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COUNCIL REGULATION (EU) No 961/2010

of 25 October 2010

on restrictive measures against Iran and repealing Regulation (EC) No 423/2007

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COUNCIL REGULATION (EU) No 961/2010

of 25 October 2010

on restrictive measures against Iran and repealing Regulation (EC) $$No\ 423/2007$$

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 215 thereof,

Having regard to Council Decision 2010/413/CFSP of 26 July 2010 concerning restrictive measures against Iran and repealing Common Position 2007/140/CFSP (1),

Having regard to the joint proposal from the High Representative of the Union for Foreign Affairs and Security Policy and the European Commission.

Whereas:

- (1) On 26 July 2010, the Council approved Decision 2010/413/CFSP confirming the restrictive measures taken since 2007 and providing for additional restrictive measures against the Islamic Republic of Iran ('Iran') in order to comply with UN Security Council Resolution 1929 (2010), as well as for accompanying measures as requested by the European Council in its Declaration of 17 June 2010.
- (2) Those restrictive measures comprise, in particular, additional restrictions on trade in dual-use goods and technology, as well as equipment which might be used for internal repression, restrictions on trade in key equipment and technology for, and restrictions on investment in the Iranian oil and gas industry, restrictions on Iranian investment in the uranium mining and nuclear industry, restrictions on transfers of funds to and from Iran, restrictions concerning the Iranian banking sector, restrictions on Iran's access to the insurance and bonds markets of the Union and restrictions on providing certain services to Iranian ships and cargo aircraft.
- (3) Decision 2010/413/CFSP also provided for additional categories of persons to be made subject to the freezing of funds and economic resources and for certain other technical amendments to existing measures.
- (4) Those restrictive measures fall within the scope of the Treaty on the Functioning of the European Union and, therefore, notably with a view to ensuring their uniform application by economic operators in all Member States, legislation at the level of the Union is necessary in order to implement them as far as the Union is concerned.

- (5) Regulation (EC) No 423/2007 of 19 April 2007 concerning restrictive measures against Iran (¹) enacted the restrictive measures taken by the Union further to Common Position 2007/140/CFSP (²). For the sake of clarity, Regulation (EC) No 423/2007 should be repealed and replaced by this Regulation.
- (6) The revised restrictive measures concerning dual-use goods should cover all goods and technology set out in Annex I to Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (3), with the exception of certain items in Category 5 thereof. Those Category 5 items which relate to nuclear and missile technology and are currently subject to a prohibition on their transfer to and from Iran should, nevertheless, remain subject to such prohibition. Moreover, a prohibition should also be imposed on the transfer to and from Iran of certain goods and technology which were previously subject to a prior authorisation requirement under Article 3 of Regulation (EC) No 423/2007.
- (7) In order to ensure the effective implementation of the prohibition on the sale, supply, transfer or export to Iran of certain key equipment or technology which could be used in the key sectors of the oil and natural gas industries, a list of such key equipment and technology should be provided.
- (8) In addition, to be effective, restrictions on investment in the Iranian oil and gas sector should cover certain key activities, such as bulk gas transmission services for the purpose of transit or delivery to directly interconnected grids, and, for the same reason, should apply to joint ventures as well as other forms of associations and cooperation with Iran in the sector of the transmission of natural gas.
- (9) The restrictive measures should not affect the import or export of oil or gas to and from Iran, including the fulfilment of payment obligations in connection with such import or export.
- (10) Effective restrictions on Iranian investment in the Union require that measures be taken to prohibit natural or legal persons, entities and bodies subject to the jurisdiction of the Member States from enabling or authorising such investment.
- (11) It is prohibited, pursuant to the obligation to freeze the funds and economic resources of Islamic Republic of Iran Shipping Line (IRISL) and of designated entities owned or controlled by IRISL to load and unload cargoes on and from vessels owned or chartered by IRISL or by such entities in ports of Member States. However, the obligation to freeze the funds and economic resources of IRISL and of designated entities owned or controlled by IRISL does not require the impounding or detention of vessels owned by such entities or the cargoes carried by them insofar as such cargoes belong to third parties, nor does it require the detention of the crew contracted by them.

⁽¹⁾ OJ L 103, 20.4.2007, p. 1.

⁽²⁾ OJ L 61, 28.2.2007, p. 49.

⁽³⁾ OJ L 134, 29.5.2009, p. 1.

- (12) It should be clarified that submitting and forwarding the necessary documents to a bank for the purpose of their final transfer to a person, entity or body that is not listed, to trigger payments allowed under Article 18 of this Regulation, does not constitute making funds available within the meaning of Article 16(3) of this Regulation.
- (13) This Regulation respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union and notably the right to an effective remedy and to a fair trial, the right to property and the right to protection of personal data. This Regulation should be applied in accordance with those rights and principles.
- (14) This Regulation also fully respects the obligations of Member States under the Charter of the United Nations and the legally binding nature of the United Nations Security Council Resolutions.
- (15) The power to amend the lists in Annexes VII and VIII to this Regulation should be exercised by the Council, in view of the specific threat to international peace and security posed by Iran as manifested by the deepening concern about its nuclear programme underlined by the European Council on 17 June 2010, and to ensure consistency with the process for amending and reviewing Annexes I and II to Decision 2010/413/CFSP.
- (16) The procedure for amending the lists in Annexes VII and VIII to this Regulation should include providing designated natural or legal persons, entities or bodies with the grounds for listing, so as to give them an opportunity to submit observations. Where observations are submitted, or substantial new evidence is presented, the Council should review its decision in light of those observations and inform the person, entity or body concerned accordingly.
- (17) For the implementation of this Regulation, and to create maximum legal certainty within the Union, the names and other relevant data concerning natural and legal persons, entities and bodies whose funds and economic resources must be frozen in accordance with the Regulation, should be made public. Any processing of personal data of natural persons under this Regulation should respect Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (¹) and Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (²).

⁽¹⁾ OJ L 8, 12.1.2001, p. 1.

⁽²⁾ OJ L 281, 23.11.1995, p. 31.

(18) In order to ensure that the measures provided for in this Regulation are effective, it should enter into force on the day of its publication,

HAS ADOPTED THIS REGULATION:

CHAPTER I

DEFINITIONS

Article 1

For the purposes of this Regulation the following definitions shall apply:

- (a) 'branch' of a financial or credit institution means a place of business which forms a legally dependent part of a financial or credit institution and which carries out directly all or some of the transactions inherent in the business of financial or credit institutions;
- (b) 'brokering services' means:
 - (i) the negotiation or arrangement of transactions for the purchase, sale or supply of goods and technology from a third country to any other third country, or
 - (ii) the selling or buying of goods and technology that are located in third countries for their transfer to another third country.
- (c) 'contract or transaction' means any transaction of whatever form and whatever the applicable law, whether comprising one or more contracts or similar obligations made between the same or different parties; for this purpose 'contract' includes a bond, guarantee or indemnity, particularly a financial guarantee or financial indemnity, and credit, whether legally independent or not, as well as any related provision arising under, or in connection with, the transaction;
- (d) 'credit institution' means a credit institution as defined in Article 4(1) of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (1), including its branches inside or outside the Union;
- (e) 'customs territory of the Union' means the territory as defined in Article 3 of Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code (²) and in Commission Regulation (EEC) No 2454/93 of 2 July 1993 laying down provisions for the implementation of Regulation (EEC) No 2913/92 (³);
- (f) 'economic resources' means assets of every kind, whether tangible or intangible, movable or immovable, which are not funds, but which may be used to obtain funds, goods or services;
- (g) 'financial institution' means
 - (i) an undertaking, other than a credit institution, which carries out one or more of the operations included in points 2 to 12 and points 14 and 15 of Annex I to Directive 2006/48/EC, including the activities of currency exchange offices (bureaux de change);

⁽¹⁾ OJ L 177, 30.6.2006, p. 1.

⁽²⁾ OJ L 302, 19.10.1992, p. 1.

⁽³⁾ OJ L 253, 11.10.1993, p. 1.

- (ii) an insurance company duly authorised in accordance with Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002 concerning life assurance (1), insofar as it carries out activities covered by that Directive;
- (iii) an investment firm as defined in point 1 of Article 4(1) of Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments (2);
- (iv) a collective investment undertaking marketing its units or shares; or
- (v) an insurance intermediary as defined in Article 2(5) of Directive 2002/92/EC of the European Parliament and of the Council of 9 December 2002 on insurance mediation (3), with the exception of intermediaries referred to in Article 2(7) of that Directive, when they act in respect of life insurance and other investment related services;

including its branches inside or outside the Union.

- (h) 'freezing of economic resources' means preventing the use of economic resources to obtain funds, goods or services in any way, including, but not limited to, by selling, hiring or mortgaging them;
- (i) 'freezing of funds' means preventing any move, transfer, alteration, use of, access to, or dealing with funds in any way that would result in any change in their volume, amount, location, ownership, possession, character, destination or other change that would enable the funds to be used, including portfolio management;
- (j) 'funds' means financial assets and benefits of every kind, including, but not limited to:
 - (i) cash, cheques, claims on money, drafts, money orders and other payment instruments;
 - (ii) deposits with financial institutions or other entities, balances on accounts, debts and debt obligations;
 - (iii) publicly-and privately-traded securities and debt instruments, including stocks and shares, certificates representing securities, bonds, notes, warrants, debentures and derivatives contracts;
 - (iv) interest, dividends or other income on or value accruing from or generated by assets;
 - (v) credit, right of set-off, guarantees, performance bonds or other financial commitments;
 - (vi) letters of credit, bills of lading, bills of sale; and
 - (vii) documents showing evidence of an interest in funds or financial resources;
- (k) 'goods' includes items, materials and equipment;

⁽¹⁾ OJ L 345, 19.12.2002, p. 1.

⁽²⁾ OJ L 145, 30.4.2004, p. 1.

⁽³⁾ OJ L 9, 15.1.2003, p. 3.

- (1) 'insurance' means an undertaking or commitment whereby one or more natural or legal persons is or are obliged, in return for a payment, to provide one or more other persons, in the event of materialisation of a risk, with an indemnity or a benefit as determined by the undertaking or commitment;
- (m) 'Iranian person, entity or body' means:
 - (i) the State of Iran or any public authority thereof;
 - (ii) any natural person in, or resident in, Iran;
 - (iii) any legal person, entity or body having its registered office in Iran;
 - (iv) any legal person, entity or body, inside or outside Iran, owned or controlled directly or indirectly by one or more of the above mentioned persons or bodies;
- (n) 'reinsurance' means the activity consisting in accepting risks ceded by an insurance undertaking or by another reinsurance undertaking or, in the case of the association of underwriters known as Lloyd's, the activity consisting in accepting risks, ceded by any member of Lloyd's, by an insurance or reinsurance undertaking other than the association of underwriters known as Lloyd's;
- (o) 'Sanctions Committee' means the Committee of the United Nations Security Council which was established pursuant to paragraph 18 of United Nations Security Council Resolution ('UNSCR') 1737 (2006);
- (p) 'technical assistance' means any technical support related to repairs, development, manufacture, assembly, testing, maintenance, or any other technical service, and may take forms such as instruction, advice, training, transmission of working knowledge or skills or consulting services; including verbal forms of assistance;
- (q) 'territory of the Union' means the territories of the Member States to which the Treaty is applicable, under the conditions laid down in the Treaty, including their airspace;
- (r) 'transfer of funds' means any transaction carried out on behalf of a payer through a payment service provider by electronic means, with a view to making funds available to a payee at a payment service provider, irrespective of whether the payer and the payee are the same person. The terms payer, payee and payment service provider have the same meaning as in Regulation (EC) No 1781/2006 of the European Parliament and of the Council of 15 November 2006 on information on the payer accompanying transfers of funds (¹);
- (s) 'claim' means any claim, whether asserted by legal proceedings or not, made before or after the date of entry into force of this Regulation, under or in connection with a contract or transaction, and includes in particular:
 - (i) a claim for performance of any obligation arising under or in connection with a contract or transaction;

- (ii) a claim for extension or payment of a bond, financial guarantee or indemnity of whatever form;
- (iii) a claim for compensation in respect of a contract or transaction;
- (iv) a counterclaim;
- (v) a claim for the recognition or enforcement, including by the procedure of exequatur, of a judgment, an arbitration award or an equivalent decision, wherever made or given.

CHAPTER II

EXPORT AND IMPORT RESTRICTIONS

- 1. It shall be prohibited:
- (a) to sell, supply, transfer or export, directly or indirectly, the goods and technology listed in Annexes I and II, whether or not originating in the Union, to any Iranian person, entity or body or for use in Iran; or
- (b) to sell, supply, transfer or export, directly or indirectly, equipment which might be used for internal repression as listed in Annex III, whether or not originating in the Union, to any Iranian person, entity or body or for use in Iran;
- (c) to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent the prohibitions referred to in points (a) and (b).
- 2. Annex I shall include goods and technology, including software, which are dual-use items or technology as defined in Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items, except for the goods and technology defined in Category 5 of Annex I to that Regulation which are not included in the Nuclear Suppliers Group and Missile Technology Control Regime lists.
- 3. Annex II shall include other goods and technology which could contribute to Iran's enrichment-related, reprocessing or heavy-water-related activities, to the development of nuclear weapon delivery systems, or to the pursuit of activities related to other topics about which the IAEA has expressed concerns or has identified as outstanding, including those determined by the UN Security Council or by the Sanctions Committee.
- 4. Annexes I, II and III shall not include goods and technology included in the Common Military List of the European Union (¹) ('Common Military List').

- 1. A prior authorisation shall be required for the sale, supply, transfer or export, directly or indirectly, of the goods and technology listed in Annex IV, whether or not originating in the Union, to any Iranian person, entity or body or for use in Iran.
- 2. For all exports for which an authorisation is required under this Article, such authorisation shall be granted by the competent authorities of the Member State where the exporter is established and shall be in accordance with the detailed rules laid down in Article 11 of Regulation (EC) No 428/2009. The authorisation shall be valid throughout the Union.
- 3. Annex IV shall include any goods and technology, other than those included in Annexes I and II, which could contribute to enrichment-related, reprocessing or heavy water-related activities, to the development of nuclear weapon delivery systems, or to the pursuit of activities related to other topics about which the International Atomic Energy Agency (IAEA) has expressed concerns or has identified as outstanding.
- 4. Exporters shall supply the competent authorities with all relevant information required for their application for an export authorisation.
- 5. The competent authorities of the Member States, as identified on the websites listed in Annex V, shall not grant any authorisation for any sale, supply, transfer or export of the goods or technology included in Annex IV, if they have reasonable grounds to determine that the sale, supply, transfer or export thereof would contribute to one of the following activities:
- (a) Iran's enrichment-related, reprocessing or heavy water-related activities:
- (b) the development of nuclear weapon delivery systems by Iran; or
- (c) the pursuit by Iran of activities related to other topics about which the IAEA has expressed concerns or has identified as outstanding.
- 6. Under the conditions set out in paragraph 5, the competent authorities of the Member States, as identified on the websites listed in Annex V, may annul, suspend, modify or revoke an export authorisation which they have granted.
- 7. Where the competent authority of a Member State refuses to grant an authorisation, or annul, suspend, substantially limit or revoke an authorisation in accordance with paragraph 5, the Member State shall notify the other Member States and the Commission thereof and share the relevant information with them, while complying with the provisions concerning the confidentiality of such information of Council Regulation (EC) No 515/97 of 13 March 1997 on mutual assistance between the administrative authorities of the Member States and cooperation between the latter and the Commission to ensure the correct application of the law on customs and agricultural matters (¹).

8. Before a Member State grants an authorisation in accordance with paragraph 5 for a transaction which is essentially identical to a transaction which is the subject of a still valid denial issued by another Member State or by other Member States under paragraphs 6 and 7, it will first consult the Member State or States which issued the denial. If, following such consultations, the Member State concerned decides to grant an authorisation, it shall inform the other Member States and the Commission thereof, providing all relevant information to explain the decision.

Article 4

It shall be prohibited to purchase, import or transport from Iran the goods and technology listed in Annexes I, II and III, whether the item concerned originates in Iran or not.

- 1. It shall be prohibited:
- (a) to provide, directly or indirectly, technical assistance related to the goods and technology listed in the Common Military List, or related to the provision, manufacture, maintenance and use of goods included in that list, to any Iranian person, entity or body or for use in Iran;
- (b) to provide, directly or indirectly, technical assistance or brokering services related to the goods and technology listed in Annexes I and II, or related to the provision, manufacture, maintenance and use of goods listed in Annexes I and II, to any Iranian person, entity or body or for use in Iran;
- (c) to provide, directly or indirectly, technical assistance or brokering services related to equipment which might be used for internal repression as listed in Annex III, to any Iranian person, entity or body or for use in Iran;
- (d) to provide, directly or indirectly, financing or financial assistance related to the goods and technology listed in the Common Military List or in Annexes I, II and III, including in particular grants, loans and export credit insurance, for any sale, supply, transfer or export of such items, or for any provision of related technical assistance to any Iranian person, entity or body or for use in Iran;
- (e) to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent the prohibitions referred to in points (a) to (d).
- 2. The provision of the following shall be subject to an authorisation from the competent authority of the Member State concerned:
- (a) technical assistance or brokering services related to goods and technology listed in Annex IV and to the provision, manufacture, maintenance and use of those items, directly or indirectly to any Iranian person, entity or body or for use in Iran;

- (b) financing or financial assistance related to goods and technologies referred to in Annex IV, including in particular grants, loans and export credit insurance, for any sale, supply, transfer or export of those items, or for any provision of related technical assistance, directly or indirectly, to any Iranian person, entity or body or for use in Iran.
- 3. The competent authorities of the Member States, as identified on the websites listed in Annex V, shall not grant any authorisation for the transactions referred to in paragraph 2, if they have reasonable grounds to determine that the action would contribute to one of the following activities:
- (a) Iran's enrichment-related, reprocessing or heavy water-related activities;
- (b) the development of nuclear weapon delivery systems by Iran; or
- (c) the pursuit by Iran of activities related to other topics about which the IAEA has expressed concerns or has identified as outstanding.

Article 2(1)(a) shall not apply to:

- (a) the direct or indirect transfer of goods falling within Part B of Annex I, through the territories of Member States when those goods are sold, supplied, transferred or exported to, or for use in, Iran for a light water reactor in Iran the construction of which has begun before December 2006;
- (b) transactions mandated by the International Atomic Energy Agency (IAEA) technical cooperation programme;
- (c) goods supplied, transferred to or for use in, Iran due to obligations of State Parties under the Paris Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction of 13 January 1993.

- 1. The competent authorities of the Member States, as identified on the websites listed in Annex V, may grant, under such terms and conditions as they deem appropriate, an authorisation for a transaction in relation to goods and technology referred to in Article 2(1) or assistance or brokering services referred to in Article 5(1), if they determine, except when subparagraph (c) applies, that the transaction would clearly not contribute to the development of technologies in support of Iran's proliferation-sensitive nuclear activities, or to the development of nuclear weapon delivery systems, including where such goods and technology, assistance or brokering services are for food, agricultural, medical or other humanitarian purposes, and if the following conditions are met:
- (a) the contract for delivery of the goods or technology, or for the provision of assistance or brokering services, includes appropriate end-user guarantees;

- (b) Iran has undertaken not to use the goods or technology concerned, or if applicable, the assistance or brokering services concerned, in proliferation-sensitive nuclear activities or for development of nuclear weapon delivery systems; and
- (c) in those cases where the transaction concerns goods or technology contained in the Nuclear Suppliers Group or Missile Technology Control Regime lists, the Sanctions Committee has determined in advance and on a case-by-case basis that the transaction would clearly not contribute to the development of technologies in support of Iran's proliferation-sensitive nuclear activities, or to the development of nuclear weapon development delivery systems.
- 2. The Member State concerned shall inform the other Member States and the Commission when it rejects a request for an authorisation.
- 3. Paragraph 1 shall not apply to transactions or brokering services in relation to goods and technology referred to in Annex III.

