tepan (HX-879), reaction product of tetraethlylenepentamine and acrylonitrile (CAS 68412-45-3);
- 5. Polyfunctional aziridine amides with isophthalic, trimesic, isocyanuric, or trimethyladipic backbone also having a 2-methyl or 2-ethyl aziridine group;

#### *Note:*

Item 4.C.6.a.5. includes:

- 1. 1,1'-Isophthaloyl-bis(2-methylaziridine) (HX-752) (CAS 7652-64-4);
- 2. 2,4,6-tris(2-ethyl-1-aziridinyl)-1,3,5-triazine (HX-874) (CAS 18924-91-9);
- 3. 1,1'-trimethyladipoylbis(2-ethylaziridine) (HX-877) (CAS 71463-62-2).
- b. Curing reaction catalysts as follows: Triphenyl bismuth (TPB) (CAS 603-33-8);
- c. Burning rate modifiers, as follows:
  - 1. Carboranes, decaboranes, pentaboranes and derivatives thereof;
  - 2. Ferrocene derivatives, as follows:
    - a. Catocene (CAS 37206-42-1);
    - b. Ethyl ferrocene (CAS 1273-89-8);
    - c. Propyl ferrocene;
    - d. n-Butyl ferrocene (CAS 31904-29-7):
    - e. Pentyl ferrocene (CAS 1274-00-6);
    - f. Dicyclopentyl ferrocene;
    - g. Dicyclohexyl ferrocene;
    - h. Diethyl ferrocene (CAS 1273-97-8);
    - i. Dipropyl ferrocene;
    - j. Dibutyl ferrocene (CAS 1274-08-4);
    - k. Dihexyl ferrocene (CAS 93894-59-8);
    - l. Acetyl ferrocene (CAS 1271-55-2) / 1,1'-diacetyl ferrocene (CAS 1273-94-5):
    - m. Ferrocene carboxylic acid (CAS 1271-42-7) / 1,1'-Ferrocenedicarboxylic acid (CAS 1293-87-4);
    - n. Butacene (CAS 125856-62-4);
    - o. Other ferrocene derivatives usable as rocket propellant burning rate modifiers;

#### *Note:*

Item 4.C.6.c.2.o does not control ferrocene derivatives that contain a six carbon aromatic functional group attached to the ferrocene molecule.

- d. Esters and plasticisers as follows:
  - 1. Triethylene glycol dinitrate (TEGDN) (CAS 111-22-8);
  - 2. Trimethylolethane trinitrate (TMETN) (CAS 3032-55-1);
  - 3. 1,2,4-butanetriol trinitrate (BTTN) (CAS 6659-60-5);
  - 4. Diethylene glycol dinitrate (DEGDN) (CAS 693-21-0);
  - 5. 4,5 diazidomethyl-2-methyl-1,2,3-triazole (iso- DAMTR);
  - 6. Nitratoethylnitramine (NENA) based plasticisers, as follows:
    - a. Methyl-NENA (CAS 17096-47-8);
    - b. Ethyl-NENA (CAS 85068-73-1);
    - c. Butyl-NENA (CAS 82486-82-6);
  - 7. Dinitropropyl based plasticisers, as follows:
    - a. Bis (2,2-dinitropropyl) acetal (BDNPA) (CAS 5108-69-0);
    - b. Bis (2,2-dinitropropyl) formal (BDNPF) (CAS 5917-61-3);
- e. Stabilisers as follows:
  - 1. 2-Nitrodiphenylamine (CAS 119-75-5);
  - 2. N-methyl-p-nitroaniline (CAS 100-15-2).

#### 4.D. SOFTWARE

4.D.1. "Software" specially designed or modified for the "use" of equipment specified in 4.B. for the "production" and handling of materials specified in 4.C.

#### 4.E. TECHNOLOGY

4.E.1 "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or materials specified in 4.B. and 4.C.

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# ITEM 6 PRODUCTION OF STRUCTURAL COMPOSITES, PYROLYTIC DEPOSITION AND DENSIFICATION, AND STRUCTURAL MATERIALS

- 6.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 6.A.1. Composite structures, laminates, and manufactures thereof, specially designed for use in the systems specified in 1.A., 19.A.1. or 19.A.2. and the subsystems specified in 2.A. or 20.A.
- 6.A.2. Resaturated pyrolised (i.e. carbon-carbon) components having all of the following:
  - a. Designed for rocket systems; and
  - b. Usable in the systems specified in 1.A. or 19.A.1.
- 6.B. TEST AND PRODUCTION EQUIPMENT
- 6.B.1. Equipment for the "production" of structural composites, fibres, prepregs or preforms, usable in the systems specified in 1.A., 19.A.1. or 19.A.2., as follows, and specially designed components, and accessories therefor:
  - a. Filament winding machines or fibre placement machines, of which the motions for positioning, wrapping and winding fibres can be co-ordinated and programmed in three or more axes, designed to fabricate composite structures or laminates from fibrous or filamentary materials, and co-ordinating and programming controls;
  - b. Tape-laying machines of which the motions for positioning and laying tape and sheets can be co-ordinated and programmed in two or more axes, designed for the manufacture of composite airframes and missile structures;
  - c. Multi-directional, multi-dimensional weaving machines or interlacing machines, including adapters and modification kits for weaving, interlacing or braiding fibres to manufacture composite structures;

#### *Note:*

- 6.B.1.c. does not control textile machinery not modified for the end-uses stated.
- d. Equipment designed or modified for the production of fibrous or filamentary materials as follows:
  - 1. Equipment for converting polymeric fibres (such as polyacrylonitrile, rayon, or polycarbosilane) including special provision to strain the fibre during heating;

- 2. Equipment for the vapour deposition of elements or compounds on heated filament substrates;
- 3. Equipment for the wet-spinning of refractory ceramics (such as aluminium oxide);
- e. Equipment designed or modified for special fibre surface treatment or for producing prepregs and preforms, including rollers, tension stretchers, coating equipment, cutting equipment and clicker dies.