- 1. It shall be prohibited to sell, supply, transfer or export key equipment or technology listed in Annex VI, directly or indirectly, to any Iranian person, entity or body or for use in, Iran.
- 2. Annex VI shall include key equipment and technology for the following key sectors of the oil and gas industry in Iran:
- (a) exploration of crude oil and natural gas;
- (b) production of crude oil and natural gas;
- (c) refining;
- (d) liquefaction of natural gas.
- 3. Annex VI shall not include items included in the Common Military List, or in Annex I, Annex II or Annex IV.

Article 9

It shall be prohibited:

- (a) to provide, directly or indirectly, technical assistance or brokering services related to the key equipment and technology listed in Annex VI, or related to the provision, manufacture, maintenance and use of goods listed in Annex VI, to any Iranian person, entity or body or for use in Iran.
- (b) to provide, directly or indirectly, financing or financial assistance related to the key equipment and technology listed in Annex VI, to any Iranian person, entity or body or for use in Iran.
- (c) to participate, knowingly and intentionally, in activities the object or effect of which is to circumvent the prohibitions referred to in points (a) and (b).

The prohibitions in Articles 8 and 9 shall not apply to transactions required by a trade contract concluded before the date of entry into force of this Regulation, or by a contract or agreement concluded before 26 July 2010 and relating to an investment in Iran made before 26 July 2010, nor shall they prevent the execution of an obligation arising therefrom, provided that the natural or legal person, entity or body seeking to engage in the transaction or to provide assistance has notified, at least 20 working days in advance, the transaction or assistance to the competent authorities of the Member State in which it is established, as identified on the websites listed in Annex V.

CHAPTER III

RESTRICTIONS ON FINANCING OF CERTAIN ENTREPRISES

- 1. The following shall be prohibited:
- (a) the granting of any financial loan or credit to any Iranian person, entity or body referred to in paragraph (2);
- (b) the acquisition or extension of a participation in any Iranian person, entity or body referred to in paragraph (2);
- (c) the creation of any joint venture with any Iranian person, entity or body referred to in paragraph (2).
- (d) the participation, knowingly and intentionally, in activities, the object or effect of which is to circumvent the prohibitions referred to in points (a), (b) and (c).
- 2. The prohibition in paragraph (1) shall apply to any Iranian person, entity or body engaged:
- (a) in the manufacture of goods or technology listed in the Common Military List or in Annex I or II;
- (b) in the manufacture of equipment which might be used for internal repression as listed in Annex III;
- (c) in the exploration or production of crude oil and natural gas, the refining of fuels or the liquefaction of natural gas.
- 3. For the purposes of paragraph 2(c) only, the following definitions shall apply:
- (a) 'exploration of crude oil and natural gas' includes the exploration for, prospection of and management of crude oil and natural gas reserves, as well as the provision of geological services in relation to such reserves;
- (b) 'production of crude oil and natural gas' includes bulk gas transmission services for the purpose of transit or delivery to directly interconnected grids;
- (c) 'refining' means the processing, conditioning or preparation for the ultimately final sale of fuels.

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- 4. It shall be prohibited to establish cooperation with an Iranian person, entity or body engaged in the transmission of natural gas as referred to in paragraph 3(b).
- 5. For the purposes of paragraph 4, 'cooperation' means:
- (a) the sharing of investment costs in an integrated or managed supply chain for the receipt or delivery of natural gas directly from or to the territory of Iran; and
- (b) direct co-operation for the purpose of investing in liquefied natural gas facilities within the territory of Iran or in liquefied natural gas facilities directly connected thereto.

Article 12

- 1. The making of an investment through transactions referred to in Article 11(1) in an Iranian person, entity or body engaged in the manufacture of goods or technology listed in Annex IV shall be subject to an authorisation from the competent authority of the Member State concerned.
- 2. The competent authorities of the Member States, as identified on the websites listed in Annex V, shall not grant any authorisation for the transactions referred to in paragraph 1, if they have reasonable grounds to determine that the action would contribute to one of the following activities:
- (a) Iran's enrichment-related, reprocessing or heavy water-related activities;
- (b) the development of nuclear weapon delivery systems by Iran; or
- (c) the pursuit by Iran of activities related to other topics about which the IAEA has expressed concerns or has identified as outstanding.

Article 13

By way of derogation from Article 11(2)(a), the competent authorities of the Member States, as identified on the websites listed in Annex V, may grant, under such terms and conditions as they deem appropriate, an authorisation to make an investment through transactions referred to in Article 11(1), if the following conditions are met:

- (a) the Iranian person, entity or body has committed itself to apply appropriate end-user guarantees as regards the goods or technology concerned:
- (b) Iran has undertaken not to use the goods or technology concerned in proliferation-sensitive nuclear activities or for development of nuclear weapon delivery systems; and

(c) in those cases where the investment is made in an Iranian person, entity or body engaged in the manufacture of goods or technology contained in the Nuclear Suppliers Group and Missile Technology Control Regime lists, the Sanctions Committee has determined in advance and on a case-by-case basis that the transaction would clearly not contribute to the development of technologies in support of Iran's proliferation-sensitive nuclear activities, or to the development of nuclear weapon development delivery systems.

Article 14

Article 11(2)(c) shall not apply to the granting of a financial loan or credit or to the acquisition or extension of a participation, if the following conditions are met:

- (a) the transaction is required by an agreement or contract concluded before 26 July 2010; and
- (b) the competent authority has been informed at least 20 working days in advance of that agreement or contract.

Article 15

It shall be prohibited:

- (a) to accept or approve, by concluding an agreement or by any other means, that the granting of any finacial loan or credit, or the acquisition or extension of a participation, or the creation of any joint venture be made by one or more Iranian persons, entities or bodies, in an enterprise engaged in any of the following activities:
 - (i) uranium mining,
 - (ii) uranium enrichment and reprocessing of uranium;
 - (iii) the manufacture of goods or technology included in the Nuclear Suppliers Group and Missile Technology Control Regime lists.
- (b) to participate, knowingly and intentionally, in activities, the object or effect of which is to circumvent the prohibition in point (a).

CHAPTER IV

FREEZING OF FUNDS AND ECONOMIC RESOURCES

Article 16

1. All funds and economic resources belonging to, owned, held or controlled by the persons, entities and bodies listed in Annex VII shall be frozen. Annex VII shall include the persons, entities and bodies designated by the United Nations Security Council or by the Sanctions Committee in accordance with paragraph 12 of UNSCR 1737 (2006), paragraph 7 of UNSCR 1803 (2008) or paragraph 11, 12 or 19 of UNSCR 1929 (2010).

- 2. All funds and economic resources belonging to, owned, held or controlled by the persons, entities and bodies listed in Annex VIII shall be frozen. Annex VIII shall include the natural and legal persons, entities and bodies, not covered by Annex VII, who, in accordance with Article 20(1)(b) of Council Decision 2010/413/CFSP, have been identified as:
- (a) being engaged in, directly associated with, or providing support for Iran's proliferation-sensitive nuclear activities or the development of nuclear weapon delivery systems by Iran, including through involvement in the procurement of prohibited goods and technology, or being owned or controlled by such a person, entity or body, including through illicit means, or acting on their behalf or at their direction;
- (b) being a natural or legal person, entity or body that has assisted a listed person, entity or body to evade or violate the provisions of this Regulation, Council Decision 2010/413/CFSP or UNSCR 1737 (2006), UNSCR 1747 (2007), UNSCR 1803 (2008) and UNSCR 1929 (2010);
- (c) being a senior member of the Islamic Revolutionary Guard Corps or a legal person, entity or body owned or controlled by the Islamic Revolutionary Guard Corps or by one of more of its senior members;
- (d) being a legal person, entity or body owned or controlled by the Islamic Republic of Iran Shipping Lines (IRISL).

It shall be prohibited, pursuant to the obligation to freeze the funds and economic resources of IRISL and of designated entities owned or controlled by IRISL, to load and unload cargoes on and from vessels owned or chartered by IRISL or by such entities in ports of Member States. That prohibition shall not prevent the execution of a contract concluded before the entry into force of this Regulation.

The obligation to freeze the funds and economic resources of IRISL and of designated entities owned or controlled by IRISL shall not require the impounding or detention of vessels owned by such entities or the cargoes carried by them insofar as such cargoes belong to third parties, nor does it require the detention of the crew contracted by them.

- 3. No funds or economic resources shall be made available, directly or indirectly, to or for the benefit of the natural or legal persons, entities or bodies listed in Annexes VII and VIII.
- 4. The participation, knowingly and intentionally, in activities the object or effect of which is, directly or indirectly, to circumvent the measures referred to in paragraphs 1, 2 and 3 shall be prohibited.
- 5. Annexes VII and VIII shall include the grounds for listing of listed persons, entities and bodies, as provided by the Security Council or by the Sanctions Committee for Annex VII.

6. Annexes VII and VIII shall also include, where available, information necessary to identify the natural or legal persons, entities and bodies concerned, as provided by the Security Council or by the Sanctions Committee for Annex VII. With regard to natural persons, such information may include names including aliases, date and place of birth, nationality, passport and ID card numbers, gender, adress, if known, and function or profession. With regard to legal persons, entities and bodies, such information may include names, place and date of registration, registration number and place of business. Annex VII shall also include the date of designation by the Security Council or by the Sanctions Committee.

Article 17

By way of derogation from Article 16, the competent authorities of the Member States, as indicated on the websites listed in Annex V, may authorise the release of certain frozen funds or economic resources, if the following conditions are met:

- (a) the funds or economic resources are the subject of a judicial, administrative or arbitral lien established before the date on which the person, entity or body referred to in Article 16 has been designated by the Sanctions Committee, the Security Council or the Council or of a judicial, administrative or arbitral judgment rendered prior to that date;
- (b) the funds or economic resources will be used exclusively to satisfy claims secured by such a lien or recognised as valid in such a judgment, within the limits set by applicable laws and regulations governing the rights of persons having such claims;
- (c) the lien or judgment is not for the benefit of a person, entity or body listed in Annex VII or VIII;
- (d) recognising the lien or judgment is not contrary to public policy in the Member State concerned; and
- (e) where Article 16(1) applies, the Sanctions Committee has been notified by the Member State of the lien or judgment.

Article 18

By way of derogation from Article 16 and provided that a payment by a person, entity or body listed in Annex VII or VIII is due under a contract or agreement that was concluded by, or an obligation that arose for the person, entity or body concerned, before the date on which that person, entity or body had been designated by the Sanctions Committee, the Security Council or by the Council, the competent authorities of the Member States, as indicated on the websites listed in Annex V, may authorise, under such conditions as they deem appropriate, the release of certain frozen funds or economic resources, if the following conditions are met:

- (a) the competent authority concerned has determined that:
 - (i) the funds or economic resources shall be used for a payment by a person, entity or body listed in Annex VII or VIII;
 - (ii) the contract, agreement or obligation will not contribute to the manufacture, sale, purchase, transfer, export, import, transport or use of goods and technology listed in Annexes I, II, III and VI; and
 - (iii) the payment is not in breach of Article 16(3);
- (b) where Article 16(1) applies, the Member State concerned has notified the Sanctions Committee of that determination and its intention to grant an authorisation, and the Sanctions Committee has not objected to that course of action within ten working days of notification; and
- (c) where Article 16(2) applies, the Member State concerned has, at least two weeks prior to the grant of the authorisation, notified the other Member States and the Commision of that determination and its intention to grant an authorisation.

- 1. By way of derogation from Article 16, the competent authorities of the Member States, as identified on the websites listed in Annex V, may authorise, under such conditions as they deem appropriate, the release of certain frozen funds or economic resources, or the making available of certain funds or economic resources, provided that the following conditions are met:
- (a) the competent authority concerned has determined that the funds or economic resources are:
 - (i) necessary to satisfy the basic needs of persons listed in Annex VII or VIII, and their dependent family members, including payments for foodstuffs, rent or mortgage, medicines and medical treatment, taxes, insurance premiums, and public utility charges;
 - (ii) intended exclusively for payment of reasonable professional fees and reimbursement of incurred expenses associated with the provision of legal services; or
 - (iii) intended exclusively for payment of fees or service charges for routine holding or maintenance of frozen funds or economic resources; and
- (b) where the authorisation concerns a person, entity or body listed in Annex VII, the Member State concerned has notified the Sanctions Committee of that determination and its intention to grant an authorisation, and the Sanctions Committee has not objected to that course of action within five working days of notification.

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- 2. By way of derogation from Article 16, the competent authorities of the Member States, as indicated on the websites listed in Annex V, may authorise the release of certain frozen funds or economic resources or the making available of certain funds or economic resources, after having determined that the funds or economic resources are necessary for extraordinary expenses or for payment for or transfer of goods when procured for a light water reactor in Iran the construction of which has begun before December 2006, or for goods referred to in Article 6(b) and (c), provided that the following conditions are met:
- (a) where the authorisation concerns a person, entity or body listed in Annex VII, the Sanctions Committee has been notified of that determination by the Member State concerned and the determination has been approved by that Committee; and
- (b) where the authorisation concerns a person, entity or body listed in Annex VIII, the competent authority has notified the grounds on which it considers that a specific authorisation should be granted to the other competent authorities of the Member States and to the Commission at least two weeks before the authorisation.
- 3. The relevant Member State shall inform the other Member States and the Commission of any authorisation granted under paragraphs 1 or 2.

Article 20

- 1. Article 16(3) shall not prevent financial or credit institutions from crediting frozen accounts where they receive funds transferred onto the account of a listed natural or legal person, entity or body, provided that any additions to such accounts shall also be frozen. The financial or credit institution shall inform the competent authorities about such transactions without delay.
- 2. Article 16(3) shall not apply to the addition to frozen accounts of:
- (a) interest or other earnings on those accounts; or
- (b) payments due under contracts, agreements or obligations that were concluded or arose before the date on which the person, entity or body referred to in Article 16 has been designated by the Sanctions Committee, the Security Council or by the Council;

provided that any such interest or other earnings and payments are frozen in accordance with Article 16(1) or (2).

3. This Article shall not be construed as authorising transfers of funds referred to in Article 21.

CHAPTER V

RESTRICTIONS ON TRANSFERS OF FUNDS AND ON FINANCIAL SERVICES

Article 21

- 1. Transfer of funds to and from an Iranian person, entity or body shall be processed as follows:
- (a) transfers due on transactions regarding foodstuffs, healthcare, medical equipment, or for humanitarian purposes shall be carried out without any prior authorisation. The transfer shall be notified in advance in writing to the competent authorities of the Member States, as identified on the websites listed in Annex V, if above EUR 10 000 or equivalents;
- (b) any other transfer below EUR 40 000 shall be carried out without any prior authorisation. The transfer shall be notified in advance in writing to the competent authorities of the Member States, as identified on the websites listed in Annex V, if above EUR 10 000 or equivalent;
- (c) any other transfer of or above EUR 40 000 or equivalent shall require a prior authorisation of the competent authorities of the Member States, as identified on the websites listed in Annex V.
- 2. These provisions shall apply regardless of whether the transfer of funds is executed in a single operation or in several operations which appear to be linked.
- 3. Notifications and requests for authorisation relating to the transfer of funds to an Iranian person, entity or body shall be addressed by or on behalf of the payment service provider of the payer as referred to in Article 1(r) to the competent authorities of the Member State where the initial order to execute the transfer is given.

Notifications and requests for authorisation relating to the transfer of funds from an Iranian person, entity or body shall be addressed by or on behalf of the payment service provider of the payee as referred to in Article 1(r) to the competent authorities of the Member State in which the payee is resident or the payment service provider is established.

If the payments service provider of the payer or the payee does not fall under the scope of Article 39, notifications and requests for authorisation shall be addressed by the payer or payee to the competent authorities of the Member State in which the payer or payee is resident.

- 4. For the purposes of paragraph 1(c), the competent authorities of the Member States, as identified on the websites listed in Annex V, shall grant, under such terms and conditions as they deem appropriate, an authorisation for a transfer of funds having a value of EUR 40 000 or more, unless they have reasonable grounds to determine that the transfer of funds for which the authorisation is requested, would contribute to one of the following activities:
- (a) Iran's enrichment-related, reprocessing or heavy water-related activities;

- (b) the development of nuclear weapon delivery systems by Iran;
- (c) the pursuit by Iran of activities related to other topics about which the IAEA has expressed concerns or has identified as outstanding; or
- (d) prohibited activities related to the exploration of crude oil and natural gas, production of crude oil and natural gas, refining, or liquefaction of natural gas as referred to in Articles 8, 9 and 11 by an Iranian person, entity or body.

A competent authority may charge a fee for the assessment of requests for authorisation.

An authorisation shall be deemed granted if a competent authority has received a request in writing for authorisation and, within four weeks, the competent authority has not objected in writing to the transfer of funds. If the objection is raised because an investigation is pending, the competent authority shall state this and communicate its decision as soon as possible. The competent authorities shall have access, directly or indirectly, on a timely basis to the financial, administrative and law enforcement related information necessary for carrying out the investigation.

The Member State concerned shall inform the other Member States and the Commission when it rejects a request for authorisation.

5. This article shall not apply where an authorisation for a transfer has been granted in accordance with Articles 13, 17, 18, 19 or 20.

- 1. Branches and subsidiaries, falling within the scope of Article 39, of credit and financial institutions domiciled in Iran shall notify the competent authority of the Member State where they are established, as identified on the website mentioned in Annex V, of all transfers of funds carried out or received by them, the names of the parties and the amount and the date of the transaction, within five working days after carrying out or receiving the transfer of funds concerned. If the information is available, the notification must specify the nature of the transaction and, where appropriate, the nature of the goods covered by the transaction and must, in particular, state whether the goods are covered by Annex I, II, III, IV or VI of this Regulation and, if their export is subject to authorisation, indicate the number of the licence granted.
- 2. Subject to and in accordance with the information-sharing arrangements, the other notified competent authorities shall without delay transmit that data, as necessary, in order to prevent any transaction that could contribute to proliferation-sensitive nuclear activities or to the development of nuclear weapons delivery systems, to the competent authorities of other Member States where the counterparts to such transactions are established.

- 1. Credit and financial institutions which fall within the scope of Article 39 shall, in their activities with credit and financial institutions referred to in paragraph 2, and in order to prevent such activities from contributing to proliferation-sensitive nuclear activities or to the development of nuclear weapon delivery systems:
- (a) exercise continuous vigilance over account activity, particularly through their programmes on customer due diligence and under their obligations relating to money laundering and financing of terrorism;
- (b) require that in payment instructions all information fields which relate to the originator and beneficiary of the transaction in question be completed and if that information is not supplied, refuse the transaction;
- (c) maintain all records of transactions for a period of five years and make them available to national authorities on request;
- (d) if they suspect or have reasonable grounds to suspect that funds are related to proliferation financing, promptly report their suspicions to the financial intelligence unit (FIU) or to another competent authority designated by the Member State concerned, as indicated on the websites listed in Annex V, without prejudice to Articles 5 and 16. The FIU or such other competent authority will serve as a national centre for receiving and analysing suspicious transaction reports regarding potential proliferation financing. The FIU or such other competent authority shall have access, directly or indirectly, on a timely basis to the financial, administrative and law enforcement information that it requires to properly undertake this function, including the analysis of suspicious transaction reports.