#### *Note:*

Examples of components and accessories for the machines specified in 6.B.1. are moulds, mandrels, dies, fixtures and tooling for the preform pressing, curing, casting, sintering or bonding of composite structures, laminates and manufactures thereof.

- 6.B.2. Nozzles specially designed for the processes referred to in 6.E.3.
- 6.B.3. Isostatic presses having all of the following characteristics:
  - a. Maximum working pressure equal to or greater than 69 MPa;
  - b. Designed to achieve and maintain a controlled thermal environment of 600°C or greater; and
  - c. Possessing a chamber cavity with an inside diameter of 254 mm or greater.
- 6.B.4. Chemical vapour deposition furnaces designed or modified for the densification of carbon-carbon composites.
- 6.B.5. Equipment and process controls, other than those specified in 6.B.3. or 6.B.4., designed or modified for densification and pyrolysis of structural composite rocket nozzles and re-entry vehicle nose tips.

#### 6.C. MATERIALS

6.C.1. Resin impregnated fibre prepregs and metal coated fibre preforms, for the goods specified in 6.A.1., made either with organic matrix or metal matrix utilising fibrous or filamentary reinforcements having a specific tensile strength greater than 7.62 x 10<sup>4</sup> m and a specific modulus greater than 3.18 x 10<sup>6</sup> m.

#### *Note:*

The only resin impregnated fibre prepregs specified in 6.C.1. are those using resins with a glass transition temperature (Tg), after cure, exceeding  $145^{\circ}$ C as determined by ASTM D4065 or national equivalents.

12-66036

#### Technical Notes:

- 1. In Item 6.C.1. 'specific tensile strength' is the ultimate tensile strength in  $N/m^2$  divided by the specific weight in  $N/m^3$ , measured at a temperature of  $(296 \pm 2)K((23 \pm 2)^{\circ}C)$  and a relative humidity of  $(50 \pm 5)\%$ .
- 2. In Item 6.C.1. 'specific modulus' is the Young's modulus in  $N/m^2$  divided by the specific weight in  $N/m^3$ , measured at a temperature of  $(296 \pm 2)K$   $((23 \pm 2)^{\circ}C)$  and a relative humidity of  $(50 \pm 5)\%$ .
- 6.C.2. Resaturated pyrolised (i.e. carbon-carbon) materials having all of the following:
  - a. Designed for rocket systems; and
  - b. Usable in the systems specified in 1.A. or 19.A.1.
- 6.C.3. Fine grain graphites with a bulk density of at least 1.72 g/cc measured at 15°C and having a grain size of  $100 \times 10^{-6}$  m ( $100 \mu m$ ) or less, usable for rocket nozzles and re-entry vehicle nose tips, which can be machined to any of the following products:
  - a. Cylinders having a diameter of 120 mm or greater and a length of 50 mm or greater;
  - b. Tubes having an inner diameter of 65 mm or greater and a wall thickness of 25 mm or greater and a length of 50 mm or greater; or
  - c. Blocks having a size of 120 mm x 120 mm x 50 mm or greater.
- 6.C.4. Pyrolytic or fibrous reinforced graphites usable for rocket nozzles and re-entry vehicle nose tips usable in systems specified in 1.A. or 19.A.1.
- 6.C.5. Ceramic composite materials (dielectric constant less than 6 at any frequency from 100 MHz to 100 GHz) for use in missile radomes usable in systems specified in 1.A. or 19.A.1.
- 6.C.6. Silicon-carbide materials as follows:
  - a. Bulk machinable silicon-carbide reinforced unfired ceramic usable for nose tips usable in systems specified in 1.A. or 19.A.1.;
  - b. Reinforced silicon-carbide ceramic composites usable for nose tips, re-entry vehicles, nozzle flaps, usable in systems specified in 1.A. or 19.A.1.

- 6.C.7. Materials for the fabrication of missile components in the systems specified in 1.A., 19.A.1. or 19.A.2, as follows:
  - a. Tungsten and alloys in particulate form with a tungsten content of 97% by weight or more and a particle size of  $50 \times 10^{-6}$  m ( $50 \mu m$ ) or less;
  - b. Molybdenum and alloys in particulate form with a molybdenum content of 97% by weight or more and a particle size of  $50 \times 10^{-6}$  m ( $50 \mu m$ ) or less;
  - c. Tungsten materials in the solid form having all of the following:
    - 1. Any of the following material compositions:
      - i. Tungsten and alloys containing 97% by weight or more of tungsten;
      - ii. Copper infiltrated tungsten containing 80% by weight or more of tungsten; or
      - iii. Silver infiltrated tungsten containing 80% by weight or more of tungsten; and
    - 2. Able to be machined to any of the following products:
      - i. Cylinders having a diameter of 120 mm or greater and a length of 50 mm or greater;
      - ii. Tubes having an inner diameter of 65 mm or greater and a wall thickness of 25 mm or greater and a length of 50 mm or greater; or
      - iii. Blocks having a size of 120 mm x 120 mm x 50 mm or greater.
- 6.C.8. Maraging steels, usable in the systems specified in 1.A. or 19.A.1., having all of the following:
  - a. Having an ultimate tensile strength, measured at 20°C, equal to or greater than:
    - 1. 0.9 GPa in the solution annealed stage; or
    - 2. 1.5 GPa in the precipitation hardened stage; and
  - b. Any of the following forms:
    - 1. Sheet, plate or tubing with a wall or plate thickness equal to or less than 5.0 mm; or
    - 2. Tubular forms with a wall thickness equal to or less than 50 mm and having an inner diameter equal to or greater than 270 mm.