The above requirements for credit and financial institutions shall be complementary to existing obligations deriving from Regulation (EC) No 1781/2006 and from the implementation of Directive 2005/60/EC of the European Parliament and of the Council of 26 October 2005 on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing (1).

- 2. The measures set out in paragraph 1 shall apply to credit and financial institutions in their activities with:
- (a) credit and financial institutions domiciled in Iran, including the Central Bank of Iran;
- (b) branches and subsidiaries, where they fall within the scope of Article 39, of credit and financial institutions domiciled in Iran;
- (c) branches and subsidiaries, where they do not fall within the scope of Article 39, of credit and financial institutions domiciled in Iran;
- (d) credit and financial institutions that are not domiciled in Iran but are controlled by persons and entities domiciled in Iran.

⁽¹⁾ OJ L 309, 25.11.2005, p. 15.

- 1. It shall be prohibited for credit and financial institutions falling within the scope of Article 39 to do any of the following:
- (a) to open a new bank account with a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or with any credit or financial institution referred to in Article 23(2);
- (b) to establish a new correspondent banking relationship with a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or with any credit or financial institution referred to in Article 23(2),
- (c) to open a new representative office in Iran or to establish a new branch or subsidiary in Iran;
- (d) to establish a new joint venture with a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or with any credit or financial institution referred to in Article 23(2).
- 2. It shall be prohibited:
- (a) to authorise the opening of a representative office or the establishment of a branch or subsidiary in the Union of a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or of any credit or financial institution referred to in Article 23(2);
- (b) to conclude agreements for, or on behalf of, a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or for, or on behalf of, any credit or financial institution referred to in Article 23(2) pertaining to the opening of a representative office or the establishment of a branch or subsidiary in the Union;
- (c) to grant an authorisation for taking up and pursuing the business of credit institution or for any other business requiring prior authorisation, by a representative office, branch or subsidiary of a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or of any credit or financial institution referred to in Article 23(2), if the representative office, branch or subsidiary was not operational before 26 July 2010.
- (d) to acquire or to extend a participation, or to acquire any other ownership interest, in a credit or financial institution falling within the scope of Article 39 by any credit or financial institution referred to in Article 23(2).

Article 25

It shall be prohibited:

- (a) to sell or purchase public or public-guaranteed bonds issued after 26 July 2010, directly or indirectly, to or from any of the following:
 - (i) Iran or its Government, and its public bodies, corporations and agencies;

- (ii) a credit or financial institution domiciled in Iran, including the Central Bank of Iran, or any credit or financial institution referred to in Article 23(2);
- (iii) a natural person or a legal person, entity or body acting on behalf or at the direction of a legal person, entity or body referred to in (i) or (ii);
- (iv) a legal person, entity or body owned or controlled by a person, entity or body referred to in (i), (ii) or (iii);
- (b) to provide brokering services with regard to public or public-guaranteed bonds issued after 26 July 2010 to a person, entity or body referred to in point (a);
- (c) to assist a person, entity or body referred to in point (a) in order to issue public or public-guaranteed bonds, by providing brokering services, advertising or any other service with regard to such bonds.

- 1. It shall be prohibited:
- (a) to provide insurance or re-insurance to:
 - (i) Iran or its Government, and its public bodies, corporations and agencies;
 - (ii) an Iranian person, entity or body other than a natural person; or
 - (iii) a natural person or a legal person, entity or body when acting on behalf or at the direction of a legal person, entity or body referred to in (i) or (ii).
- (b) to participate, knowingly and intentionally, in activities, the object or effect of which is to circumvent the prohibition in point (a).
- 2. Points (i) and (ii) of paragraph 1(a) shall not apply to the provision of compulsory or third party insurance to Iranian persons, entities or bodies based in the Union.
- 3. Point (iii) of paragraph 1(a) shall not apply to the provision of insurance, including health and travel insurance, to individuals acting in their private capacity, except for persons listed in Annexes VII and VIII, and re-insurance relating thereto.

Point (iii) of paragraph 1(a) shall not prevent the provision of insurance or re-insurance to the owner of a vessel, aircraft or vehicle chartered by a person, entity or body referred to in point (i) or (ii) of paragraph 1(a) and which is not listed in Annexes VII or VIII.

For the purpose of point (iii) of paragraph 1(a), a person, entity or body shall not be considered to act at the direction of a person, entity or body referred to in points (i) and (ii) of paragraph 1(a) where that direction is for the purposes of docking, loading, unloading or safe transit of a vessel or aircraft temporarly in Iranian waters or airspace.

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4. This Article prohibits the extension or renewal of insurance and re-insurance agreements concluded before the entry into force of this Regulation, but, without prejudice to Article 16(3), it does not prohibit compliance with agreements concluded before that date.

CHAPTER VI

RESTRICTIONS ON TRANSPORT

Article 27

- 1. To prevent the transfer of goods and technology which are covered by the Common Military List or the supply, sale, transfer, export or import of which is prohibited by this Regulation, all goods brought into or leaving the customs territory of the Union from or to Iran shall be made subject to pre-arrival or pre-departure information to be submitted to the competent customs authorities of the Member State concerned.
- 2. The rules governing the obligation to provide pre-arrival and predeparture information, in particular regarding the person who provides that information, the time limits to be respected and the data required, shall be as determined in the relevant provisions concerning entry and exit summary declarations as well as customs declarations in Regulation (EEC) No 2913/92 and in Regulation (EEC) No 2454/93.
- 3. Furthermore, the person who provides the information referred to in paragraph 2, shall declare whether the goods are covered by the Common Military List or by this Regulation and, where their export is subject to authorisation, specify the particulars of the export licence granted.
- 4. Until 31 December 2010 the entry and exit summary declarations and the required additional elements referred to in paragraph 3 may be submitted in written form using commercial, port or transport information, provided that they contain the necessary details.
- 5. As from 1 January 2011, the required additional elements referred to in this Article shall be submitted either in written form or using a customs declaration as appropriate.

Article 28

1. The provision by nationals of Member States or from the territories of Member States of bunkering or ship supply services, or any other servicing of vessels, to vessels owned or controlled, directly or indirectly, by an Iranian person, entity or body shall be prohibited where the providers of the service have information, including from the competent customs authorities on the basis of the pre-arrival and predeparture information referred to in Article 27, that provides reasonable grounds to believe that the vessels carry goods covered by the Common Military List or goods whose supply, sale, transfer or export is prohibited under this Regulation, unless the provision of such services is necessary for humanitarian purposes.

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- 2. The provision by nationals of Member States, or from the territories of Member States, of engineering and maintenance services to cargo aircraft owned or controlled, directly or indirectly, by an Iranian person, entity or body shall be prohibited, where the providers of the service have information, including from the competent customs authorities on the basis of the pre-arrival and pre-departure information referred to in Article 27, that provides reasonable grounds to believe that the cargo aircraft carry goods covered by the Common Military List or goods the supply, sale, transfer or export of which is prohibited under this Regulation, unless the provision of such services is necessary for humanitarian and safety purposes.
- 3. The prohibitions in paragraphs 1 and 2 shall apply until the cargo has been inspected and, if necessary, seized or disposed of, as the case may be.

Any seizure and disposal may, in accordance with national legislation or the decision of a competent authority, be carried out at the expense of the importer or be recovered from any other person or entity responsible for the attempted illicit supply, sale, transfer or export.

CHAPTER VII

GENERAL AND FINAL PROVISIONS

- 1. No claims in connection with any contract or transaction the performance of which would have been affected, directly or indirectly, in whole or in part, by the measures imposed under Regulation (EC) No 423/2007 or this Regulation, including claims for indemnity or any other claim of this type, such as a claim for compensation or a claim under a guarantee, notably a claim for extension or payment of a bond, guarantee or indemnity, particularly a financial guarantee or financial indemnity, of whatever form, shall be satisfied, if they are made by:
- (a) designated persons, entities or bodies listed in Annexes VII and VIII;
- (b) any other Iranian person, entity or body, including the Iranian government;
- (c) any person, entity or body acting through or on behalf of one of the persons, entities or bodies referred to in points (a) and (b).
- 2. The performance of a contract or transaction shall be regarded as having been affected by the measures imposed under Regulation (EC) No 423/2007 or by this Regulation where the existence or content of the claim results directly or indirectly from those measures.
- 3. In any proceedings for the enforcement of a claim, the onus of proving that satisfying the claim is not prohibited by paragraph 1 shall be on the person seeking the enforcement of that claim.

4. This Article is without prejudice to the right of the persons, entities and bodies referred to in paragraph 1 to judicial review of the legality of the non-performance of contractual obligations in accordance with Regulation (EC) No 423/2007 or this Regulation.

Article 30

For the purposes of Articles 8 and 9, point (c) of Article 11(2), and Articles 21 and 26, any body, entity or holder of rights derived from an original award before the entry into force of this Regulation by a sovereign Government other than Iran, of a production sharing agreement shall not be considered an Iranian person, entity or body. In such cases and in relation to Article 8, the competent authority of the Member State may require appropriate end-user guarantees from any body or entity for any sale, supply, transfer or export of any key equipment or technology listed in Annex VI.

Article 31

- 1. Without prejudice to the applicable rules concerning reporting, confidentiality and professional secrecy, natural and legal persons, entities and bodies shall:
- (a) supply immediately any information which would facilitate compliance with this Regulation, such as information on accounts and amounts frozen in accordance with Article 16, to the competent authorities of the Member States, as indicated on the websites listed in Annex V, where they are resident or located, and shall transmit such information, directly or through the Member States, to the Commission;
- (b) cooperate with the competent authorities, as indicated on the websites listed in Annex V, in any verification of this information.
- 2. Any additional information received directly by the Commission shall be made available to the Member State concerned.
- Any information provided or received in accordance with this Article shall be used only for the purposes for which it was provided or received.

- 1. The freezing of funds and economic resources or the refusal to make funds or economic resources available, carried out in good faith on the basis that such action is in accordance with this Regulation, shall not give rise to liability of any kind on the part of the natural or legal person or entity or body implementing it, or its directors or employees, unless it is proved that the funds and economic resources were frozen or withheld as a result of negligence.
- 2. The prohibitions set out in the present Regulation shall not give rise to liability of any kind on the part of the natural or legal persons or entities concerned, if they did not know, and had no reasonable cause to suspect, that their actions would infringe these prohibitions.

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3. The disclosure in good faith, as provided for in Articles 21, 22 and 23, by an institution or by a person covered by this Regulation or an employee or director of such an institution, of the information referred to in Articles 21, 22 and 23 shall not give rise to liability of any kind on the part of the institution or person or its directors or employees.

Article 33

- 1. A Member State may take all action it deems necessary to ensure that relevant international, Union or national legal obligations concerning the health and safety of workers and environmental protection are respected where cooperation with an Iranian person, entity or body may be affected by the implementation of this Regulation.
- 2. For the purpose of action taken pursuant to paragraph 1, the prohibitions in Articles 8 and 9, point (c) of Article 11(2), and Articles 16(2), 21 and 26 shall not apply.
- 3. Member States shall inform each other in advance of action pursuant to paragraph 1.

Article 34

The Commission and Member States shall immediately inform each other of the measures taken under this Regulation and shall supply each other with any other relevant information at their disposal in connection with this Regulation, in particular information in respect of violations and enforcement problems and judgments issued by national courts.

Article 35

The Commission shall:

- (a) amend Annex II on the basis of determinations made by either the United Nations Security Council or the Sanctions Committee or on the basis of information supplied by Member States;
- (b) amend Annex IV on the basis of information supplied by Member States;
- (c) amend Annex V on the basis of information supplied by Member States.

- 1. Where the Security Council or the Sanctions Committee lists a natural or legal person, entity or body, the Council shall include such natural or legal person, entity or body in Annex VII.
- 2. Where the Council decides to subject a natural or legal person, entity or body to the measures referred to in Article 16(2), it shall amend Annex VIII accordingly.

- 3. The Council shall communicate its decision, including the grounds for listing, to the natural or legal person, entity or body referred to in paragraphs 1 and 2, either directly, if the address is known, or through the publication of a notice, providing such natural or legal person, entity or body with an opportunity to present observations.
- 4. Where observations are submitted, or where substantial new evidence is presented, the Council shall review its decision and inform the natural or legal person, entity or body accordingly.
- 5. Where the United Nations decides to delist a natural or legal person, entity or body, or to amend the identifying data of a listed natural or legal person, entity or body, the Council shall amend Annex VII accordingly.
- 6. The list in Annex VIII shall be reviewed in regular intervals and at least every 12 months.

- 1. Member States shall lay down the rules on penalties applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive.
- 2. Member States shall notify the Commission of those rules without delay after the entry into force of this Regulation and shall notify it of any subsequent amendment.

Article 38

- 1. Member States shall designate the competent authorities referred to in this Regulation and identify them on the websites listed in Annex V. Member States shall notify the Commission of any changes in the addresses of their websites listed in Annex V.
- 2. Member States shall notify the Commission of their competent authorities, including the contact details of those competent authorities, without delay after the entry into force of this Regulation, and shall notify it of any subsequent amendment.
- 3. Where this Regulation sets out a requirement to notify, inform or otherwise communicate with the Commission, the address and other contact details to be used for such communication shall be those indicated in Annex V.

Article 39

This Regulation shall apply:

- (a) within the territory of the Union, including its airspace;
- (b) on board any aircraft or any vessel under the jurisdiction of a Member State;
- (c) to any person inside or outside the territory of the Union who is a national of a Member State;

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- (d) to any legal person, entity or body which is incorporated or constituted under the law of a Member State;
- (e) to any legal person, entity or body in respect of any business done in whole or in part within the Union.

Article 40

Regulation (EC) No 423/2007 is hereby repealed. References to the repealed regulation shall be construed as references to this Regulation.

Article 41

This Regulation shall enter into force on the day of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

ANNEX I

PART A

Goods and technology referred to in point (a) of Article 2(1), Articles 2(2) and 4, and points (b) and (d) of Article 5(1)

This Annex comprises all goods and technology listed in Annex I to Regulation (EC) No 428/2009, as defined therein, except the following:

| Item from Annex I to Regulation (EC) No 428/2009 | | | | |
|--|--|--|--|--|
| 5A001 | Telecommunications systems, equipment, components and accessories as follows: | | | |
| | a. Any type of telecommunications equipment having any of the following characteristics, function or features: | | | |
| | Specially designed to withstand transitory electronic effects or electromagnetic pulse effect both arising from a nuclear explosion; | | | |
| | 2. Specially hardened to withstand gamma, neutron or ion radiation; or | | | |
| | 3. Specially designed to operate outside the temperature range from 218 K (- 55 °C) to 397 (124 °C); | | | |
| | Note: 5A001.a.3. applies only to electronic equipment. | | | |
| | Note: 5A001.a.2. and 5A001.a.3. do not control equipment designed or modified for use of board satellites. | | | |
| | b. Telecommunication systems and equipment, and specially designed components and accessorie therefor, having any of the following characteristics, functions or features: | | | |
| | Being underwater untethered communications systems having any of the following: | | | |
| | a. An acoustic carrier frequency outside the range from 20 kHz to 60 kHz; | | | |
| | b. Using an electromagnetic carrier frequency below 30 kHz; | | | |
| | c. Using electronic beam steering techniques; or | | | |
| | d. Using 'lasers' or light-emitting diodes (LEDs) with an output wavelength greater tha 400 nm and less than 700 nm, in a 'local area network'; | | | |
| | Being radio equipment operating in the 1,5 MHz to 87,5 MHz band and having all of the following: | | | |
| | a. Automatically predicting and selecting frequencies and 'total digital transfer rates' p channel to optimise the transmission; and | | | |
| | b. Incorporating a linear power amplifier configuration having a capability to support multiple signals simultaneously at an output power of 1 kW or more in the frequency range of 1,5 MHz or more but less than 30 MHz, or 250 W or more in the frequency range of 30 MHz or more but not exceeding 87,5 MHz, over an 'instantaneous bandwidth of one octave or more and with an output harmonic and distortion content of better that | | | |

- 3. Being radio equipment employing 'spread spectrum' techniques, including 'frequency hopping' techniques, other than those specified in 5A001.b.4. and having any of the following:
 - a. User programmable spreading codes; or

- 80 dB;

 A total transmitted bandwidth which is 100 or more times the bandwidth of any one information channel and in excess of 50 kHz;

Note: 5A001.b.3.b. does not control radio equipment specially designed for use with civil cellular radio-communications systems.

Note: 5A001.b.3 does not control equipment designed to operate at an output power of 1 W or less.

| Item from Anı | nex I |
|---------------|-------|
| to Regulation | (EC) |
| No 428/200 |)9 |

Description

- 4. Being radio equipment employing ultra-wideband modulation techniques, having user programmable channelising codes, scrambling codes or network identification codes and having any of the following:
 - a. A bandwidth exceeding 500 MHz; or
 - b. A 'fractional bandwidth' of 20 % or more;
- 5. Being digitally controlled radio receivers having all of the following:
 - a. More than 1,000 channels;
 - b. A 'frequency switching time' of less than 1 ms;
 - c. Automatic searching or scanning of a part of the electromagnetic spectrum; and
 - d. Identification of the received signals or the type of transmitter; or

Note: 5A001.b.5. does not control radio equipment specially designed for use with civil cellular radio-communications systems.

6. Employing functions of digital 'signal processing' to provide 'voice coding' output at rates of less than 2,400 bit/s:

Technical Notes:

- 1. For variable rate 'voice coding', 5A001.b.6. applies to the 'voice coding' output of continuous speech.
- 2. For the purposes of 5A001.b.6., 'voice coding' is defined as the technique to take samples of human voice and then convert these samples into a digital signal, taking into account specific characteristics of human speech.
- c. Optical fibre communication cables, optical fibres and accessories, as follows:
 - 1. Optical fibres of more than 500 m in length, and specified by the manufacturer as being capable of withstanding a 'proof test' tensile stress of 2 x 10^9 N/m² or more;

Technical Note:

'Proof Test': on-line or off-line production screen testing that dynamically applies a prescribed tensile stress over a 0,5 to 3 m length of fibre at a running rate of 2 to 5 m/s while passing between capstans approximately 150 mm in diameter. The ambient temperature is a nominal 293 K (20 °C) and relative humidity 40 %. Equivalent national standards may be used for executing the proof test.

2. Optical fibre cables and accessories, designed for underwater use;

Note: 5A001.c.2. does not control standard civil telecommunication cables and accessories.

- N.B. 1: For underwater umbilical cables, and connectors therefor, see 8A002.a.3.
- N.B. 2: For fibre-optic hull penetrators or connectors, see 8A002.c.
- d. 'Electronically steerable phased array antennae' operating above 31,8 GHz;

Note: 5A001.d. does not control 'electronically steerable phased array antennae' for landing systems with instruments meeting ICAO standards covering Microwave Landing Systems (MLS).

▼<u>B</u>

| Item from Annex I to Regulation (EC) No 428/2009 | Description | | | |
|--|---|--|--|--|
| | e. Radio direction finding equipment operating at frequencies above 30 MHz and having all of the following, and specially designed components therefor: | | | |
| | 1. 'Instantaneous bandwidth' of 10 MHz or more; and | | | |
| | 2. Capable of finding a Line Of Bearing (LOB) to non-cooperating radio transmitters with a signal duration of less than 1 ms; | | | |
| | f. Jamming equipment specially designed or modified to intentionally and selectively interfere with, deny, inhibit, degrade or seduce mobile telecommunications services and perform any of the following, and specially designed components therefore: | | | |
| | 1. Simulate the functions of Radio Access Network (RAN) equipment; | | | |
| | 2. Detect and exploit specific characteristics of the mobile telecommunications protocol employed (e.g., GSM); or | | | |
| | 3. Exploit specific characteristics of the mobile telecommunications protocol employed (e.g., GSM); | | | |
| | N.B.: For GNSS jamming equipment see Military Goods Controls. | | | |
| | g. Passive Coherent Location (PCL) systems or equipment, specially designed for detecting and tracking moving objects by measuring reflections of ambient radio frequency emissions, supplied by non-radar transmitters: | | | |
| | Technical Note: | | | |
| | Non-radar transmitters may include commercial radio, television or cellular telecommunications base stations. | | | |
| | Note: 5A001.g. does not control any of the following: | | | |
| | a. Radio-astronomical equipment; or | | | |
| | b. Systems or equipment, that require any radio transmission from the target. | | | |
| | h. Electronic equipment designed or modified to prematurely activate or prevent the initiation of Radio Controlled Improvised Explosive Devices (RCIED): | | | |
| | N.B.: SEE ALSO MILITARY GOODS CONTROLS. | | | |
| 5A002 | 'Information security' systems, equipment and components therefor, as follows: | | | |
| | a. Systems, equipment, application specific 'electronic assemblies', modules and integrated circuits for 'information security', as follows and other specially designed components therefor: | | | |
| | N.B.: For the control of Global Navigation Satellite Systems (GNSS) receiving equipment containing or employing decryption (i.e., GPS or GLONASS), see 7A005. | | | |
| | Designed or modified to use 'cryptography' employing digital techniques performing any cryptographic function other than authentication or digital signature and having any of the following: | | | |
| | Technical Notes: | | | |
| | Authentication and digital signature functions include their associated key management function. | | | |
| | Authentication includes all aspects of access control where there is no encryption of files or text except as directly related to the protection of passwords, Personal Identification Numbers (PINs) or similar data to prevent unauthorised access. | | | |

Item from Annex I to Regulation (EC) No 428/2009

Description

3. 'Cryptography' does not include 'fixed' data compression or coding techniques.

Note: 5A002.a.1. includes equipment designed or modified to use 'cryptography' employing analogue principles when implemented with digital techniques.

- a. A 'symmetric algorithm' employing a key length in excess of 56 bits; or
- b. An 'asymmetric algorithm' where the security of the algorithm is based on any of the following:
 - 1. Factorisation of integers in excess of 512 bits (e.g., RSA);
 - Computation of discrete logarithms in a multiplicative group of a finite field of size greater than 512 bits (e.g., Diffie-Hellman over Z/pZ); or
 - 3. Discrete logarithms in a group other than mentioned in 5A002.a.1.b.2. in excess of 112 bits (e.g., Diffie-Hellman over an elliptic curve);
- 2. Designed or modified to perform cryptanalytic functions;
- 3. Not used;
- 4. Specially designed or modified to reduce the compromising emanations of information-bearing signals beyond what is necessary for health, safety or electromagnetic interference standards:
- Designed or modified to use cryptographic techniques to generate the spreading code for 'spread spectrum' systems, other than those specified in 5A002.a.6., including the hopping code for 'frequency hopping' systems;
- 6. Designed or modified to use cryptographic techniques to generate channelising codes, scrambling codes or network identification codes, for systems using ultra-wideband modulation techniques and having any of the following:
 - a. A bandwidth exceeding 500 MHz; or
 - b. A 'fractional bandwidth' of 20 % or more;
- Non-cryptographic information and communications technology (ICT) security systems and devices evaluated to an assurance level exceeding class EAL-6 (evaluation assurance level) of the Common Criteria (CC) or equivalent;
- 8. Communications cable systems designed or modified using mechanical, electrical or electronic means to detect surreptitious intrusion;
- 9. Designed or modified to use 'quantum cryptography'.

Technical Note:

'Quantum cryptography' is also known as Quantum Key Distribution (QKD).

Note: 5A002 does not control any of the following:

- a. 'Personalised smart cards' having any of the following:
 - 1. Where the cryptographic capability is restricted for use in equipment or systems excluded from control under entries b. to g. of this Note; or
 - For general public-use applications where the cryptographic capability is not user-accessible and it is specially designed and limited to allow protection of personal data stored within;
 - N.B. If a 'personalised smart card' has multiple functions, the control status of each function is assessed individually.

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- Receiving equipment for radio broadcast, pay television or similar restricted audience broadcast of the consumer type, without digital encryption except that exclusively used for sending the billing or programme-related information back to the broadcast providers;
- c. Equipment where the cryptographic capability is not user-accessible and which is specially designed and limited to allow any of the following:
 - 1. Execution of copy-protected 'software';
 - 2. Access to any of the following:
 - a. Copy-protected contents stored on read-only media; or
 - Information stored in encrypted form on media (e.g., in connection with the protection of intellectual property rights) when the media is offered for sale in identical sets to the public;
 - 3. Copying control of copyright protected audio/video data; or
 - 4. Encryption and/or decryption for protection of libraries, design attributes, or associated data for the design of semiconductor devices or integrated circuits;
- d. Cryptographic equipment specially designed and limited for banking use or 'money transactions';

Technical Note:

- 'Money transactions' in 5A002 Note d. includes the collection and settlement of fares or credit functions.
- e. Portable or mobile radiotelephones for civil use (e.g., for use with commercial civil cellular radio communication systems) that are not capable of transmitting encrypted data directly to another radiotelephone or equipment (other than Radio Access Network (RAN) equipment), nor of passing encrypted data through RAN equipment (e.g., Radio Network Controller (RNC) or Base Station Controller (BSC));
- f. Cordless telephone equipment not capable of end-to-end encryption where the maximum effective range of unboosted cordless operation (i.e. a single, unrelayed hop between terminal and home base station) is less than 400 metres according to the manufacturer's specifications; or
- g. Portable or mobile radiotelephones and similar client wireless devices for civil use, that implement only published or commercial cryptographic standards (except for anti-piracy functions, which may be non-published) and also meet the provisions of paragraphs b. to d. of the Cryptography Note (Note 3 in Category 5 Part 2), that have been customised for a specific civil industry application with features that do not affect the cryptographic functionality of these original non-customised devices;
- h. Equipment specially designed for the servicing of portable or mobile radiotelephones and similar client wireless devices that meet all the provisions of the Cryptography Note (Note 3 in Category 5, Part 2), where the servicing equipment meets all of the following:
 - 1. The cryptographic functionality of the servicing equipment cannot easily be changed by the user of the equipment;
 - 2. The servicing equipment is designed for installation without further substantial support by the supplier; and
 - The servicing equipment cannot change the cryptographic functionality of the device being serviced;

| Item from Annex I to Regulation (EC) No 428/2009 | Description |
|--|---|
| | Wireless 'personal area network' equipment that implement only published commercial cryptographic standards and where the cryptographic capability limited to a nominal operating range not exceeding 30 metres according to manufacturer's specifications. |
| 5B001 | Telecommunications test, inspection and production equipment, components and accessories, follows: |
| | a. Equipment and specially designed components or accessories therefor, specially designed for 'development', 'production' or 'use' of equipment, functions or features, specified in 5A0 |
| | Note: 5B001.a. does not control optical fibre characterization equipment. |
| | b. Equipment and specially designed components or accessories therefor, specially designed for 'development' of any of the following telecommunication transmission or switching equipment |
| | Equipment employing digital techniques designed to operate at a 'total digital transfer reexceeding 15 Gbit/s; |
| | Technical Note: |
| | For switching equipment the 'total digital transfer rate' is measured at the highest speed por line. |
| | 2. Equipment employing a 'laser' and having any of the following: |
| | a. A transmission wavelength exceeding 1 750 nm; |
| | Performing 'optical amplification' using praseodymium-doped fluoride fibre amplification' (PDFFA); |
| | c. Employing coherent optical transmission or coherent optical detection techniques (a called optical heterodyne or homodyne techniques); or |
| | d. Employing analogue techniques and having a bandwidth exceeding 2,5 GHz; |
| | Note: 5B001.b.2.d. does not control equipment specially designed for the 'development' commercial TV systems. |
| | 3. Equipment employing 'optical switching'; |
| | Radio equipment employing Quadrature-Amplitude-Modulation (QAM) techniques ab- level 256; or |
| | Equipment employing 'common channel signalling' operating in non-associated mode operation. |
| 5B002 | 'Information security' test, inspection and 'production' equipment, as follows: |
| | a. Equipment specially designed for the 'development' or 'production' of equipment specified 5A002 or 5B002.b.; |
| | b. Measuring equipment specially designed to evaluate and validate the 'information secur functions of the equipment specified in 5A002 or 'software' specified in 5D002.a. or 5D002. |
| 5D001 | 'Software' as follows: |
| | a. 'Software' specially designed or modified for the 'development', 'production' or 'use' equipment, functions or features, specified in 5A001; |
| | b. 'Software' specially designed or modified to support 'technology' specified in 5E001; |

| Item from Annex I to Regulation (EC) No 428/2009 | Description |
|--|--|
| | c. Specific 'software' specially designed or modified to provide characteristics, functions or features of equipment, specified in 5A001 or 5B001; |
| | d. 'Software' specially designed or modified for the 'development' of any of the following tele- communication transmission or switching equipment: |
| | Equipment employing digital techniques designed to operate at a 'total digital transfer rate' exceeding 15 Gbit/s; |
| | Technical Note: |
| | For switching equipment the 'total digital transfer rate' is measured at the highest speed port or line. |
| | 2. Equipment employing a 'laser' and having any of the following: |
| | a. A transmission wavelength exceeding 1,750 nm; or |
| | b. Employing analogue techniques and having a bandwidth exceeding 2.5 GHz; |
| | Note: 5D001.d.2.b. does not control 'software' specially designed or modified for the 'development' of commercial TV systems. |
| | 3. Equipment employing 'optical switching'; or |
| | Radio equipment employing Quadrature-Amplitude-Modulation (QAM) techniques above level 256. |
| 5D002 | 'Software' as follows: a. 'Software' specially designed or modified for the 'development', 'production' or 'use' of equipment specified in 5A002 or 'software' specified in 5D002.c.; b. 'Software' specially designed or modified to support 'technology' specified in 5E002; c. Specific 'software', as follows: 1. 'Software' having the characteristics, or performing or simulating the functions of the equipment, specified in 5A002; 2. 'Software' to certify 'software' specified in 5D002.c.1. Note: 5D002 does not control 'software' as follows: a. 'Software' required for the 'use' of equipment excluded from control by the Note to 5A002; b. 'Software' providing any of the functions of equipment excluded from control by the Note to 5A002. |
| 5E001 | 'Technology' as follows: a. 'Technology' according to the General Technology Note for the 'development', 'production' or 'use' (excluding operation) of equipment, functions or features specified in 5A001 or 'software' specified in 5D001.a.; b. Specific 'technology' as follows: 1. 'Required' 'technology' for the 'development' or 'production' of telecommunications equipment specially designed to be used on board satellites; 2. 'Technology' for the 'development' or 'use' of 'laser' communication techniques with the capability of automatically acquiring and tracking signals and maintaining communications through exoatmosphere or sub-surface (water) media; |

| Item from Annex |
|--------------------|
| to Regulation (EC) |
| No 428/2009 |

Description

- 3. 'Technology' for the 'development' of digital cellular radio base station receiving equipment whose reception capabilities that allow multi-band, multi-channel, multi-mode, multi-coding algorithm or multi-protocol operation can be modified by changes in 'software';
- 4. 'Technology' for the 'development' of 'spread spectrum' techniques, including 'frequency hopping' techniques;
- c. 'Technology' according to the General Technology Note for the 'development' or 'production' of any of the following:
 - Equipment employing digital techniques designed to operate at a 'total digital transfer rate' exceeding 15 Gbit/s;

Technical Note:

For switching equipment the 'total digital transfer rate' is measured at the highest speed port or line.

- 2. Equipment employing a 'laser' and having any of the following:
 - a. A transmission wavelength exceeding 1,750 nm;
 - b. Performing 'optical amplification' using Praseodymium-Doped Fluoride Fibre Amplifiers (PDFFA);
 - c. Employing coherent optical transmission or coherent optical detection techniques (also called optical heterodyne or homodyne techniques);
 - d. Employing wavelength division multiplexing techniques of optical carriers at less than 100 GHz spacing; or
 - e. Employing analogue techniques and having a bandwidth exceeding 2,5 GHz;
 - Note: 5E001.c.2.e. does not control 'technology' for the 'development' or 'production' of commercial TV systems.
 - *N.B.*: For 'technology' for the 'development' or 'production' of non-telecommunications equipment employing a laser, see 6E.
- 3. Equipment employing 'optical switching';
- 4. Radio equipment having any of the following:
 - a. Quadrature-Amplitude-Modulation (QAM) techniques above level 256;
 - b. Operating at input or output frequencies exceeding 31,8 GHz; or
 - Note: 5E001.c.4.b. does not control 'technology' for the 'development' or 'production' of equipment designed or modified for operation in any frequency band which is 'allocated by the ITU' for radio-communications services, but not for radio-determination.
 - c. Operating in the 1,5 MHz to 87,5 MHz band and incorporating adaptive techniques providing more than 15 dB suppression of an interfering signal;
- Equipment employing 'common channel signalling' operating in non-associated mode of operation; or
- 6. Mobile equipment having all of the following:
 - a. Operating at an optical wavelength greater than or equal to $200~\mathrm{nm}$ and less than or equal to $400~\mathrm{nm}$; and
 - b. Operating as a 'local area network';
- d. 'Technology' according to the General Technology Note for the 'development' or 'production' of Microwave Monolithic Integrated Circuit (MMIC) power amplifiers specially designed for telecommunications and having any of the following:
 - Rated for operation at frequencies exceeding 3,2 GHz up to and including 6 GHz and with an average output power greater than 4 W (36 dBm) with a 'fractional bandwidth' greater than 15 %;

| Item from Annex I to Regulation (EC) No 428/2009 | | |
|--|--|--|
| Rated for operation at frequencies exceeding 6 GHz up to and including 16 GHz and average output power greater than 1 W (30 dBm) with a 'fractional bandwidth' gre 10 %;3. Rated for operation at frequencies exceeding 16 GHz up to and including 31,8 GHz and average output power greater than 0,8 W (29 dBm) with a 'fractional bandwidth' gre 10 %; Rated for operation at frequencies exceeding 31,8 GHz up to and including 37,5 GE. Rated for operation at frequencies exceeding 37,5 GHz up to and including 43,5 GE with an average output power greater than 0,25 W (24 dBm) with a 'fractional bar greater than 10 %; or Rated for operation at frequencies exceeding 43,5 GHz; 'Technology' according to the General Technology Note for the 'development' or 'proof electronic devices and circuits, specially designed for telecommunications and components manufactured from 'superconductive' materials, specially designed for at temperatures below the 'critical temperature' of at least one of the 'superconductive' | | |
| | constituents and having any of the following: 1. Current switching for digital circuits using 'superconductive' gates with a product of delay time per gate (in seconds) and power dissipation per gate (in watts) of less than 10⁻¹⁴ J; or 2. Frequency selection at all frequencies using resonant circuits with Q-values exceeding 10,000. | |
| 5E002 | 'Technology' according to the General Technology Note for the 'development', 'production' or 'use' of equipment specified in 5A002, 5B002 or 'software' specified in 5D002.a. or 5D002.c. | |
| | PART B | |

PART B

Article 6 applies to the following goods:

| Item from Annex I to Regulation (EC) No 428/2009 | Description | |
|--|---|--|
| 0A001 | 'Nuclear reactors' and specially designed or prepared equipment and components therefor, as follows: | |
| | a. 'Nuclear reactors'; | |
| | b. Metal vessels, or major shop-fabricated parts therefor, including the reactor vessel head for a reactor pressure vessel, specially designed or prepared to contain the core of a 'nuclear reactor'; | |
| | c. Manipulative equipment specially designed or prepared for inserting or removing fuel in a 'nuclear reactor'; | |
| | d. Control rods specially designed or prepared for the control of the fission process in a 'nuclear reactor', support or suspension structures therefor, rod drive mechanisms and rod guide tubes; | |
| | e. Pressure tubes specially designed or prepared to contain fuel elements and the primary coolant in a 'nuclear reactor' at an operating pressure in excess of 5,1 MPa; | |
| | f. Zirconium metal and alloys in the form of tubes or assemblies of tubes in which the ratio of hafnium to zirconium is less than 1:500 parts by weight, specially designed or prepared for use in a 'nuclear reactor'; | |
| | g. Coolant pumps specially designed or prepared for circulating the primary coolant of 'nuclear reactors'; | |

| Item from Annex I to Regulation (EC) No 428/2009 | Description |
|--|--|
| | h. 'Nuclear reactor internals' specially designed or prepared for use in a 'nuclear reactor', incl support columns for the core, fuel channels, thermal shields, baffles, core grid plates diffuser plates; |
| | Note: In 0A001.h. 'nuclear reactor internals' means any major structure within a reactor which has one or more functions such as supporting the core, maintaining fuel align directing primary coolant flow, providing radiation shields for the reactor vessel guiding in-core instrumentation. |
| | Heat exchangers (steam generators) specially designed or prepared for use in the primary co- circuit of a 'nuclear reactor'; |
| | j. Neutron detection and measuring instruments specially designed or prepared for determ neutron flux levels within the core of a 'nuclear reactor'. |
| OC002 | Low enriched uranium covered by 0C002 when it is incorporated in assembled nuclear elements |

ANNEX II

Goods and technology referred to in point (a) of Article 2(1), Articles 2(3) and 4, and points (b) and (d) of Article 5(1)

INTRODUCTORY NOTES

- Unless otherwise stated, reference numbers used in the column entitled 'Description' refer to the descriptions of dual-use items and technology set out in Annex I to Regulation (EC) No 428/2009.
- A reference number in the column entitled 'Related item from Annex I to Regulation (EC) No 428/2009' means that the characteristics of the item described in the column 'Description' lie outside the parameters set out in the description of the dual-use entry referred to.
- 3. Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
- 4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

GENERAL NOTES

- The object of the prohibitions contained in this Annex should not be defeated by the export of any non-prohibited goods (including plant) containing one or more prohibited components when the prohibited component or components are the principal element of the goods and can feasibly be removed or used for other purposes.
 - N.B.: In judging whether the prohibited component or components are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the prohibited component or components as the principal element of the goods being procured.
- 2. The goods specified in this Annex include both new and used goods.

GENERAL TECHNOLOGY NOTE (GTN)

(To be read in conjunction with Section II.B.)

- The sale, supply, transfer or export of 'technology' which is 'required' for the 'development', 'production' or 'use' of goods the sale, supply, transfer or export of which is prohibited in Part A (Goods) below, is prohibited in accordance with the provisions of Section II.B.
- The 'technology' 'required' for the 'development', 'production' or 'use' of prohibited goods remains under prohibition even when applicable to nonprohibited goods.
- Prohibitions do not apply to that 'technology' which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not prohibited or the export of which has been authorised in accordance with Regulation (EC) No 423/2007 or this Regulation.
- Prohibitions on 'technology' transfer do not apply to information 'in the public domain', to 'basic scientific research' or to the minimum necessary information for patent applications.