#### Technical Note:

Maraging steels are iron alloys:

- a. Generally characterised by high nickel, very low carbon content and use substitutional elements or precipitates to produce strengthening and agehardening of the alloy; <u>and</u>
- b. Subjected to heat treatment cycles to facilitate the martensitic transformation process (solution annealed stage) and subsequently age hardened (precipitation hardened stage).

12-66036

- 6.C.9. Titanium-stabilized duplex stainless steel (Ti-DSS) usable in the systems specified in 1.A. or 19.A.1. and having all of the following:
  - a. Having all of the following characteristics:
    - 1. Containing 17.0 23.0 weight percent chromium and 4.5 7.0 weight percent nickel;
    - 2. Having a titanium content of greater than 0.10 weight percent; and
    - 3. A ferritic-austenitic microstructure (also referred to as a two-phase microstructure) of which at least 10% is austenite by volume (according to ASTM E-1181-87 or national equivalents); and
  - b. Any of the following forms:
    - 1. Ingots or bars having a size of 100 mm or more in each dimension;
    - 2. Sheets having a width of 600 mm or more and a thickness of 3 mm or less; or
    - 3. Tubes having an outer diameter of 600 mm or more and a wall thickness of 3 mm or less.

## 6.D. SOFTWARE

- 6.D.1. "Software" specially designed or modified for the "use" of equipment specified in 6.B.1.
- 6.D.2. "Software" specially designed or modified for the equipment specified in 6.B.3., 6.B.4. or 6.B.5.
- 6.E. TECHNOLOGY
- 6.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 6.A., 6.B., 6.C. or 6.D.
- 6.E.2. "Technical data" (including processing conditions) and procedures for the regulation of temperature, pressures or atmosphere in autoclaves or hydroclaves when used for the production of composites or partially processed composites, usable for equipment or materials specified in 6.A. or 6.C.
- 6.E.3. "Technology" for producing pyrolytically derived materials formed on a mould, mandrel or other substrate from precursor gases which decompose in the 1,300°C to 2,900°C temperature range at pressures of 130 Pa (1 mm Hg) to 20 kPa (150 mm Hg) including "technology" for the composition of precursor gases, flow-rates, and process control schedules and parameters.

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#### ITEM 9 INSTRUMENTATION, NAVIGATION AND DIRECTION FINDING

#### 9.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 9.A.1. Integrated flight instrument systems which include gyrostabilisers or automatic pilots, designed or modified for use in the systems specified in 1.A., or 19.A.1. or 19.A.2. and specially designed components therefor.
- 9.A.2. Gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, and specially designed components therefor.
- 9.A.3. Linear accelerometers, designed for use in inertial navigation systems or in guidance systems of all types, usable in the systems specified in 1.A., 19.A.1. or 19.A.2., having all of the following characteristics, and specially designed components therefor:
  - a. 'Scale factor' 'repeatability' less (better) than 1250 ppm; and
  - b. 'Bias' 'repeatability' less (better) than 1250 micro g.

### *Note:*

Item 9.A.3. does not control accelerometers specially designed and developed as Measurement While Drilling (MWD) sensors for use in downhole well service operations.

#### Technical Notes:

- 1. 'Bias' is defined as the accelerometer output when no acceleration is applied.
- 2. 'Scale factor' is defined as the ratio of change in output to a change in the input.
- 3. The measurement of 'bias' and 'scale factor' refers to one sigma standard deviation with respect to a fixed calibration over a period of one year.
- 4. 'Repeatability' is defined according to IEEE Standard 528-2001 as follows: 'The closeness of agreement among repeated measurements of the same variable under the same operating conditions when changes in conditions or non-operating periods occur between measurements'.

12-66036

9.A.4. All types of gyros usable in the systems specified in 1.A., 19.A.1 or 19.A.2., with a rated 'drift rate' 'stability' of less than 0.5 degrees (1 sigma or rms) per hour in a 1 g environment, and specially designed components therefor.

#### Technical Notes:

- 1. 'Drift rate' is defined as the component of gyro output that is functionally independent of input rotation and is expressed as an angular rate. (IEEE STD 528-2001 paragraph 2.56)
- 2. 'Stability' is defined as a measure of the ability of a specific mechanism or performance coefficient to remain invariant when continuously exposed to a fixed operating condition. (This definition does not refer to dynamic or servo stability.) (IEEE STD 528-2001 paragraph 2.247)
- 9.A.5. Accelerometers or gyros of any type, designed for use in inertial navigation systems or in guidance systems of all types, specified to function at acceleration levels greater than 100 g, and specially designed components therefor.

#### *Note*:

- 9.A.5. does not include accelerometers that are designed to measure vibration or shock.
- 9.A.6. Inertial or other equipment using accelerometers specified in 9.A.3. or 9.A.5. or gyros specified in 9.A.4. or 9.A.5., and systems incorporating such equipment, and specially designed components therefor.
- 9.A.7. 'Integrated navigation systems', designed or modified for the systems specified in 1.A., 19.A.1. or 19.A.2. and capable of providing a navigational accuracy of 200 m CEP or less.

#### Technical Note:

An 'integrated navigation system' typically incorporates all of the following components:

- a. An inertial measurement device (e.g. an attitude and heading reference system, inertial reference unit, or inertial navigation system);
- b. One or more external sensors used to update the position and/or velocity, either periodically or continuously throughout the flight (e.g. satellite navigation receiver, radar altimeter, and/or Doppler radar); and
- c. Integration hardware and software.
- <u>N.B.</u> For integration "software", see Item 9.D.4.