II.A. GOODS

A0. Nuclear Materials, Facilities, and Equipment

| | , , , , , , , , , , , , , , , , , , , | |
|-----------|---|--|
| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
| II.A0.001 | Hollow cathode lamps as follows: a. Iodine hollow cathode lamps with windows in pure silicon or quartz b. Uranium hollow cathode lamps | _ |
| II.A0.002 | Faraday isolators in the wavelength range 500 nm - 650 nm | _ |
| II.A0.003 | Optical gratings in the wavelength range 500 nm - 650 nm | _ |
| II.A0.004 | Optical fibres in the wavelength range 500 nm - 650 nm coated with anti- reflecting layers in the wavelength range 500 nm - 650 nm and having a core diameter greater than 0,4 mm but not exceeding 2 mm | _ |
| II.A0.005 | Nuclear reactor vessel components and testing equipment, other than those specified in 0A001, as follows: 1. Seals 2. Internal components 3. Sealing, testing and measurement equipment | 0A001 |
| II.A0.006 | Nuclear detection systems for detection, identification or quantification of radio- active materials and radiation of nuclear origin and specially designed components thereof other than those specified in 0A001.j. or 1A004.c. | 0A001.j 1A004.c |
| II.A0.007 | Bellows-sealed valves made of aluminium alloy or stainless steel type 304, 304L or 316L. Note: This item does not cover bellow valves defined in 0B001.c.6 and 2A226. | 0B001.c.6 2A226 |
| II.A0.008 | Laser mirrors, other than those specified in 6A005.e, consisting of substrates having a thermal expansion coefficient of $10^{-6} \mathrm{K}^{-1}$ or less at 20 °C (e.g. fused silica or sapphire). Note: This item does not cover optical systems specially designed for astronomical applications, except if the mirrors contain fused silica. | 0B001.g.5, 6A005.e |
| II.A0.009 | Laser lenses, other than those specified in 6A005.e.2, consisting of substrates having a thermal expansion coefficient of 10^{-6} K $^{-1}$ or less at 20 °C (e.g. fused silica). | 0B001.g, 6A005.e.2 |
| II.A0.010 | Pipes, piping, flanges, fittings made of, or lined with, nickel or nickel alloy containing more than 40 % nickel by weight, other than those specified in 2B350.h.1., in respect of pipes having an inner diameter smaller than 100 mm. | 2B350 |
| II.A0.012 | Shielded enclosures for the manipulation, storage and handling of radioactive substances (Hot cells). | 0B006 |
| II.A0.013 | 'Natural uranium' or 'depleted uranium' or thorium in the form of metal, alloy, chemical compound or concentrate and any other material containing one or more of the foregoing, other than those specified in 0C001. | 0C001 |
| II.A0.014 | Detonation chambers having a capacity of explosion absorption of more than 2,5 kg TNT equivalent. | _ |
| | | <u>I</u> |

A1. Materials, chemicals, 'microorganisms' and 'toxins'

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| II.A1.001 | Bis(2-ethylhexyl) phosphoric acid (HDEHP or D2HPA) CAS 298-07-7 solvent in any quantity, with a purity greater than 90 %. | _ |
| II.A1.002 | Fluorine gas (Chemical Abstract Number (CAS): 7782-41-4), with a purity of at least 95 %. | _ |
| II.A1.005 | Electrolytic cells for fluorine production with an output capacity greater than 100 g of fluorine per hour. Note: This item does not cover electrolytic cells defined in item 1B225. | 1B225 |
| II.A1.006 | Catalysts, other than those prohibited by 1A225, containing platinum, palladium or rhodium, usable 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. | 1B231, 1A225 |
| II.A1.007 | Aluminium and its alloys, other than those specified in 1C002.b.4 or 1C202.a, in crude or semi-fabricated form having either of the following characteristics: a. Capable of an ultimate tensile strength of 460 MPa or more at 293 K (20 °C); or b. Having a tensile strength of 415 MPa or more at 298 K (25 °C). | 1C002.b.4, 1C202.a |
| II.A1.008 | Magnetic metals, of all types and of whatever form, having an initial relative permeability of 120 000 or more and a thickness between 0,05 and 0,1 mm. | 1C003.a |
| II.A1.009 | 'Fibrous or filamentary materials' or prepregs, as follows: a. Carbon or aramid 'fibrous or filamentary materials' having either of the following characteristics: 1. A 'specific modulus' exceeding 10 × 10 ⁶ m; or 2. A 'specific tensile strength' exceeding 17 × 10 ⁴ m; b. Glass 'fibrous or filamentary materials' having either of the following characteristics: 1. A 'specific modulus' exceeding 3,18 × 10 ⁶ m; or 2. A 'specific tensile strength' exceeding 76,2 × 10 ³ m; c. Thermoset resin-impregnated continuous 'yarns', 'rovings', 'tows' or 'tapes' with a width of 15 mm or less (once prepregs), made from carbon or glass 'fibrous or filamentary materials' other than those specified in II.A1.010.a. or b. Note: This item does not cover 'fibrous or filamentary materials' defined in items 1C010.a, 1C010.b, 1C210.a and 1C210.b. | 1C010.a 1C010.b 1C210.a 1C210.b |
| II.A1.010 | Resin-impregnated or pitch-impregnated fibres (prepregs), metal or carbon-coated fibres (preforms) or 'carbon fibre preforms', as follows: a. Made from 'fibrous or filamentary materials' specified in II.A1.009 above; b. Epoxy resin 'matrix' impregnated carbon 'fibrous or filamentary materials' (prepregs), specified in 1C010.a, 1C010.b or 1C010.c, for the repair of aircraft structures or laminates, of which the size of individual sheets does not exceed 50 cm × 90 cm; c. Prepregs specified in 1C010.a, 1C010.b or 1C010.c, when impregnated with phenolic or epoxy resins having a glass transition temperature (Tg) less than 433 K (160 °C) and a cure temperature lower than the glass transition temperature. Note: This item does not cover 'fibrous or filamentary materials' defined in item 1C010.e. | 1C010.e. 1C210 |

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|--|
| II.A1.011 | Reinforced silicon carbide ceramic composites usable for nose tips, re-entry vehicles, nozzle flaps, usable in 'missiles', other than those specified in 1C107. | 1C107 |
| II.A1.012 | Maraging steels, other than those specified in 1C116 or 1C216, 'capable of' an ultimate tensile strength of 2050 MPa or more, at 293 K (20 °C). <i>Technical Note:</i> The phrase 'maraging steel capable of' encompasses maraging steel before or after heat treatment. | 1C216 |
| II.A1.013 | Tungsten, tantalum, tungsten carbide, tantalum carbide and alloys, having both of the following characteristics: a. In forms having a hollow cylindrical or spherical symmetry (including cylinder segments) with an inside diameter between 50 mm and 300 mm; and b. A mass greater than 5 kg. Note: This item does not cover tungsten, tungsten carbide and alloys defined in item 1C226. | 1C226 |
| II.A1.014 | Elemental powders of cobalt, neodymium or samarium or alloys or mixtures thereof containing at least 20 % by weight of cobalt, neodymium or samarium, with a particle size less than 200 $\mu m.$ | _ |
| II.A1.015 | Pure tributyl phosphate (TBP) [CAS No 126-73-8] or any mixture having a TBP content of more than 5 % by weight. | _ |
| II.A1.016 | Maraging steel, other than those prohibited by 1C116, 1C216 or II.A1.012 Technical Note: Maraging steels are iron alloys generally characterised by high nickel, very low carbon content and the use of substitutional elements or precipitates to produce strengthening and age-hardening of the alloy. | _ |
| II.A1.017 | Metals, metal powders and material as follows: a. Tungsten and tungsten alloys, other than those prohibited by 1C117, in the form of uniform spherical or atomized particles of 500 μm diameter or less with a tungsten content of 97 % by weight or more; b. Molybdenum and molybdenum alloys, other than those prohibited by 1C117, in the form of uniform spherical or atomized particles of 500 μm diameter or less with a molybdenum content of 97 % by weight or more; c. Tungsten materials in the solid form, other than those prohibited by 1C226, or II.A1.013 having material compositions as follows: 1. Tungsten and alloys containing 97 % by weight or more of tungsten; 2. Copper infiltrated tungsten containing 80 % by weight or more of tungsten; or 3. Silver infiltrated tungsten containing 80 % by weight or more of tungsten. | _ |
| II.A1.018 | Soft magnetic alloys having a chemical composition as follows: a) Iron content between 30 % and 60 %, and b) Cobalt content between 40 % and 60 %. | _ |

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|--|
| II.A1.019 | 'Fibrous or filamentary materials' or prepregs, not prohibited by Annex I or by Annex II (under II.A1.009, II.A1.010) of this Regulation, or not specified by Annex I of Regulation (EC) No 428/2009, as follows: | _ |
| | a) Carbon 'fibrous or filamentary materials'; Note: II.A1.019a. does not cover fabrics. b) Thermoset resin-impregnated continuous 'yarns', 'rovings', 'tows', or 'tapes', made from carbon 'fibrous or filamentary materials'; c) Polyacrylonitrile (PAN) continuous 'yarns', 'rovings', 'tows' or 'tapes' | |

A2. Materials Processing

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| II.A2.001 | Vibration test systems, equipment and components thereof, other than those specified in 2B116: | 2B116 |
| | 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 0,1 g rms between 0,1 Hz and 2 kHz and 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 bandwidth greater than 5 kHz designed for use with vibration test systems specified in a.; | |
| | 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 a.; | |
| | d. Test piece support structures and electronic units designed to combine multiple shaker units in a system capable of providing an effective combined force equal to or greater than 50 kN, measured 'bare table', and usable in vibration systems specified in a. | |
| | Technical Note: | |
| | 'Bare table' means a flat table, or surface, with no fixture or fittings. | |
| II.A2.002 | Machine tools and components and numerical controls for machine tools, as follows: | 2B201.b |
| | a. Machine tools for grinding having positioning accuracies with 'all compensations available' equal to or less (better) than 15 μm according to ISO 230/2 (1988) (1) or national equivalents along any linear axis; | 2B001.c |
| | Note: This item does not cover machine tools for grinding defined in items 2B201.b and 2B001.c. | |
| | b. Components and numerical controls, specially designed for machine tools specified in 2B001, 2B201, or under a. | |
| H A 2 002 | Delenaing machines and related equipment as follows: | 2B119 |
| II.A2.003 | Balancing machines and related equipment as follows: a. Balancing machines, designed or modified for dental or other medical equipment, having all the following characteristics: | 20119 |
| | 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; | |
| | | |

▼B

| 3. Capable of correcting imbalance in two planes or more; and 4. Capable of balancing to a residual specific imbalance of 0,2 g × mm per kg of rotor mass; b. Indicator heads designed or modified for use with machines specified in a above. Technical Note: Indicator heads are sometimes known as balancing instrumentation. II.A2.004 Remote manipulators that can be used to provide remote actions in radio-chemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 **Pressure transducers**, other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₀), and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of less than 200 kPa and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or translum alloys; 6. Tinanium or translum alloys; 6. Tinanium or translum | No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|---|-----------|--|--|
| kg of rotor mass; b. Indicator heads designed or modified for use with machines specified in a above. Technical Note: Indicator heads are sometimes known as balancing instrumentation. II.A2.004 Remote manipulators that can be used to provide remote actions in radio-chemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); or b. A capability of penetrating a ver the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor bell, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; or 7. Zirconium or zirconium alloys; 6. Tittanium or titanium alloys; or 7. Zirconium or zirconium alloys; or 8. Zirconium or zirconium alloys; or 8. Zirconium or zirconium | | 3. Capable of correcting imbalance in two planes or more; and | |
| above. Technical Note: Indicator heads are sometimes known as balancing instrumentation. II.A2.004 Remote manipulators that can be used to provide remote actions in radio-chemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₂)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of less than 200 kPa and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tintalum alloys; or 7. Zirconium or zirconium alloys; 6. Titanium or zirconium alloys; 7. Zirconium or zirconium alloys; 8. Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| II.A2.004 Remote manipulators that can be used to provide remote actions in radio-chemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C 2B226 Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆), and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of less than 200 kPa and an 'accuracy' of better than ± 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of acrosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Trantalum or tantalum alloys; or 7. Zirconium or zirconium alloys, Note: This item does not cover centrifugal separators defined in item 2B352.c. | | | |
| II.A2.004 Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells, other than those specified in 2B255, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of sets than 200 kPa and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. | | Technical Note: | |
| chemical separation operations or hot cells, other than those specified in 2B225, having either of the following characteristics: a. A capability of penetrating a hot cell wall of 0,3 m or more (through the wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0,3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than ± 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of acrosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or tantalum alloys; 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. | | Indicator heads are sometimes known as balancing instrumentation. | |
| wall operation); or b. A capability of bridging over the top of a hot cell wall with a thickness of 0.3 m or more (over the wall operation). II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | II.A2.004 | chemical separation operations or hot cells, other than those specified in | 2B225 |
| II.A2.006 Oxidation furnaces capable of operation at temperatures above 400 °C Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of less than 200 kPa and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tinatum alloys; 6. Titanium or trantalum alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| Note: This item does not cover tunnel kilns with roller or car conveyance, tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₀)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
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| tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or structural ceramics. II.A2.007 'Pressure transducers', other than those defined in 2B230, capable of measuring absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | II.A2.006 | | |
| absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | tunnel kilns with conveyor belt, pusher type kilns or shuttle kilns, specially designed for the production of glass, tableware ceramics or | 2B227 |
| absolute pressures at any point in the range 0 to 200 kPa and having both of the following characteristics: a. Pressure sensing elements made of or protected by 'Materials resistant to corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| corrosion by uranium hexafluoride (UF ₆)', and b. Having either of the following characteristics: 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | II.A2.007 | absolute pressures at any point in the range 0 to 200 kPa and having both of the | 2B230 |
| 1. A full scale of less than 200 kPa and an 'accuracy' of better than ± 1 % of full scale; or 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
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| II.A2.011 Centrifugal separators, capable of continuous separation without the propagation of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| of aerosols and manufactured from: 1. Alloys with more than 25 % nickel and 20 % chromium by weight; 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | 2. A full scale of 200 kPa or greater and an 'accuracy' of better than 2 kPa. | |
| 2. Fluoropolymers; 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | II.A2.011 | | 2B352.c |
| 3. Glass (including vitrified or enamelled coating or glass lining); 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | 1. Alloys with more than 25 % nickel and 20 % chromium by weight; | |
| 4. Nickel or alloys with more than 40 % nickel by weight; 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | 2. Fluoropolymers; | |
| 5. Tantalum or tantalum alloys; 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| 6. Titanium or titanium alloys; or 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| 7. Zirconium or zirconium alloys. Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| Note: This item does not cover centrifugal separators defined in item 2B352.c. II.A2.012 Sintered metal filters made of nickel or nickel alloy with more than 40 % nickel by weight. | | | |
| by weight. | | | |
| by weight. | | | |
| Note: This item does not cover filters defined in item 2B352.d. | II.A2.012 | | 2B352.d |
| | | Note: This item does not cover filters defined in item 2B352.d. | |

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|--|
| II.A2.013 | Spin-forming machines and flow-forming machines, other than those controlled by 2B009, 2B109 or 2B209, having a roller force of more than 60 kN and specially designed components therefor. Technical Note: | _ |
| | For the purpose of II.A2.013, machines combining the functions of spin-forming and flow-forming are regarded as flow-forming machines. | |
| | A3. Electronics | |
| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
| II.A3.001 | High voltage direct current power supplies having both of the following characteristics: | 3A227 |
| | a. Capable of continuously producing, over a time period of eight hours, 10 kV or more, with output power of 5 kW or more with or without sweeping; and | |
| | b. Current or voltage stability better than 0,1 % over a time period of four hours. | |
| | Note: This item does not cover power supplies defined in items 0B001.j.5 and 3A227. | |
| II.A3.002 | Mass spectrometers, other than those specified in 3A233 or 0B002.g, capable of measuring ions of 200 atomic mass units or more and having a resolution of better than 2 parts in 200, as follows, and ion sources thereof: | 3A233 |
| | a. Inductively coupled plasma mass spectrometers (ICP/MS); | |
| | b. Glow discharge mass spectrometers (GDMS); | |
| | c. Thermal ionisation mass spectrometers (TIMS); | |
| | d. Electron bombardment mass spectrometers which have a source chamber constructed from, lined with or plated with 'materials resistant to corrosion by uranium hexafluoride UF ₆ '; | |
| | 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 °C) or less; or | |
| | 2. A source chamber constructed from, lined with or plated with 'materials resistant to corrosion by uranium hexafluoride (UF ₆)'; | |
| | f. Mass spectrometers equipped with a microfluorination ion source designed for actinides or actinide fluorides. | |
| II.A3.003 | Frequency changers or generators, other than those prohibited by 0B001 or 3A225, having all of the following characteristics, and specially designed components and software therefor: | _ |
| | a. Multiphase output capable of providing a power of 40 W or greater; | |
| | b. Capable of operating in the frequency range between 600 and 2 000 Hz; and | |
| | c. Frequency control better (less) than 0,1 %. | |
| | Technical Note: | |
| | Frequency changers in II.A3.003 are also known as converters or inverters. | |

A6. Sensors and Lasers

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| II.A6.001 | Yttrium aluminium garnet (YAG) rods | _ |
| II.A6.002 | Optical equipment and components, other than those specified in 6A002, 6A004.b as follows: | 6A002 6A004.b |
| | Infrared optics in the wavelength range 9 000 nm – 17 000 nm and components thereof, including cadmium telluride (CdTe) components. | |
| II.A6.003 | Wave front corrector systems for use with a laser beam having a diameter exceeding 4 mm, and specially designed components thereof, including control systems, phase front sensors and 'deformable mirrors' including bimorph mirrors. | 6A003 |
| | Note: This item does not cover mirrors defined in 6A004.a, 6A005.e and 6A005.f. | |
| II.A6.004 | Argon ion 'lasers' having an average output power equal to or greater than 5 W. | 6A005.a.6 |
| | Note: This item does not cover argon ion 'lasers' defined in items 0B001.g.5, 6A005 and 6A205.a. | 6A205.a |
| II.A6.005 | Semiconductor 'lasers' and components thereof, as follows: | 6A005.b |
| | a. Individual semiconductor 'lasers' with an output power greater than 200 mW each, in quantities larger than 100; | |
| | b. Semiconductor 'laser' arrays having an output power greater than 20 W. | |
| | Notes: | |
| | 1. Semiconductor 'lasers' are commonly called 'laser' diodes. | |
| | 2. This item does not cover 'lasers' defined in items 0B001.g.5, 0B001.h.6 and 6A005.b. | |
| | 3. This item does not cover 'laser' diodes with a wavelength in the range 1 200 nm - 2 000 nm. | |
| II.A6.006 | Tunable semiconductor 'lasers' and tunable semiconductor 'laser' arrays, of a wavelength between 9 μm and 17 μm , as well as array stacks of semiconductor 'lasers' containing at least one tunable semiconductor 'laser' array of such wavelength. | 6A005.b |
| | Notes: | |
| | Semiconductor 'lasers' are commonly called 'laser' diodes. | |
| | 2. This item does not cover semiconductor 'lasers' defined in items 0B001.h.6 and 6A005.b | |
| II.A6.007 | Solid state 'tunable' 'lasers' and specially designed components thereof as follows: | 6A005.c.1 |
| | a. Titanium-sapphire lasers, | |
| | b. Alexandrite lasers. | |
| | Note: This item does not cover titanium-sapphire and alexandrite lasers defined in items 0B001.g.5, 0B001.h.6 and 6A005.c.1. | |
| II.A6.008 | Neodymium-doped (other than glass) 'lasers', having an output wavelength greater than 1 000 nm but not exceeding 1 100 nm and output energy exceeding 10 J per pulse. | 6A005.c.2 |
| | Note: This item does not cover neodymium-doped (other than glass) 'lasers' defined in item 6A005.c.2.b. | |
| | | |

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| II.A6.009 | Components of acousto-optics, as follows: | 6A203.b.4.c |
| | a. Framing tubes and solid-state imaging devices having a recurrence frequency equal to or exceeding 1 kHz; | |
| | b. Recurrence frequency supplies; | |
| | c. Pockels cells. | |
| II.A6.010 | Radiation-hardened cameras, or lenses thereof, other than those specified in 6A203.c., specially designed, or rated as radiation-hardened, to withstand a total radiation dose greater than 50×10^3 Gy(silicon) (5 × 10 ⁶ rad (silicon)) without operational degradation. | 6A203.c |
| | Technical Note: | |
| | The term Gy(silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionising radiation. | |
| II.A6.011 | Tunable pulsed dye laser amplifiers and oscillators, having all of the following characteristics: | 6A205.c |
| | 1. Operating at wavelengths between 300 nm and 800 nm; | |
| | 2. An average output power greater than 10 W but not exceeding 30 W; | |
| | 3. A repetition rate greater than 1 kHz; and | |
| | 4. Pulse width less than 100 ns. | |
| | Notes: | |
| | 1. This item does not cover single mode oscillators. | |
| | 2. This item does not cover tunable pulsed dye laser amplifiers and oscillators defined in item 6A205.c, 0B001.g.5 and 6A005. | |
| II.A6.012 | Pulsed carbon dioxide 'lasers' having all of the following characteristics: | 6A205.d |
| | 1. Operating at wavelengths between 9 000 nm and 11 000 nm; | |
| | 2. A repetition rate greater than 250 Hz; | |
| | 3. An average output power greater than 100 W but not exceeding 500 W; and | |
| | 4. Pulse width less than 200 ns. | |
| | Note: This item does not cover pulsed carbon dioxide laser amplifiers and oscillators defined in item 6A205.d., 0B001.h.6. and 6A005.d. | |

A7. Navigation and Avionics

| No | Description | 3Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|---|
| II.A7.001 | Inertial navigation systems and specially designed components thereof, as follows: | 7A003 |
| | I. Inertial navigation systems which are certified for use on 'civil aircraft' by civil authorities of a State participating in the Wassenaar Arrangement, and specially designed components thereof, as follows: | 7A103 |
| | a. Inertial navigation systems (INS) (gimballed or strapdown) and inertial equipment designed for 'aircraft', land vehicle, vessels (surface or underwater) or 'spacecraft' for attitude, guidance or control, having any of the following characteristics, and specially designed components thereof: | |
| | 1. Navigation error (free inertial) subsequent to normal alignment of 0,8 nautical mile per hour (nm/hr) 'Circular Error Probable' (CEP) or less (better); or | |

| No | Description | 3Related item from Annex I to Regulation (EC) No 428/2009 |
|----|--|---|
| | 2. Specified to function at linear acceleration levels exceeding 10 g; | |
| | b. Hybrid Inertial Navigation Systems embedded with Global Navigation Satellite Systems(s) (GNSS) or with 'Data-Based Referenced Navigation' ('DBRN') System(s) for attitude, guidance or control, subsequent to normal alignment, having an INS navigation position accuracy, after loss of GNSS or 'DBRN' for a period of up to four minutes, of less (better) than 10 metres 'Circular Error Probable' (CEP); | |
| | c. Inertial Equipment for Azimuth, Heading, or North Pointing having any of the following characteristics, and specially designed components thereof: | |
| | 1. Designed to have an Azimuth, Heading, or North Pointing accuracy equal to, or less (better) than 6 arc/minutes RMS at 45 degrees latitude; or | |
| | 2. Designed to have a non-operating shock level of at least 900 g at a duration of at least 1 msec. | |
| | Note: The parameters of I.a. and I.b. are applicable with any of the following environmental conditions: | |
| | 1. Input random vibration with an overall magnitude of 7,7 g rms in the first half hour and a total test duration of one and a half hours per axis in each of the three perpendicular axes, when the random vibration meets the following: | |
| | a. A constant power spectral density (PSD) value of 0,04 g ² /Hz over a frequency interval of 15 to 1 000 Hz; and | |
| | b. The PSD attenuates with a frequency from $0.04~{\rm g^2/Hz}$ to $0.01~{\rm g^2/Hz}$ over a frequency interval from 1 000 to 2 000 Hz; | |
| | 2. A roll and yaw rate equal to or greater than + 2,62 radian/s (150 deg/s); or | |
| | 3. According to national standards equivalent to 1. or 2. above. | |
| | Technical Notes: | |
| | I. I.b. refers to systems in which an INS and other independent navigation aids are built into a single unit (embedded) in order to achieve improved performance. | |
| | 2. 'Circular Error Probable' (CEP) – In a circular normal distribution, the radius of the circle containing 50 percent of the individual measurements being made, or the radius of the circle within which there is a 50 percent probability of being located. | |
| | II. Theodolite systems incorporating inertial equipment specially designed for civil surveying purposes and designed to have an Azimuth, Heading, or North Pointing accuracy equal to, or less (better) than 6 arc minutes RMS at 45 degrees latitude, and specially designed components thereof. | |
| | III. Inertial or other equipment using accelerometers specified in 7A001 or 7A101, where such accelerometers are specially designed and developed as MWD (Measurement While Drilling) sensors for use in downhole well services operations. | |

A9. Aerospace and Propulsion

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| II.A9.001 | Explosive bolts. | _ |
| | II.B. TECHNOLOGY | |
| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
| II.B.001 | Technology required for the development, production, or use of the items in Part II.A. (Goods) above. | _ |
| II.B.002 | Technology required for the development or production of the items in Part IV A. (Goods) of Annex IV. | _ |
| | Technical Note: | |
| | The term 'technology' includes software. | |

ANNEX III

List of equipment which might be used for internal repression as referred to in point (b) of Article 2(1), point (c) of Article 5(1) and point (e) of Article 5(1)

- 1. Fire-arms, ammunition and related accessories therefor, as follows:
 - 1.1 Firearms not controlled by ML 1 and ML 2 of the Common Military List of the European Union ('Common Military List') (1);
 - 1.2 Ammunition specially designed for the firearms listed in item 1.1 and specially designed components therefor;
 - 1.3 Weapon-sights not controlled by the Common Military List.
- 2. Bombs and grenades not controlled by the Common Military List.
- 3. Vehicles as follows:
 - 3.1 Vehicles equipped with a water cannon, specially designed or modified for the purpose of riot control;
 - 3.2 Vehicles specially designed or modified to be electrified to repel borders;
 - 3.3 Vehicles specially designed or modified to remove barricades, including construction equipment with ballistic protection;
 - 3.4 Vehicles specially designed for the transport or transfer of prisoners and/or detainees;
 - 3.5 Vehicles specially designed to deploy mobile barriers;
 - 3.6 Components for the vehicles specified in items 3.1 to 3.5 specially designed for the purposes of riot control.
 - Note 1 This item does not control vehicles specially designed for the purposes of fire-fighting.
 - Note 2 For the purposes of item 3.5 the term 'vehicles' includes trailers.
- 4. Explosive substances and related equipment as follows:
 - 4.1 Equipment and devices specially designed to initiate explosions by electrical or non-electrical means, including firing sets, detonators, igniters, boosters and detonating cord, and specially designed components therefor; except those specially designed for a specific commercial use consisting of the actuation or operation by explosive means of other equipment or devices the function of which is not the creation of explosions (e.g., car air-bag inflaters, electric-surge arresters of fire sprinkler actuators);
 - 4.2 Linear cutting explosive charges not controlled by the Common Military List;
 - 4.3 Other explosives not controlled by the Common Military List and related substances as follows:
 - a. amatol;
 - b. nitrocellulose (containing more than 12,5 % nitrogen);
 - c. nitroglycol;
 - d. pentaerythritol tetranitrate (PETN);
 - e. picryl chloride;
 - f. 2,4,6-trinitrotoluene (TNT).

- 5. Protective equipment not controlled by ML 13 of the Common Military List as follows:
 - 5.1 Body armour providing ballistic and/or stabbing protection;
 - 5.2 Helmets providing ballistic and/or fragmentation protection, anti-riot helmets, antiriot shields and ballistic shields.

Note: This item does not control:

- equipment specially designed for sports activities;
- equipment specially designed for safety of work requirements.
- Simulators, other than those controlled by ML 14 of the Common Military List, for training in the use of firearms, and specially designed software therefor.
- 7. Night vision, thermal imaging equipment and image intensifier tubes, other than those controlled by the Common Military List.
- 8. Razor barbed wire.
- 9. Military knives, combat knives and bayonets with blade lengths in excess of $10\,$ cm.
- 10. Production equipment specially designed for the items specified in this list.
- 11. Specific technology for the development, production or use of the items specified in this list.

ANNEX IV

Goods and technology referred to in Articles 3 and 5(2)

INTRODUCTORY NOTES

- Unless otherwise stated, reference numbers used in the column below entitled 'Description' refer to the descriptions of dual use items and technology set out in Annex I to Regulation (EC) No 428/2009.
- A reference number in the column below entitled 'Related item from Annex I to Regulation (EC) No 428/2009' means that the characteristics of the item described in the 'Description' column lie outside the parameters set out in the description of the dual use entry referred to.
- Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
- 4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

GENERAL NOTES

- The object of the controls contained in this Annex should not be defeated by the export of any non-controlled goods (including plant) containing one or more controlled components when the controlled component or components is/are the principal element of the goods and can feasibly be removed or used for other purposes.
 - N.B.: In judging whether the controlled component or components is/are to be considered the principal element, it is necessary to 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 goods being procured.
- 2. The goods specified in this Annex include both new and used goods.

GENERAL TECHNOLOGY NOTE (GTN)

(To be read in conjunction with Section IV.B)

- The sale, supply, transfer or export of 'technology' which is 'required' for the 'development', 'production' or 'use' of goods the sale, supply, transfer or export of which is controlled in Part A (Goods) below, is controlled in accordance with the provisions of Section IV.B.
- The 'technology' required' for the 'development', 'production' or 'use' of goods under control remains under control even when it is applicable to noncontrolled goods.
- Controls do not apply to that 'technology' which is the minimum necessary
 for the installation, operation, maintenance (checking) and repair of those
 goods which are not controlled or the export of which has been authorised in
 accordance with Regulation (EC) No 423/2007 or This Regulation.
- Controls on 'technology' transfer do not apply to information 'in the public domain', to 'basic scientific research' or to the minimum necessary information for patent applications.

IV.A. GOODS

A0. Nuclear Materials, Facilities, and Equipment

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|--|
| IV.A0.010 | Pipes, piping, flanges, fittings made of, or lined with, nickel or nickel alloy containing more than 40 % nickel by weight, other than those specified in 2B350.h.1., in respect of pipes having an inner diameter larger than 100 mm. | 2B350 |
| IV.A0.011 | Vacuum pumps other than those specified in 0B002.f.2 or 2B231, as follows: | 0B002.f.2, 2B231 |
| | Turbomolecular pumps having a flowrate equal to or greater than 400 l/s, | |
| | Roots type vacuum roughing pumps having a volumetric aspiration flow rate greater than 200 $\mbox{m}^{3}/\mbox{h}.$ | |
| | Bellows-sealed, scroll, dry compressor, and bellows-sealed, scroll, dry vacuum pumps. | |

A1. Materials, chemicals, 'micro-organisms' and 'toxins'

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 | |
|-----------|--|--|--|
| IV.A1.003 | Ring-shaped seals and gaskets, having an inner diameter of 400 mm or less, made of any of the following materials: | | |
| | a. Copolymers of vinylidene fluoride having 75 % or more beta crystalline structure without stretching; | | |
| | b. Fluorinated polyimides containing 10 % by weight or more of combined fluorine; | | |
| | c. Fluorinated phosphazene elastomers containing 30 % by weight or more of combined fluorine; | | |
| | d. Polychlorotrifluoroethylene (PCTFE, e.g. Kel-F ®); | | |
| | e. Fluoro-elastomers (e.g., Viton ®, Tecnoflon ®); | | |
| | f. Polytetrafluoroethylene (PTFE). | | |
| IV.A1.004 | Personal equipment for detecting radiation of nuclear origin, including personal dosimeters. | 1A004.c | |
| | Note: This item does not cover nuclear detection systems defined in item 1A004.c. | | |

A2. Materials Processing

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|---|--|
| IV.A2.005 | Controlled atmosphere heat treatment furnaces, as follows: | 2B226 |
| | Furnaces capable of operation at temperatures above 400 °C. | 2B227 |
| IV.A2.008 | Liquid-liquid contacting equipment (mixer-settlers, pulsed columns, centrifugal contactors); and liquid distributors, vapour distributors or liquid collectors designed for such equipment, where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials: | 2B350.e |
| | 1. Alloys with more than 25 % nickel and 20 % chromium by weight; | |
| | 2. Fluoropolymers; | |
| | 3. Glass (including vitrified or enamelled coating or glass lining); | |
| | 4. Graphite or 'carbon graphite'; | |
| | 5. Nickel or alloys with more than 40 % nickel by weight; | |
| | 6. Tantalum or tantalum alloys; | |
| | 7. Titanium or titanium alloys; | |
| | 8. Zirconium or zirconium alloys; or | |
| | 9. Stainless steel. | |
| | Technical Note: | |
| | 'Carbon graphite' is a composition consisting of amorphous carbon and graphite, in which the graphite content is 8 % or more by weight. | |
| IV.A2.009 | Industrial equipment and components, other than those specified in 2B350.d, as follows: | 2B350.d |
| | Heat exchangers or condensers with a heat transfer surface area greater than $0.05~\text{m}^2$, and less than $30~\text{m}^2$; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the fluid(s) are made from any of the following materials: | |
| | 1. Alloys with more than 25 % nickel and 20 % chromium by weight; | |
| | 2. Fluoropolymers; | |
| | 3. Glass (including vitrified or enamelled coating or glass lining); | |
| | 4. Graphite or 'carbon graphite'; | |
| | 5. Nickel or alloys with more than 40 % nickel by weight; | |
| | 6. Tantalum or tantalum alloys; | |
| | 7. Titanium or titanium alloys; | |
| | 8. Zirconium or zirconium alloys; | |
| | 9. Silicon carbide; | |
| | 10. Titanium carbide; or | |
| | 11. Stainless steel. | |
| | Note: This item does not cover vehicle radiators. | |
| | Technical Note: | |
| | The materials used for gaskets and seals and other implementation of sealing functions do not determine the status of control of the heat exchanger. | |

| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
|-----------|--|--|
| IV.A2.010 | Multiple-seal, and seal-less pumps, other than those specified in 2B350.i, suitable for corrosive fluids, with manufacturer's specified maximum flow-rate greater than 0,6 m³/hour, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m³/hour [measured under standard temperature (273 K or 0 °C) and pressure (101,3 k Pa) conditions]; and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials: | 2B350.d |
| | 1. Alloys with more than 25 % nickel and 20 % chromium by weight; | |
| | 2. Ceramics; | |
| | 3. Ferrosilicon; | |
| | 4. Fluoropolymers; | |
| | 5. Glass (including vitrified or enamelled coatings or glass lining); | |
| | 6. Graphite or 'carbon graphite'; | |
| | 7. Nickel or alloys with more than 40 % nickel by weight; | |
| | 8. Tantalum or tantalum alloys; | |
| | 9. Titanium or titanium alloys; | |
| | 10. Zirconium or zirconium alloys; | |
| | 11. Niobium (columbium) or niobium alloys; | |
| | 12. Stainless steel; or | |
| | 13. Aluminium alloys. | |
| | Technical Note: | |
| | The materials used for gaskets and seals and other implementation of sealing functions do not determine the status of control of the pump. | |
| | A3. Electronics | |
| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
| IV.A3.004 | Spectrometers and diffractometers, designed for the indicative test or quantitative analysis of the elemental composition of metals or alloys without chemical decomposition of the material. | |
| | IV.B. TECHNOLOGY | |
| No | Description | Related item from Annex I to Regulation (EC) No 428/2009 |
| IV.B.001 | Technology required for the use of the items in Part IV.A. (Goods) above. Technical Note: | |
| | | |
| | The term 'technology' includes software. | |

ANNEX V

Web sites for information on the competent authorities referred to in Articles 3(5) and (6), 5(3), 7(1), 10, 12(2), 13, 17, 18, 19(1) and (2), 21(1) and (4), 22(1), 23(1), 31(1) and 38(1), and address for notifications to the European Commission

BELGIUM

http://www.diplomatie.be/eusanctions

BULGARIA

http://www.mfa.government.bg

CZECH REPUBLIC

http://www.mfcr.cz/mezinarodnisankce

DENMARK

http://www.um.dk/da/menu/Udenrigspolitik/FredSikkerhedOgInternational

Retsorden/Sanktioner/

GERMANY

http://www.bmwi.de/BMWi/Navigation/Aussenwirtschaft/Aussenwirtschaftsrecht/embargos.html

ESTONIA

http://www.vm.ee/est/kat_622/

IRELAND

http://www.dfa.ie/home/index.aspx?id=28519

GREECE

http://www.ypex.gov.gr/www.mfa.gr/en-US/Policy/Multilateral+Diplomacy/

International+Sanctions/

SPAIN

http://www.maec.es/es/MenuPpal/Asuntos/Sanciones%20Internacionales/Paginas/Sanciones_%20Internacionales.aspx

FRANCE

http://www.diplomatie.gouv.fr/autorites-sanctions/

ITALY

http://www.esteri.it/UE/deroghe.html

CYPRUS

http://www.mfa.gov.cy/sanctions

LATVIA

http://www.mfa.gov.lv/en/security/4539

LITHUANIA

http://www.urm.lt

LUXEMBOURG

http://www.mae.lu/sanctions

HUNGARY

 $http://www.kulugyminiszterium.hu/kum/hu/bal/Kulpolitikank/nemzetkozi_$

szankciok/

▼B

MALTA

 $http://www.doi.gov.mt/EN/bodies/boards/sanctions_monitoring.asp$

NETHERLANDS

http://www.minbuza.nl/sancties

AUSTRIA

http://www.bmeia.gv.at/view.php3?f_id=12750&LNG=en&version=

POLAND

http://www.msz.gov.pl

PORTUGAL

http://www.min-nestrangeiros.pt

ROMANIA

http://www.mae.ro/index.php?unde=doc&id=32311&idlnk=1&cat=3

SLOVENIA

http://www.mzz.gov.si/si/zunanja_politika/mednarodna_varnost/omejevalni_ukrepi/

SLOVAKIA

http://www.foreign.gov.sk

FINLAND

http://formin.finland.fi/kvyhteistyo/pakotteet

SWEDEN

http://www.ud.se/sanktioner

UNITED KINGDOM

www.fco.gov.uk/competentauthorities

Address for notifications to the European Commission:

European Commission
DG External Relations
Directorate A Crisis Platform — Policy Coordination in Common Foreign and Security Policy (CFSP)

Unit A.2. Crisis Response and Peace Building

CHAR 12/106

B-1049 Bruxelles/Brussel (Belgium) E-mail: relex-sanctions@ec.europa.eu

Tel.: (32-2) 295 55 85 Fax: (32-2) 299 08 73

ANNEX VI

List of key equipment and technology referred to in Article 8

GENERAL NOTES

- The object of the prohibitions contained in this Annex should not be defeated by the export of any non-prohibited goods (including plant) containing one or more prohibited components when the prohibited component or components are the principal element of the goods and can feasibly be removed or used for other purposes.
 - N.B.: In judging whether the prohibited component or components are to be considered the principal element, it is necessary to weigh the factors of quantity, value and technological know-how involved and other special circumstances which might establish the prohibited component or components as the principal element of the goods being procured.
- 2. The goods specified in this Annex include both new and used goods.
- Definitions of terms between 'single quotation marks' are given in a technical note to the relevant item.
- 4. Definitions of terms between "double quotation marks" can be found in Annex I to Regulation (EC) No 428/2009.