- 9.A.8. Three axis magnetic heading sensors having all of the following characteristics, and specially designed components therefor:
  - a. Internal tilt compensation in pitch (+/- 90 degrees) and having roll (+/- 180 degrees) axes.
  - b. Capable of providing azimuthal accuracy better (less) than 0.5 degrees rms at latitudes of +/- 80 degrees, referenced to local magnetic field; and
  - c. Designed or modified to be integrated with flight control and navigation systems.

#### *Note:*

Flight control and navigation systems in Item 9.A.8. include gyrostabilisers, automatic pilots and inertial navigation systems.

## 9.B. TEST AND PRODUCTION EQUIPMENT

9.B.1. "Production equipment", and other test, calibration and alignment equipment, other than that described in 9.B.2., designed or modified to be used with equipment specified in 9.A.

#### *Note:*

Equipment specified in 9.B.1. includes the following:

- a. For laser gyro equipment, the following equipment used to characterise mirrors, having the threshold accuracy shown or better:
  - 1. Scatterometer (10 ppm);
  - 2. Reflectometer (50 ppm);
  - 3. Profilometer (5 Angstroms);
- b. For other inertial equipment:
  - 1. Inertial Measurement Unit (IMU) Module Tester;
  - 2. IMU Platform Tester;
  - 3. IMU Stable Element Handling Fixture;
  - 4. IMU Platform Balance Fixture;
  - 5. Gyro Tuning Test Station;
  - 6. Gyro Dynamic Balance Station;
  - 7. Gyro Run-In/Motor Test Station;
  - 8. Gyro Evacuation and Filling Station;
  - 9. Centrifuge Fixture for Gyro Bearings;
  - 10. Accelerometer Axis Align Station;
  - 11. Accelerometer Test Station.

12-66036

## 9.B.2. Equipment as follows:

- a. Balancing machines having all the following characteristics:
  - 1. Not capable of balancing rotors/assemblies having a mass greater than 3 kg;
  - 2. Capable of balancing rotors/assemblies at speeds greater than 12,500 rpm;
  - 3. Capable of correcting unbalance in two planes or more; and
  - 4. Capable of balancing to a residual specific unbalance of 0.2 g mm per kg of rotor mass;
- b. Indicator heads (sometimes known as balancing instrumentation) designed or modified for use with machines specified in 9.B.2.a.;
- c. Motion simulators/rate tables (equipment capable of simulating motion) having all of the following characteristics:
  - 1. Two axes or more;
  - 2. Designed or modified to incorporate sliprings or integrated non-contact devices capable of transferring electrical power, signal information, or both; and
  - 3. Having any of the following characteristics:
    - a. For any single axis having all of the following:
      - 1. Capable of rates of 400 degrees/s or more, or 30 degrees/s or less; and
      - 2. A rate resolution equal to or less than 6 degrees/s and an accuracy equal to or less than 0.6 degrees/s;
    - b. Having a worst-case rate stability equal to or better (less) than plus or minus 0.05% averaged over 10 degrees or more; or
    - c. A positioning "accuracy" equal to or less (better) than 5 arc second;
- d. Positioning tables (equipment capable of precise rotary positioning in any axes) having the following characteristics:
  - 1. Two axes or more; and
  - 2. A positioning "accuracy" equal to or less (better) than 5 arc second;
- e. Centrifuges capable of imparting accelerations above 100 g and designed or modified to incorporate sliprings or integrated non-contact devices capable of transferring electrical power, signal information, or both.

#### Notes:

- 1. The only balancing machines, indicator heads, motion simulators, rate tables, positioning tables and centrifuges specified in Item 9 are those specified in 9.B.2.
- 2. 9.B.2.a. does not control balancing machines designed or modified for dental or other medical equipment.

- 3. 9.B.2.c. and 9.B.2.d. do not control rotary tables designed or modified for machine tools or for medical equipment.
- 4. Rate tables not controlled by 9.B.2.c. and providing the characteristics of a positioning table are to be evaluated according to 9.B.2.d.
- 5. Equipment that has the characteristics specified in 9.B.2.d. which also meets the characteristics of 9.B.2.c. will be treated as equipment specified in 9.B.2.c.
- 6. Item 9.B.2.c. applies whether or not sliprings or integrated non-contact devices are fitted at the time of export.
- 7. Item 9.B.2.e. applies whether or not sliprings or integrated non-contact devices are fitted at the time of export.

#### 9.C. MATERIALS

None.

#### 9.D. SOFTWARE

- 9.D.1. "Software" specially designed or modified for the "use" of equipment specified in 9.A. or 9.B.
- 9.D.2. Integration "software" for the equipment specified in 9.A.1.
- 9.D.3. Integration "software" specially designed for the equipment specified in 9.A.6.
- 9.D.4. Integration "software", designed or modified for the 'integrated navigation systems' specified in 9.A.7.

#### *Note:*

A common form of integration "software" employs Kalman filtering.

#### 9.E. TECHNOLOGY

9.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 9.A., 9.B. or 9.D.

## *Note:*

Equipment or "software" specified in 9.A. or 9.D. may be exported as part of a manned aircraft, satellite, land vehicle, marine/submarine vessel or geophysical survey equipment or in quantities appropriate for replacement parts for such applications.

12-66036

#### ITEM 10 FLIGHT CONTROL

- 10.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 10.A.1. Hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) designed or modified for the systems specified in 1.A.
- 10.A.2. Attitude control equipment designed or modified for the systems specified in 1.A.
- 10.A.3. Flight control servo valves designed or modified for the systems in 10.A.1. or 10.A.2., and designed or modified to operate in a vibration environment greater than 10 g rms between 20 Hz and 2 kHz.