GENERAL TECHNOLOGY NOTE (GTN)

- The 'technology' 'required' for the 'development', 'production' or 'use' of prohibited goods remains under prohibition even when applicable to nonprohibited goods.
- Prohibitions do not apply to that 'technology' which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those goods which are not prohibited or the export of which has been authorised in accordance with Regulation (EC) No 423/2007 or this Regulation.
- Prohibitions on 'technology' transfer do not apply to information 'in the public domain', to 'basic scientific research' or to the minimum necessary information for patent applications.

EXPLORATION AND PRODUCTION OF CRUDE OIL AND NATURAL GAS

1.A Equipment

- Geophysical survey equipment, vehicles, vessels and aircraft specially designed or adapted to acquire data for oil and gas exploration and specially designed components therefor.
- Sensors specially designed for downhole well operations in oil and gas wells, including sensors used for measurement whilst drilling and the associated equipment specially designed to acquire and store data from such sensors.
- Drilling equipment designed to drill rock formations, specifically for the purpose of exploring for, or producing oil, gas and other naturally occurring, hydrocarbon materials.
- Drill bits, drill pipes, drill collars, centralisers and other equipment, specially designed for use in and with oil and gas well drilling equipment.

Drilling wellheads, 'blowout preventers' and 'Christmas or production trees' and the specially designed components thereof, meeting the 'API and ISO specifications' for use with oil and gas wells.

Technical Notes:

- a. A 'blowout preventer' is a device typically used at ground level (or if drilling underwater, at the seabed) during drilling to prevent the uncontrolled escape of oil and/or gas from the well.
- b. A 'Christmas tree or production tree' is a device typically used to control flow of fluids from the well when it is complete and oil and/or gas production has started.
- c. For the purpose of this item, 'API and ISO specifications' refers to the American Petroleum Institute specifications 6A, 16A, 17D and 11IW and/or the International Standards Organisation specifications 10423 and 13533 for blowout preventers, wellhead and Christmas trees for use on oil and/or gas wells.
- 6. Drilling and production platforms for crude oil and natural gas.
- Vessels and barges incorporating drilling and/or petroleum processing equipment used for producing oil, gas and other naturally occurring flammable materials.
- 8. Liquid/gas separators meeting API specification 12J, specially designed to process the production from an oil or gas well, to separate the petroleum liquids from any water and any gas from the liquids.
- 9. Gas compressor with a design pressure of 40 bar (PN 40 and/or ANSI 300) or more and having a suction volume capacity of 300 000 Nm³/h or more, for the initial processing and transmission of natural gas, excluded gas compressors for CNG (Compressed Natural Gas) filling stations, and specially designed components therefor.
- 10. Subsea production control equipment and the components thereof meeting 'API and ISO specifications' for use with oil and gas wells.

Technical Note:

For the purposes of this entry, 'API and ISO specifications' refers to the American Petroleum Institute specification 17 F and/or the International Standards Organisation specification 13268 for subsea production control systems.

11. Pumps, typically high capacity and/or high pressure (in excess of 0.3 m³ per minute and/or 40 bar), specially designed to pump drilling muds and/or cement into oil and gas wells.

1.B Test and inspection equipment

 Equipment specially designed for sampling, testing and analysing the properties of drilling mud, oil well cements and other materials specially designed and/or formulated for use in oil and gas wells.

▼B

- Equipment specially designed for sampling, testing and analysing the properties of rock samples, liquid and gaseous samples and other materials taken from an oil and/or gas well either during or after drilling, or from the initial processing facilities attached thereto.
- 3. Equipment specially designed for collecting and interpreting information about the physical and mechanical condition of an oil and/or gas well, and for determining the *in situ* properties of the rock and reservoir formation.

1.C Materials

- Drilling mud, drilling mud additives and the components thereof, specially formulated to stabilise oil and gas wells during drilling, to recover drill cuttings to the surface and to lubricate and cool the drilling equipment in the well.
- Cements and other materials meeting the 'API and ISO specifications' for use in oil and gas wells.

Technical Note:

'API and ISO specification' refers to the American Petroleum Institute specification 10A or the International Standards Organisation specification 10426 for oil well cements and other materials specially formulated for use in the cementing of oil and gas wells.

Corrosion inhibiting, emulsion treatment, defoaming agents and other chemicals specially formulated to be used in the drilling for, and the initial processing of, petroleum produced from an oil and/or gas well.

1.D Software

- 'Software' specially designed to collect and interpret data acquired from seismic, electromagnetic, magnetic or gravity surveys for the purpose of establishing oil or gas prospectivity.
- 'Software' specially designed for storing, analysing and interpreting information acquired during drilling and production to assess the physical characteristics and behaviour of oil or gas reservoirs.
- 3. 'Software' specially designed for the 'use' of petroleum production and processing facilities or specific sub-units of such facilities.

1.E Technology

1. 'Technology''required' for the 'development', 'production' and 'use' of equipment specified in 1.A.01-1.A.11.

REFINING OF CRUDE OIL AND LIQUEFACTION OF NATURAL GAS

2.A Equipment

- 1. Heat exchangers as follows and specially designed components therefor:
 - a. Plate-fin heat exchangers with a surface/volume ratio greater than $500\ m^2/m^3$, specially designed for pre-cooling of natural gas;
 - Coil-wound heat exchangers specially designed for liquefaction or subcooling of natural gas.

▼B

- Cryogenic pumps for the transport of media at a temperature 120 °C having a transport capacity of more than 500 m³/h and specially designed components therefor.
- 3. 'Coldbox' and 'coldbox' equipment not specified by 2.A.1.

Technical Note:

'Coldbox' equipment' refers to a specially designed construction, which is specific for LNG plants and incorporates the process stage of liquefaction. The 'coldbox' comprises heat exchangers, piping, other instrumentation and thermal insulators. The temperature inside the 'coldbox' is below – 120 °C (conditions for condensation of natural gas). The function of the 'coldbox' is the thermal insulation of the above described equipment.

- Equipment for shipping terminals of liquefied gases having a temperature below – 120 °C and specially designed components therefor.
- Flexible and non-flexible transfer line having a diameter greater than 50 mm for the transport of media below – 120 °C.
- 6. Maritime vessels specially designed for the transport of LNG.
- Electrostatic desalters specially designed to remove contaminants such as salts, solids and water from crude oil and specially designed components therefor.
- All crackers, including hydrocrackers, and cokers, specially designed for conversion of vacuum gas oils or vacuum residuum, and specially designed components therefor.
- Hydrotreaters specially designed for desulphurisation of gasoline, diesel cuts and kerosene and specially designed components therefor.
- Catalytic reformers specially designed for conversion of desulphurised gasoline into high-octane gasoline, and specially designed components therefor.
- 11. Refinery units for C5-C6 cuts isomerisation, and refinery units for alkylation of light olefins, to improve the octane index of the hydrocarbon cuts.
- 12. Pumps specially designed for the transport of crude oil and fuels, having a capacity of 50 m³/h or more and specially designed components therefor.
- 13. Tubes with an outer diameter of 0,2 m or more and made from any of the following materials:
 - a. Stainless steels with 23 % chromium or more by weight;
 - b. Stainless steels and nickel bases alloys with a 'Pitting resistance equivalent' number higher than 33.

Technical Note:

'Pitting resistance equivalent' (PRE) number characterises the corrosion resistance of stainless steels and nickel alloys to pitting or crevice corrosion. The pitting resistance of stainless steels and nickel alloys is primarily determined by their compositions, primarily: chromium, molybdenum, and nitrogen. The formula to calculate the PRE number is: PRE = Cr + 3.3% Mo + 30% N

 'Pigs' (Pipeline Inspection Gauge(s)) and specially designed components therefor

Technical Note:

'Pig' is a device typically used for cleaning or inspection of a pipeline from inside (corrosion state or crack formation) and is propelled by the pressure of the product in the pipeline.

- 15. Pig launchers and pig catchers for the integration or removing of pigs.
- 16. Tanks for the storage of crude oil and fuels with a volume greater than $1\ 000\ m^3\ (1\ 000\ 000\ litres)$ as follows, and specially designed components therefor:
 - a. fixed roof tanks:
 - b. floating roof tanks.
- 17. Subsea flexible pipes specially designed for the transportation of hydrocarbons and injection fluids, water or gas, having a diameter greater than 50 mm.
- 18. Flexible pipes used for high pressure for topside and subsea application.
- Isomeration equipment specially designed for production of high-octane gasoline based on light hydrocarbons as feed, and specially designed components therefor.

2.B Test and inspection equipment

- Equipment specially designed for testing and analysing of quality (properties) of crude oil and fuels.
- Interface control systems specially designed for controlling and optimising of the desalting process.

2.C Materials

- 1. Diethyleneglycol (CAS 111-46-6), Triethylene glycol (CAS 112-27-6)
- 2. N-Methylpyrrolidon (CAS 872-50-4), Sulfolane (CAS 126-33-0)
- Zeolites, of natural or synthetic origin, specially designed for fluid catalytic cracking or for the purification and/or dehydration of gases, including natural gases.
- 4. Catalysts for the cracking and conversion of hydrocarbons as follows:
 - Single metal (platinum group) on alumina type or on zeolite, specially designed for catalytic reforming process;
 - Mixed metal species (platinum in combination with other noble metals) on alumina type or on zeolite, specially designed for catalytic reforming process;
 - c. Cobalt and nickel catalysts doped with molybdenum on alumina type or on zeolite, specially designed for catalytic desulphurisation process;
 - d. Palladium, nickel, chromium and tungsten catalysts on alumina type or on zeolite, specially designed for catalytic hydrocracking process.

Gasoline additives specially formulated for increasing the octane number of gasoline.

Note:

This entry includes Ethyl tertiary butyl ether(ETBE) (CAS 637-92-3) and Methyl tertiary butyl ether (MTBE) CAS 1634-04-4).

2.D Software

- 1. 'Software' specially designed for the 'use' of LNG plants or specific subunits of such plants.
- 2. 'Software' specially designed for the 'development', 'production' or 'use' of plants (including their sub-units) for oil refining.

2.E Technology

- 'Technology' for the conditioning and purification of raw natural gas (dehydration, sweetening, removal of impurities).
- 'Technology' for the liquefaction of natural gas, including 'technology' required for the 'development', 'production' or 'use' of LNG plants.
- 3. 'Technology' for the shipment of liquefied natural gas.
- 4. 'Technology' required' for the 'development', 'production' or 'use' of maritime vessels specially designed for the transport of liquefied natural gas.
- 5. 'Technology' for storage of crude oil and fuels.
- 6. 'Technology' required' for the 'development', 'production' or 'use' of a refinery plant, such as:
 - 6.1. 'Technology' for conversion of light olefin to gasoline;
 - 6.2. Catalytic reforming and isomerisation technology;
 - 6.3. Catalytic and thermal cracking technology.

ANNEX VII

List of persons, entities and bodies referred to in Article 16(1)

A. Legal persons, entities and bodies

| | Name | Identifying information | Reasons | Date of listing |
|----|---|--|--|--|
| 1. | Abzar Boresh Kaveh Co. (alias BK Co.) | | Involved in the production of centrifuge components. | Date of UN designation: 3.3.2008 |
| 2. | Amin Industrial Complex (alias (a) Amin Industrial-Compound, (b) Amin Industrial Company) | Address: (a) P.O. Box 91735-549, Mashad, Iran; (b) Amin Industrial Estate, Khalage Rd., Seyedi District, Mashad, Iran; (c) Kaveh Complex, Khalaj Rd., Seyedi St., Mashad, Iran. | (a) Amin Industrial Complex sought temperature controllers which may be used in nuclear research and operational/production facilities; (b) Amin Industrial Complex is owned or controlled by, or acts on behalf of, the Defense Industries Organization (DIO), which was designated in UN Security Council Resolution 1737 (2006). | Date of UN designation: 9.6.2010 |
| 3. | Ammunition and Metallurgy Industries Group (alias (a) AMIG, (b) Ammunition Industries Group) | | (a) AMIG controls 7th of Tir;(b) AMIG is owned and controlled by the Defence Industries Organisation (DIO). | Date of UN designation: 4.3.2007 |
| 4. | Armament Industries Group | Address: (a) Sepah Islam Road, Karaj Special Road Km 10, Iran; (b) Pasdaran Ave., P.O. Box 19585/ 777, Tehran, Iran. | (a) Armament Industries Group (AIG) manufacturers and services a variety of small arms and light weapons, including large- and medium-calibre guns and related technology; (b) AIG conducts the majority of its procurement activity through Hadid Industries Complex. | Date of EU designation: 24.4.2007 (UN: 9.6.2010) |
| 5. | Atomic Energy Organization of Iran (AEOI) | | Involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 6. | Bank Sepah and Bank Sepah Inter- national | | Bank Sepah provides support for the Aerospace Industries Organisation (AIO) and subordinates, including Shahid Hemmat Industrial Group (SHIG) and Shahid Bagheri Industrial Group (SBIG). | Date of UN designation: 24.3.2007 |
| 7. | Barzagani Tejarat Tavanmad Saccal companies | | (a) subsidiary of Saccal System companies;(b) this company tried to purchase sensitive goods for an entity listed in resolution 1737 (2006). | Date of UN designation: 3.3.2008 |
| 8. | Cruise Missile Industry Group (alias Naval Defence Missile Industry Group) | | | Date of UN designation: 24.3.2007 |