#### *Note:*

Systems, equipment or valves specified in 10.A. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

- 10.B. TEST AND PRODUCTION EQUIPMENT
- 10.B.1. Test, calibration, and alignment equipment specially designed for equipment specified in 10.A.
- 10.C. MATERIALS

None.

- 10.D. SOFTWARE
- 10.D.1. "Software" specially designed or modified for the "use" of equipment specified in 10.A. or 10.B.

#### *Note:*

"Software" specified in 10.D.1. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

#### 10.E. TECHNOLOGY

- 10.E.1. Design "technology" for integration of air vehicle fuselage, propulsion system and lifting control surfaces, designed or modified for the systems specified in 1.A. or 19.A.2., to optimise aerodynamic performance throughout the flight regime of an unmanned aerial vehicle.
- 10.E.2. Design "technology" for integration of the flight control, guidance, and propulsion data into a flight management system, designed or modified for the systems specified in 1.A. or 19.A.1., for optimisation of rocket system trajectory.
- 10.E.3. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 10.A., 10.B. or 10.D.

## ITEM 11 AVIONICS

#### 11.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

11.A.1. Radar and laser radar systems, including altimeters, designed or modified for use in the systems specified in 1.A.

#### Technical Note:

Laser radar systems embody specialised transmission, scanning, receiving and signal processing techniques for utilisation of lasers for echo ranging, direction finding and discrimination of targets by location, radial speed and body reflection characteristics.

- 11.A.2. Passive sensors for determining bearings to specific electromagnetic sources (direction finding equipment) or terrain characteristics, designed or modified for use in the systems specified in 1.A.
- 11.A.3. Receiving equipment for Global Navigation Satellite Systems (GNSS; e.g. GPS, GLONASS or Galileo), having any of the following characteristics, and specially designed components therefor:
  - a. Designed or modified for use in systems specified in 1.A.; or
  - b. Designed or modified for airborne applications and having any of the following:
    - 1. Capable of providing navigation information at speeds in excess of 600 m/s;
    - 2. Employing decryption, designed or modified for military or governmental services, to gain access to GNSS secure signal/data; or
    - 3. Being specially designed to employ anti-jam features (e.g. null steering antenna or electronically steerable antenna) to function in an environment of active or passive countermeasures.

#### *Note:*

11.A.3.b.2. and 11.A.3.b.3. do not control equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) GNSS services.

11.A.4. Electronic assemblies and components, designed or modified for use in the systems specified in 1.A. or 19.A. and specially designed for military use and operation at temperatures in excess of 125°C.

#### Notes:

- 1. Equipment specified in 11.A. includes the following:
  - a. Terrain contour mapping equipment;
  - b. Scene mapping and correlation (both digital and analogue) equipment;
  - c. Doppler navigation radar equipment;
  - d. Passive interferometer equipment;
  - e. Imaging sensor equipment (both active and passive).
- 2. Equipment specified in 11.A. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.
- 11.A.5. Umbilical and interstage electrical connectors specially designed for systems specified in 1.A.1. or 19.A.1.

#### **Technical Note:**

Interstage connectors referred to in 11.A.5. also include electrical connectors installed between systems specified in 1.A.1. or 19.A.1. and their "payload".

11.B. TEST AND PRODUCTION EQUIPMENT

None

11.C. MATERIALS

None.

- 11.D. SOFTWARE
- 11.D.1. "Software" specially designed or modified for the "use" of equipment specified in 11.A.1., 11.A.2. or 11.A.4.
- 11.D.2. "Software" specially designed for the "use" of equipment specified in 11.A.3.
- 11.E. TECHNOLOGY
- 11.E.1. Design "technology" for protection of avionics and electrical subsystems against Electromagnetic Pulse (EMP) and Electromagnetic Interference (EMI) hazards from external sources, as follows:
  - a. Design "technology" for shielding systems;

- b. Design "technology" for the configuration of hardened electrical circuits and subsystems;
- c. Design "technology" for determination of hardening criteria for the above.
- 11.E.2. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 11.A. or 11.D.

#### ITEM 12 LAUNCH SUPPORT

- 12.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 12.A.1. Apparatus and devices, designed or modified for the handling, control, activation and launching of the systems specified in 1.A., 19.A.1., or 19.A.2.
- 12.A.2. Vehicles designed or modified for the transport, handling, control, activation and launching of the systems specified in 1.A.
- 12.A.3. Gravity meters (gravimeters), gravity gradiometers, and specially designed components therefor, designed or modified for airborne or marine use, and having a static or operational accuracy of  $7 \times 10^{-6} \text{ m/s}^2$  (0.7 milligal) or better, with a time to steady-state registration of two minutes or less, usable for systems specified in 1.A.
- 12.A.4. Telemetry and telecontrol equipment, including ground equipment, designed or modified for systems specified in 1.A., 19.A.1. or 19.A.2.

#### Notes:

- 1. 12.A.4. does not control equipment designed or modified for manned aircraft or satellites.
- 2. 12.A.4. does not control ground based equipment designed or modified for terrestrial or marine applications.
- 3. 12.A.4. does not control equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) GNSS services.
- 12.A.5. Precision tracking systems, usable for systems specified in 1.A., 19.A.1. or 19.A.2. as follows:
  - a. Tracking systems which use a code translator installed on the rocket or unmanned aerial vehicle in conjunction with either surface or airborne references or navigation satellite systems to provide real-time measurements of inflight position and velocity;
  - b. Range instrumentation radars including associated optical/infrared trackers with all of the following capabilities:
    - 1. Angular resolution better than 1.5 mrad;
    - 2. Range of 30 km or greater with a range resolution better than 10 m rms; and
    - 3. Velocity resolution better than 3 m/s.

12.A.6. Thermal batteries designed or modified for the systems specified in 1.A., 19.A.1. or 19.A.2.

#### *Note:*

Item 12.A.6. does not control thermal batteries specially designed for rocket systems or unmanned aerial vehicles that are not capable of a "range" equal to or greater than 300 km.

Technical Note:

Thermal batteries are single use batteries that contain a solid non-conducting inorganic salt as the electrolyte. These batteries incorporate a pyrolytic material that, when ignited, melts the electrolyte and activates the battery.

12.B. TEST AND PRODUCTION EQUIPMENT

None.

12.C. MATERIALS

None.

- 12.D. SOFTWARE
- 12.D.1. "Software" specially designed or modified for the "use" of equipment specified in 12.A.1.
- 12.D.2. "Software" which processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path, specially designed or modified for systems specified in 1.A., 19.A.1. or 19.A.2.
- 12.D.3. "Software" specially designed or modified for the "use" of equipment specified in 12.A.4. or 12.A.5., usable for systems specified in 1.A., 19.A.1. or 19.A.2.
- 12.E. TECHNOLOGY
- 12.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 12.A. or 12.D.

## ITEM 13 COMPUTERS

- 13.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 13.A.1. Analogue computers, digital computers or digital differential analysers, designed or modified for use in the systems specified in 1.A., having any of the following characteristics:
  - a. Rated for continuous operation at temperatures from below -45°C to above +55°C; or
  - b. Designed as ruggedised or "radiation hardened".
- 13.B. TEST AND PRODUCTION EQUIPMENT

None.

13.C. MATERIALS

None.

13.D. SOFTWARE

None.

- 13.E. TECHNOLOGY
- 13.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 13.A.

#### *Note:*

Item 13 equipment may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

## ITEM 14 ANALOGUE TO DIGITAL CONVERTERS

#### 14.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 14.A.1. Analogue-to-digital converters, usable in the systems specified in 1.A., having any of the following characteristics:
  - a. Designed to meet military specifications for ruggedised equipment; or
  - b. Designed or modified for military use and being any of the following types:
    - 1. Analogue-to-digital converter "microcircuits", which are "radiation-hardened" or have all of the following characteristics:
      - a. Having a quantisation corresponding to 8 bits or more when coded in the binary system;
      - b. Rated for operation in the temperature range from below -54°C to above +125°C; and
      - c. Hermetically sealed; or
    - 2. Electrical input type analogue-to-digital converter printed circuit boards or modules, having all of the following characteristics:
      - a. Having a quantisation corresponding to 8 bits or more when coded in the binary system;
      - b. Rated for operation in the temperature range from below -45°C to above +55°C; and
      - c. Incorporating "microcircuits" specified in 14.A.1.b.1.

#### 14.B. TEST AND PRODUCTION EQUIPMENT

None.

#### 14 C MATERIALS

None.

#### 14.D. SOFTWARE

None.

#### 14.E. TECHNOLOGY

14.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 14.A.

#### ITEM 15 TEST FACILITIES AND EQUIPMENT

15.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

None.

- 15.B. TEST AND PRODUCTION EQUIPMENT
- 15.B.1. Vibration test equipment, usable for the systems specified in 1.A., 19.A.1. or 19.A.2. or the subsystems specified in 2.A. or 20.A., and components therefor, as follows:
  - a. Vibration test systems employing feedback or closed loop techniques and incorporating a digital controller, capable of vibrating a system at an acceleration equal to or greater than 10 g rms between 20 Hz and 2 kHz while imparting forces equal to or greater than 50 kN, measured 'bare table';
  - b Digital controllers, combined with specially designed vibration test "software", with a 'real-time control bandwidth' greater than 5 kHz and designed for use with vibration test systems specified in 15.B.1.a.;

#### **Technical Note:**

'Real-time control bandwidth' is defined as the maximum rate at which a controller can execute complete cycles of sampling, processing data and transmitting control signals.

- c. Vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force equal to or greater than 50 kN, measured 'bare table', and usable in vibration test systems specified in 15.B.1.a.;
- d. Test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system capable of providing an effective combined force equal to or greater than 50 kN, measured 'bare table', and usable in vibration test systems specified in 15.B.1.a.

#### Technical Note:

Vibration test systems incorporating a digital controller are those systems, the functions of which are, partly or entirely, automatically controlled by stored and digitally coded electrical signals.

15.B.2. 'Aerodynamic test facilities' for speeds of Mach 0.9 or more, usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A. or 20.A.

#### Note:

Item 15.B.2 does not control wind-tunnels for speeds of Mach 3 or less with dimension of the 'test cross section size' equal to or less than 250 mm.

#### **Technical Notes:**

- 1. 'Aerodynamic test facilities' includes wind tunnels and shock tunnels for the study of airflow over objects.
- 2. 'Test cross section size' means the diameter of the circle, or the side of the square, or the longest side of the rectangle, or the major axis of the ellipse at the largest 'test cross section' location. 'Test cross section' is the section perpendicular to the flow direction.
- 15.B.3. Test benches/stands, usable for the systems specified in 1.A., 19.A.1. or 19.A.2. or the subsystems specified in 2.A. or 20.A., which have the capacity to handle solid or liquid propellant rockets, motors or engines having a thrust greater than 68 kN, or which are capable of simultaneously measuring the three axial thrust components.
- 15.B.4. Environmental chambers as follows, usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A. or 20.A.:
  - a. Environmental chambers capable of simulating all the following flight conditions:
    - 1. Having any of the following:
      - a. Altitude equal to or greater than 15 km; or
      - b. Temperature range from below -50°C to above 125°C; and
    - 2. Incorporating, or designed or modified to incorporate, a shaker unit or other vibration test equipment to produce vibration environments equal to or greater than 10 g rms, measured 'bare table', between 20 Hz and 2 kHz imparting forces equal to or greater than 5 kN;

#### Technical Notes:

- 1. Item 15.B.4.a.2. describes systems that are capable of generating a vibration environment with a single wave (e.g. a sine wave) and systems capable of generating a broad band random vibration (i.e. power spectrum).
- 2. In Item 15.B.4.a.2., designed or modified means the environmental chamber provides appropriate interfaces (e.g. sealing devices) to incorporate a shaker unit or other vibration test equipment as specified in this Item.
- b. Environmental chambers capable of simulating all of the following flight conditions:
  - 1. Acoustic environments at an overall sound pressure level of 140 dB or greater (referenced to 2 x 10<sup>-5</sup> N/m<sup>2</sup>) or with a total rated acoustic power output of 4 kW or greater; and

- 2. Any of the following:
  - a. Altitude equal to or greater than 15 km; or
  - b. Temperature range from below -50°C to above 125°C.
- 15.B.5. Accelerators capable of delivering electromagnetic radiation produced by bremsstrahlung from accelerated electrons of 2 MeV or greater, and equipment containing those accelerators, usable for the systems specified in 1.A., 19.A.1. or 19.A.2. or the subsystems specified in 2.A. or 20.A.

#### *Note:*

15.B.5. does not control equipment specially designed for medical purposes.

#### Technical Note:

In Item 15.B. 'bare table' means a flat table, or surface, with no fixture or fittings.

#### 15.C. MATERIALS

None.

#### 15.D. SOFTWARE

15.D.1. "Software" specially designed or modified for the "use" of equipment specified in 15.B. usable for testing systems specified in 1.A., 19.A.1. or 19.A.2. or subsystems specified in 2.A. or 20.A.

#### 15.E. TECHNOLOGY

15.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 15.B. or 15.D.

#### ITEM 16 MODELLING-SIMULATION AND DESIGN INTEGRATION

#### 16.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

16.A.1. Specially designed hybrid (combined analogue/digital) computers for modelling, simulation or design integration of systems specified in 1.A. or the subsystems specified in 2.A.

#### *Note:*

This control only applies when the equipment is supplied with "software" specified in 16.D.1.

16.B. TEST AND PRODUCTION EQUIPMENT

None.

16.C. MATERIALS

None.

#### 16.D. SOFTWARE

16.D.1. "Software" specially designed for modelling, simulation, or design integration of the systems specified in 1.A. or the subsystems specified in 2.A or 20.A.

#### **Technical Note:**

The modelling includes in particular the aerodynamic and thermodynamic analysis of the systems.

#### 16.E. TECHNOLOGY

16.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 16.A. or 16.D.

## ITEM 17 STEALTH

#### 17.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 17.A.1. Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A. or 20.A.
- 17.B. TEST AND PRODUCTION EQUIPMENT
- 17.B.1. Systems, specially designed for radar cross section measurement, usable for the systems specified in 1.A., 19.A.1. or 19.A.2. or the subsystems specified in 2.A.

#### 17.C. MATERIALS

17.C.1. Materials for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A.

#### Notes:

- 1. 17.C.1. includes structural materials and coatings (including paints), specially designed for reduced or tailored reflectivity or emissivity in the microwave, infrared or ultraviolet spectra.
- 2. 17.C.1. does not control coatings (including paints) when specially used for thermal control of satellites.

#### 17.D. SOFTWARE

17.D.1. "Software" specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A.

#### *Note:*

17.D.1. includes "software" specially designed for analysis of signature reduction.

## 17.E. TECHNOLOGY

17.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 17.A., 17.B., 17.C. or 17.D.

## *Note:*

17.E.1. includes databases specially designed for analysis of signature reduction.

#### ITEM 18 NUCLEAR EFFECTS PROTECTION

- 18.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS
- 18.A.1. "Radiation Hardened" "microcircuits" usable in protecting rocket systems and unmanned aerial vehicles against nuclear effects (e.g. Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.
- 18.A.2. 'Detectors' specially designed or modified to protect rocket systems and unmanned aerial vehicles against nuclear effects (e.g. Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.

#### Technical Note:

A 'detector' is defined as a mechanical, electrical, optical or chemical device that automatically identifies and records, or registers a stimulus such as an environmental change in pressure or temperature, an electrical or electromagnetic signal or radiation from a radioactive material. This includes devices that sense by one time operation or failure.

- 18.A.3. Radomes designed to withstand a combined thermal shock greater than 4.184 x 10<sup>6</sup> J/m<sup>2</sup> accompanied by a peak over pressure of greater than 50 kPa, usable in protecting rocket systems and unmanned aerial vehicles against nuclear effects (e.g. Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.
- 18.B. TEST AND PRODUCTION EQUIPMENT

None.

18 C MATERIALS

None.

18.D. SOFTWARE

None.

- 18.E. TECHNOLOGY
- 18.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 18.A.

#### ITEM 19 OTHER COMPLETE DELIVERY SYSTEMS

#### 19.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 19.A.1. Complete rocket systems (including ballistic missile systems, space launch vehicles, and sounding rockets), not specified in 1.A.1., capable of a "range" equal to or greater than 300 km.
- 19.A.2. Complete unmanned aerial vehicle systems (including cruise missile systems, target drones and reconnaissance drones), not specified in 1.A.2., capable of a "range" equal to or greater than 300 km.
- 19.A.3. Complete unmanned aerial vehicle systems, not specified in 1.A.2. or 19.A.2., having all of the following:
  - a. Having any of the following:
    - 1. An autonomous flight control and navigation capability; or
    - 2. Capability of controlled flight out of the direct vision range involving a human operator; and
  - b. Having any of the following:
    - 1. Incorporating an aerosol dispensing system/mechanism with a capacity greater than 20 litres; or
    - 2. Designed or modified to incorporate an aerosol dispensing system/mechanism with a capacity greater than 20 litres.

#### *Note:*

Item 19.A.3. does not control model aircraft, specially designed for recreational or competition purposes.

#### Technical Notes:

- 1. An aerosol consists of particulate or liquids other than fuel components, by-products or additives, as part of the "payload" to be dispersed in the atmosphere. Examples of aerosols include pesticides for crop dusting and dry chemicals for cloud seeding.
- 2. An aerosol dispensing system/mechanism contains all those devices (mechanical, electrical, hydraulic, etc.), which are necessary for storage and dispersion of an aerosol into the atmosphere. This includes the possibility of aerosol injection into the combustion exhaust vapour and into the propeller slip stream.

## 19.B. TEST AND PRODUCTION EQUIPMENT

# 19.B.1. "Production facilities" specially designed for the systems specified in 19.A.1 or 19.A.2.

#### 19.C. MATERIALS

None.

#### 19.D. SOFTWARE

19.D.1. "Software" which coordinates the function of more than one subsystem, specially designed or modified for "use" in the systems specified in 19.A.1. or 19.A.2.

#### 19.E. TECHNOLOGY

19.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 19.A. 1. or 19.A.2.

60

#### ITEM 20 OTHER COMPLETE SUBSYSTEMS

#### 20.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

- 20.A.1. Complete subsystems as follows:
  - a. Individual rocket stages, not specified in 2.A.1., usable in systems specified in 19.A.;
  - b. Solid propellant rocket motors, **hybrid rocket motors** or liquid propellant rocket engines, not specified in 2.A.1., usable in systems specified in 19.A., having a total impulse capacity equal to or greater than 8.41 x 10<sup>5</sup> Ns, but less than 1.1 x 10<sup>6</sup> Ns.

## 20.B. TEST AND PRODUCTION EQUIPMENT

- 20.B.1. "Production facilities" specially designed for the subsystems specified in 20.A.
- 20.B.2. "Production equipment" specially designed for the subsystems specified in 20.A.

#### 20 C MATERIALS

None.

#### 20.D. SOFTWARE

- 20.D.1. "Software" specially designed or modified for the systems specified in 20.B.1.
- 20.D.2. "Software", not specified in 2.D.2., specially designed or modified for the "use" of rocket motors or engines specified in 20.A.1.b.

#### 20.E. TECHNOLOGY

20.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 20.A., 20.B. or 20.D.

## Units, constants, acronyms and abbreviations

# UNITS, CONSTANTS, ACRONYMS AND ABBREVIATIONS USED IN THIS ANNEX

ABEC Annular Bearing Engineers Committee
ABMA American Bearing Manufactures Association
ANSI American National Standards Institute

Angstrom  $1 \times 10^{-10}$  metre

ASTM American Society for Testing and Materials

bar unit of pressure
°C degree Celsius
cc cubic centimetre

CAS Chemical Abstracts Service CEP Circle of Equal Probability

dB decibel

g gram; also, acceleration due to gravity

GHz gigahertz

GNSS Global Navigation Satellite System e.g.

'Galileo'

'GLONASS' - Global'naya Navigatsionnaya Sputnikovaya Sistema

'GPS' – Global Positioning System

h hour Hz hertz

HTPB Hydroxy-Terminated Polybutadiene
ICAO International Civil Aviation Organisation
IEEE Institute of Electrical and Electronic Engineers

IR Infrared

ISO International Organization for Standardization

J joule

JIS Japanese Industrial Standard

K Kelvin kilogram kg kilohertz kHz kilometre km kilonewton kN kilopascal kPa kWkilowatt metre m

MeV million electron volt or mega electron volt

MHz megahertz

milligal 10<sup>-5</sup> m/s<sup>2</sup> (also called mGal, mgal or milligalileo)

millimetre mm mm of mercury mm Hg megapascal MPa milliradian mrad millisecond ms micrometre μm N newton Pa pascal

ppm parts per million rads (Si) radiation absorbed dose

radio frequency root mean square revolutions per minute Re-entry Vehicles RF rms rpm RV

second S

Tg Tyler UAV glass transition temperature
Tyler mesh size, or Tyler standard sieve series
Unmanned Aerial Vehicle

UV Ultra violet

12-66036 63

## **Table of conversions**

TABLE OF CONVERSIONS USED IN THIS ANNEX		
Unit (from)	Unit (to)	Conversion
bar	pascal (Pa)	1 bar = 100 kPa
g (gravity)	m/s <sup>2</sup>	$1 \text{ g} = 9.806 65 \text{ m/s}^2$
mrad (millirad)	degrees (angle)	1 mrad ≈ 0.0573°
rads	ergs/gram of Si	1 rad (Si) = 100 ergs/gram of silicon (= 0.01 gray [Gy])
Tyler 250 mesh	mm	for a Tyler 250 mesh, mesh opening 0.063 mm

## Addendum — Statement of Understanding

## Statement of Understanding

Members agree that, in those cases where the term "national equivalents" are specifically allowed as alternatives to specified International Standards, the technical methods and parameters embodied in the national equivalent would ensure that the requirements of the standard set by the specified International Standards are met.