<u>▼</u> <u>B</u>

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|--|--|
| 9. | Defence Industries Organisation (DIO) | | (a) Overarching MODAFL-controlled entity, some of whose subordinates have been involved in the centrifuge programme making components, and in the missile programme; | Date of UN designation: 23.12.2006 |
| | | | (b) Involved in Iran's nuclear programme. | |
| 10. | Defense Technology and Science Research Center | Address: Pasdaran Ave, PO Box 19585/777, Tehran, Iran. | 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&D, production, maintenance, exports, and procurement. | Date of EU designation: 24.4.2007 (UN: 9.6.2010) |
| 11. | Doostan International Company | | Doostan International Company (DICO) supplies elements to Iran's ballistic missile program. | Date of UN designation: 9.6.2010 |
| 12. | Electro Sanam Company (alias (a) E. S. Co., (b) E. X. Co.) | | AIO front-company, involved in the ballistic missile programme. | Date of UN designation: 3.3.2008 |
| 13. | Esfahan Nuclear Fuel Research and Production Centre (NFRPC) and Esfahan Nuclear Technology Centre (ENTC) | | They are parts of the Atomic Energy Organisation of Iran's (AEOI) Nuclear Fuel Production and Procurement Company. | Date of UN designation: 24.3.2007 |
| 14. | Ettehad Technical Group | | AIO front-company, involved in the ballistic missile programme. | Date of UN designation: 3.3.2008 |
| 15. | Fajr Industrial Group | | (a) Formerly Instrumentation Factory Plant;(b) Subordinate entity of AIO;(c) Involved in Iran's ballistic missile programme. | Date of UN designation: 23.12.2006 |
| 16. | Farasakht Industries | Address: P.O. Box 83145-311, Kilometer 28, Esfahan-Tehran Freeway, Shahin Shahr, Esfahan, Iran. | Farasakht Industries is owned or controlled by, or acts on behalf of, the Iran Aircraft Manufacturing Company, which in turn is owned or controlled by MODAFL. | Date of UN designation: 9.6.2010 |
| 17. | Farayand Technique | | (a) Involved in Iran's nuclear programme (centrifuge programme); (b) Identified in IAEA reports. | Date of UN designation: 23.12.2006 |
| | | | (0) Identified in IAEA Tepofts. | |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|--|---|-----------------------------------|
| 18. | Fater (or Faater) Institute | | (a) Khatam al-Anbiya (KAA) subsidiary; (b) Fater has worked with foreign suppliers, likely on behalf of other KAA companies on IRGC projects in Iran; (c) Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. | Date of UN de nation: 9.6.2010 |
| 19. | First East Export Bank, P.L.C. | Address: Unit Level 10 (B1), Main Office Tower, Financial Park Labuan, Jalan Merdeka, 87000 WP Labuan, Malaysia. | (a) First East Export Bank, PLC is owned or controlled by, or acts on behalf of, Bank Mellat; (b) Over the last seven years, Bank Mellat has facilitated hundreds of millions of dollars in transactions for Iranian nuclear, missile, and defense entities; (c) Business Registration Number LL06889 (Malaysia). | Date of UN de nation: 9.6.2010 |
| 20. | Gharagahe Sazandegi Ghaem | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Gharagahe Sazandegi Ghaem is owned or controlled by KAA (see below). | Date of UN de nation: 9.6.2010 |
| 21. | Ghorb Karbala | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Ghorb Karbala is owned or controlled by KAA (see below). | Date of UN denation: 9.6.2010 |
| 22. | Ghorb Nooh | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Ghorb Nooh is owned or controlled by KAA (see below). | Date of UN denation: 9.6.2010 |
| 23. | Hara Company | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Owned or controlled by Ghorb Nooh. | Date of UN de nation: 9.6.2010 |
| 24. | Imensazan Consultant Engineers Institute | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Owned or controlled by, or acts on behalf of, KAA (see below). | Date of UN denation: 9.6.2010 |
| 25. | Industrial Factories of Precision (IFP) Machinery (alias Instrumentation Factories Plant) | | Used by AIO for some acquisition attempts. | Date of UN denation: 3.3.2008 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|--|---|--|
| 26. | Irano Hind Shipping Company | Address: (a) 18 Mehrshad Street, Sadaghat Street, Opposite of Park Mellat, Vali-e-Asr Ave., Tehran, Iran; (b) 265, Next to Mehrshad, Sedaghat St., Opposite of Mellat Park, Vali Asr Ave., Tehran 1A001, Iran. | Owned or controlled by, or acting on behalf of the Islamic Republic of Iran Shipping Lines. | Date of UN designation: 9.6.2010 |
| 27. | IRISL Benelux NV | Address: Noorderlaan 139, B- 2030, Antwerp, Belgium V.A.T. Number BE480224531 (Belgium). | Owned or controlled by, or acting on behalf of the Islamic Republic of Iran Shipping Lines. | Date of UN designation: 9.6.2010 |
| 28. | Jabber Ibn Hayan | | AEOI laboratory involved in fuel cycle acitivties. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 29. | Joza Industrial Co. | | AIO front-company, involved in the ballistic missile programme. | Date of UN designation: 3.3.2008 |
| 30. | Kala-Electric (alias Kalaye Electric) | | (a) Provider for PFEP — Natanz;(b) Involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 31. | Karaj Nuclear Research Centre | | Part of AEOI's research division. | Date of UN designation: 24.3.2007 |
| 32. | Kaveh Cutting Tools Company | Address: (a) 3rd Km of Khalaj Road, Seyyedi Street, Mashad 91638, Iran; (b) Km 4 of Khalaj Road, End of Seyedi Street, Mashad, Iran; (c) P.O. Box 91735-549, Mashad, Iran; (d) Khalaj Rd., End of Seyyedi Alley, Mashad, Iran; (e) Moqan St., Pasdaran St., Pasdaran Cross Rd., Tehran, Iran. | Kaveh Cutting Tools Company is owned or controlled by, or acts on behalf of, the DIO. | Date of UN designation: 9.6.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|--|--|--|
| 33. | Kavoshyar Company | | Subsidiary company of AEOI. | Date of UN onation: 24.3.2007 |
| 34. | Khatam al-Anbiya Construction Head- quarters | | Khatam al-Anbiya Construction Head-quarters (KAA) is an Islamic Revolutionary Guard Corps (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. | Date of EU onation: 24.6.2008 (UN: 9.6.2010) |
| 35. | Khorasan Metallurgy Industries | | (a) Subsidiary of the Ammunition Industries Group (AMIG) which depends on DIO; (b) involved in the production of centrifuge components. | Date of UN nation: 3.3.2008 |
| 36. | M. Babaie Industries | Address: P.O. Box 16535-76, Tehran, 16548, Iran. | (a) 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); (b) 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. | Date of UN nation: 9.6.2010. |
| 37. | Makin | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Makin is owned or controlled by or acting on behalf of KAA, and is a subsidiary of KAA. | Date of UN nation: 9.6.2010. |
| 38. | Malek Ashtar University | Address: Corner of Imam Ali Highway and Babaei Highway, Tehran, Iran. | (a) a subordinate of the DTRSC within MODAFL; (b) this includes research groups previously falling under the Physics Research Center (PHRC); (c) 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. | Date of EU onation: 24.6.2008 (UN: 9.6.2010) |
| 39. | Mesbah Energy Company | | (a) Provider for A40 research reactor — Arak; (b) Involved in Iran's nuclear programme. | Date of UN nation: 23.12.2006 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|---|--|
| 40. | Ministry of Defense Logistics Export. | Address: (a) PO Box 16315- 189, Tehran, Iran; (b) located on the west side of Dabestan Street, Abbas Abad District, Tehran, Iran. | Ministry of Defense Logistics Export (MODLEX) sells Iranian-produced arms to customers around the world in contravention of UN Security Council Resolution 1747 (2007), which prohibits Iran from selling arms or related materiel. | Date of EU designation: 24.6.2008 (UN: 9.6.2010) |
| 41. | Mizan Machinery Manufacturing (alias 3MG). | Address: O. Box 16595-365, Tehran, Iran. | Mizan Machinery Manufacturing (3M) is owned or controlled by, or acts on behalf of, SHIG. | Date of EU designation: 24.6.2008 (UN: 9.6.2010) |
| 42. | Modern Industries Technique Company (alias (a) Rahkar Company,(b) Rahkar Industries, (c) Rahkar Sanaye Company, (d) Rahkar Sanaye Novin). | Address: Arak, Iran. | (a) Modern Industries Technique Company (MITEC) is responsible for design and construction of the IR-40 heavy water reactor in Arak; (b) MITEC has spearheaded procurement for the construction of the IR-40 heavy water reactor. | Date of UN designation: 9.6.2010 |
| 43. | Niru Battery Manufacturing Company | | (a) subsidiary of the DIO; (b) its role is to manufacture power units for the Iranian military including missile systems. | Date of UN designation: 3.3.2008 |
| 44. | Novin Energy Company (alias Pars Novin) | | It operates within AEOI. | Date of UN designation: 24.3.2007 |
| 45. | Nuclear Research Center for Agriculture and Medicine (alias (a) Center for Agri- cultural Research and Nuclear Medicine, (b) Karaji Agricultural and Medical Research Center). | DO D 21505 | (a) 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 UN Security Council Resolution 1737 (2006); (b) the NFRPC is AEOI's center for the development of nuclear fuel and is involved in enrichment-related activities | nation: |
| 46. | Omran Sahel | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Owned or controlled by Ghorb Nooh. | Date of UN designation: 9.6.2010 |
| 47. | Oriental Oil Kish | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Oriental Oil Kish is owned or controlled by or acting on behalf of KAA. | Date of UN designation: 9.6.2010 |
| 48. | Parchin Chemical Industries | | Branch of DIO | Date of UN designation: 24.3.2007 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|--|--|---------------------------------------|
| 49. | Pars Aviation Services Company | | Maintains aircraft | Date of UN designation: |
| | | | | 24.3.2007 |
| 50. | Pars Trash Company | | (a) Involved in Iran's nuclear programme (centrifuge programme); (b) Identified in IAEA reports | Date of UN designation: 23.12.2006 |
| 51. | Pejman Industrial Services Corporation | Address: P.O. Box 16785-195, Tehran, Iran | Pejman Industrial Services Corporation is owned or controlled by, or acts on behalf of, SBIG | Date of UN designation: 9.6.2010 |
| 52. | Pishgam (Pioneer) Energy Industries | | Has participated in construction of the Uranium Conversion Facility at Esfahan | Date of UN designation: 3.3.2008 |
| 53. | Qods Aeronautics Industries | | It produces unmanned aerial vehicles (UAVs), parachutes, paragliders, paramotors, etc. | Date of UN designation: 24.3.2007 |
| 54. | Rah Sahel | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Rah Sahel is owned or controlled by or acting on behalf of KAA. | Date of UN designation: 9.6.2010 |
| 55. | Rahab Engineering Institute | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Rahab is owned or controlled by or acting on behalf of KAA, and is a subsidiary of KAA. | Date of UN designation: 9.6.2010 |
| 56. | Sabalan Company | Address: Damavand Tehran Highway, Tehran, Iran. | Sabalan is a cover name for SHIG. | Date of UN designation: 9.6.2010 |
| 57. | Sanam Industrial Group | | Subordinate to AIO. | Date of UN designation: 24.3.2007 |
| 58. | Safety Equipment Procurement (SEP) | | AIO front-company, involved in the ballistic missile programme. | Date of UN designation: 3.3.2008 |
| 59. | Sahand Aluminum Parts Industrial Company (SAPICO) | Address: Damavand Tehran Highway, Tehran, Iran. | SAPICO is a cover name for SHIG. | Date of UN designation: 9.6.2010 |

▼ B

| | Name | Identifying information | Reasons | Date of listing | |
|-----|--|---|--|--|--|
| 60. | Sahel Consultant Engineers | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Owned or controlled by Ghorb Nooh. | Date of UN designation: 9.6.2010 | |
| 61. | Sepanir | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Sepanir is owned or controlled by or acting on behalf of KAA | Date of UN designation: 9.6.2010 | |
| 62. | Sepasad Engineering Company | | Owned or controlled by, or acting on behalf of, the Islamic Revolutionary Guard Corps. Sepasad Engineering Company is owned or controlled by or acting on behalf of KAA. | Date of UN designation: 9.6.2010 | |
| 63. | 7th of Tir. | | (a) Subordinate of DIO, widely recognised as being directly involved in Iran's nuclear programme; (b) Involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006. | |
| 64. | Shahid Bagheri Industrial Group (SBIG) | | (a) Subordinate entity of AIO;(b) Involved in Iran's ballistic missile programme. | Date of UN designation: 23.12.2006. | |
| 65. | Shahid Hemmat Industrial Group (SHIG) | | (a) subordinate entity of AIO;(b) Involved in Iran's ballistic missile programme. | Date of UN designation: 23.12.2006. | |
| 66. | Shahid Karrazi Industries. | Address: Tehran, Iran. | Shahid Karrazi Industries is owned or controlled by, or act on behalf of, SBIG. | Date of UN designation: 9.6.2010 | |
| 67. | Shahid Satarri Industries (alias Shahid Sattari Group Equipment Industries) | Address: Southeast Tehran, Iran. | Shahid Sattari Industries is owned or controlled by, or acts on behalf of, SBIG. | Date of UN designation: 9.6.2010 | |
| 68. | Shahid Sayyade Shirazi Industries | Address: (a) Next to Nirou Battery Mfg. Co, Shahid Babaii Expressway, Nobonyad Square, Tehran, Iran; (b) Pasdaran St., P.O. Box 16765, Tehran 1835, Iran, (c) Babaei Highway — Next to Niru M.F.G, Tehran, Iran. | Shahid Sayyade Shirazi Industries (SSSI) is owned or controlled by, or acts on behalf of, the DIO. | Date of UN designation: 9.6.2010 | |
| 69. | Sho'a' Aviation | | It produces microlights. | Date of UN designation: 24.3.2007 | |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|--|--|
| 70. | South Shipping Line Iran (SSL) | Address: (a) Apt. No. 7, 3rd Floor, No. 2, 4th Alley, Gandi Ave., Tehran, Iran; (b) Qaem Magham Farahani St., Tehran, Iran. | Owned or controlled by, or acting on behalf of, the Islamic Republic of Iran Shipping Lines. | Date of UN designation: 9.6.2010 |
| 71. | Special Industries Group | Address: Pasdaran Avenue, PO Box 19585/777, Tehran, Iran. | Special Industries Group (SIG) is a subordinate of DIO. | Date of EU designation: 24.4.2007 (UN: 9.6.2010) |
| 72. | TAMAS Company | | (a) involved in enrichment-related activities; (b) TAMAS is an 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. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 73. | Tiz Pars | Address: Damavand Tehran Highway, Tehran, Iran. | (a) Tiz Pars is a cover name for SHIG; (b) 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. | Date of UN designation: 9.6.2010 |
| 74. | Ya Mahdi Industries Group | | Subordinate to AIO. | Date of UN designation: 24.3.2007 |
| 75. | Yazd Metallurgy Industries (alias (a) Yazd Ammunition Manufacturing and Metallurgy Industries, (b) Directorate of Yazd Ammunition and Metallurgy Industries.) | Address: (a) Pasdaran Avenue, Next to Telecommunication Industry, Tehran 16588, Iran; (b) Postal Box 89195/878, Yazd, Iran, (c) P.O. Box 89195- 678, Yazd, Iran, (d) Km 5 of Taft Road, Yazd, Iran. | Metallurgy Industries (YMI) is a subordinate of DIO. | Date of UN designation: 9.6.2010 |

B. Natural persons

| | Name | Identifying information | Reasons | Date of listing |
|-----|--------------------------------|-------------------------|--|--|
| 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. | Date of UN designation: 24.3.2007 |
| 2. | Dawood AGHA-JANI | | Function: Head of the PFEP – Natanz. Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 3. | Ali Akbar AHMADIAN | | Title: Vice Admiral. Function: Chief of Iranian Revolutionary Guard Corps (IRGC) Joint Staff | Date of UN designation: 24.3.2007 |
| 4. | Amir Moayyed ALAI | | Involved in managing the assembly and engineering of centrifuges. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 5. | Behman ASGARPOUR | | Function: Operational Manager (Arak) Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 6. | Mohammad Fedai ASHIANI | | Involved in the production of ammonium uranyl carbonate and management of the Natanz enrichment complex. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 7. | Abbas Rezaee ASHTIANI | | A senior official at the AEOI Office of Exploration and Mining Affairs. | Date of UN designation: 3.3.2008 |
| 8. | Bahmanyar Morteza BAHMANYAR | | Function: Head of Finance & Budget Dept, Aerospace Industries Organi- sation (AIO). Person involved in Iran's ballistic missile programme. | Date of UN designation: 23.12.2006 |
| 9. | Haleh BAKHTIAR | | Involved in the production of magnesium at a concentration of 99,9 %. | Date of EU designation: 24.4.2007 UN: 3.3.2008) |
| 10. | Morteza BEHZAD | | Involved in making centrifuge components. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |

| | Name | Identifying information | Reasons | Date of listing |
|-----|------------------------------------|-------------------------|--|--|
| 11. | Ahmad Vahid DASTJERDI | | Function: Head of the Aerospace Industries Organisation (AIO). Person involved in Iran's ballistic missile programme. | Date of Udesignation: 23.12.2006 |
| 12. | Ahmad DERAKH- SHANDEH | | Function: Chairman and Managing Director of Bank Sepah. | Date of Udesignation: 24.3.2007 |
| 13. | Mohammad ESLAMI | Title: Dr. | Head of Defence Industries Training and Research Institute. | Date of Udesignation: 3.3.2008 |
| 14. | Reza-Gholi ESMAELI | | Function: Head of Trade & International Affairs Dept, Aerospace Industries Organisation (AIO). Person involved in Iran's ballistic missile programme. | Date of Udesignation: 23.12.2006 |
| 15. | Mohsen FAKHRIZADEH- MAHABADI | | Senior MODAFL scientist and former head of the Physics Research Centre (PHRC). | Date of U designation: 24.3.2007 |
| 16. | Mohammad HEJAZI | | Title: Brigadier General. Function: Commander of Bassij resistance force. | Date of Udesignation: 24.3.2007 |
| 17. | Mohsen HOJATI | | Function: Head of Fajr Industrial Group. | Date of Udesignation: 24.3.2007 |
| 18. | Seyyed Hussein HOSSEINI | | AEOI official involved in the heavy water research reactor project at Arak. | Date of Edesignation: 24.4.2007 (UN: 3.3.200 |
| 19. | M. Javad KARIMI SABET | | Head of Novin Energy Company, which is designated under resolution 1747 (2007). | Date of Edesignation: 24.4.2007 (UN: 3.3.200 |
| 20. | Mehrdada Akhlaghi KETABACHI | | Function: Head of Shahid Bagheri Industrial Group (SBIG). | Date of Udesignation: 24.3.2007 |
| 21. | Ali Hajinia LEILABADI | | Function: Director General of Mesbah Energy Company. Person involved in Iran's nuclear programme. | Date of Udesignation: 23.12.2006 |

▼B

| | Name | Identifying information | Reasons | Date of listing |
|-----|-------------------------------|---------------------------|---|--|
| 22. | Naser MALEKI | | Function: Head of Shahid Hemmat Industrial Group (SHIG). 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. | Date of UN designation: 24.3.2007 |
| 23. | Hamid-Reza MOHA- JERANI | | Involved in production management at the Uranium Conversion Facility (UCF) at Esfahan. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 24. | Jafar MOHAMMADI | | Function: Technical Adviser to the Atomic Energy Organisation of Iran (AEOI) (in charge of managing the production of valves for centrifuges). Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 25. | Ehsan MONAJEMI | | Function: Construction Project Manager, Natanz. Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 26. | Mohammad Reza NAQDI | Title: Brigadier General. | 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). | Date of UN designation: 3.3.2008 |
| 27. | Houshang NOBARI | | Involved in the management of the Natanz enrichment complex. | Date of EU designation: 24.4.2007 (UN: 3.3.2008) |
| 28. | Mohammad Mehdi Nejad NOURI | Title: Lt Gen. | Function: Rector of Malek Ashtar University of Defence Technology. The chemistry department of Ashtar University of Defence Technology is affiliated to MODALF and has conducted experiments on beryllium. Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |
| 29. | Mohammad QANNADI | | Function: AEOI Vice President for Research & Development.Person involved in Iran's nuclear programme. | Date of UN designation: 23.12.2006 |

| | Name | Identifying information | Reasons | Date of li |
|-----|------------------------|---|---|---|
| 30. | Amir RAHIMI | | Function: Head of Esfahan Nuclear Fuel Research and Production Center. Esfahan Nuclear Fuel Research and Production Center is part of the AEOI's Nuclear Fuel Production and Procurement Company, which is involved in enrichment-related activities. | Date of designation 24.3.2007 |
| 31. | Javad RAHIQI | Date of birth: 24.4.1954. Place of birth: Marshad. | Function: Head of the Atomic Energy Organization of Iran (AEOI) Esfahan Nuclear Technology Center | Date of designation 24.4.2007 (UN: 9.6. |
| 32. | Abbas RASHIDI | | Involved in enrichment work at Natanz. | Date of designation 24.4.2007 (UN: 3.3. |
| 33. | Morteza REZAIE | Title: Brigadier General. Function: Deputy Commander of IRGC. | | Date of designation 24.3.2007 |
| 34. | Morteza SAFARI | Title: Rear Admiral. | Function: Commander of IRGC Navy. | Date of designation 24.3.2007 |
| 35. | Yahya Rahim SAFAVI | Title: Maj Gen. | Function: Commander, IRGC (Pasdaran). Person involved in both Iran's nuclear and ballistic missile programmes. | Date of designation 23.12.200 |
| 36. | Seyed Jaber SAFDARI | | Manager of the Natanz Enrichment Facilities. | Date of designation 24.3.2007 |
| 37. | Hosein SALIMI | Title: General. | Function: Commander of the Air Force, IRGC (Pasdaran). Person involved in Iran's ballistic missile programme. | Date of designation 23.12.200 |
| 38. | Qasem SOLEIMANI | Title: Brigadier General. | Function: Commander of Qods force. | Date of designation 24.3.2007 |
| 39. | Ghasem SOLEYMANI | | Director of Uranium Mining Operations at the Saghand Uranium Mine. | Date of designatio |

| | Name | Identifying information | Reasons | Date of listing |
|-----|-------------------------|---------------------------|---|-----------------------------------|
| 40. | Mohammad Reza ZAHEDI | Title: Brigadier General. | Function: Commander of IRGC Ground Forces. | Date of UN designation: 24.3.2007 |
| 41. | General ZOLQADR | | Function: Deputy Interior Minister for Security Affairs, IRGC officer. | Date of UN designation: 24.3.2007 |

ANNEX VIII

List of persons, entities and bodies referred to in Article 16(2)

A. Natural persons

| | Name | Identifying information | Reasons | Date of listing |
|----|------------------------------------|--|---|-----------------|
| 1. | Reza AGHAZADEH | DoB: 15/3/1949 Passport number: S4409483 valid 26/4/ 2000 – 27/4/2010: Issued: Tehran, Diplomatic passport number: D9001950, issued on 22/1/2008 valid until 21/1/2013, Place of birth: Khoy | Former Head of the Atomic Energy Organisation of Iran (AEOI). The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.4.2007 |
| 2. | Javad DARVISH- VAND | | IRGC Brigadier-General. MODAFL Deputy for Inspection. Responsible for all MODAFL facilities and instal- lations | 23.6.2008 |
| 3. | Ali DIVANDARI (a.k.a DAVANDARI) | | Head of Bank Mellat (see Part B, no 4) | 26.7.2010 |
| 4. | Rear Admiral Ali FADAVI | | Commander of IRGC Navy | 26.7.2010 |
| 5. | Dr Hoseyn (Hossein) FAQIHIAN | Address of NFPC: AEOI-NFPD, P.O.Box: 11365- 8486, Tehran/Iran | Deputy and Director-General of the Nuclear Fuel Production and Procurement Company (NFPC) (see Part B, no 30), part of the AEOI. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). The NFPC is involved in enrichment-related activities that Iran is required by the IAEA Board and Security Council to suspend. | 23.4.2007 |
| 6. | Seyyed Mahdi FARAHI | | IRGC Brigadier-General. Managing Director of the Defence Industries Organisation (DIO) which is designated under UNSCR 1737 (2006) | 23.6.2008 |
| 7. | Parviz FATAH | born 1961 | Khatam al Anbiya's number two | 26.7.2010 |
| 8. | Engineer Mojtaba HAERI | | MODAFL Deputy for Industry. Supervisory role over AIO and DIO | 23.6.2008 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|---|-----------------|
| 9. | Ali HOSEYNITASH | | IRGC Brigadier-General. Head of the General Department of the Supreme National Security Council and involved in formulating policy on the nuclear issue | 23.6.2008 |
| 10. | Mohammad Ali JAFARI | | Commander of the IRGC | 23.6.2008 |
| 11. | Mahmood JANNATIAN | DoB 21/4/1946, passport number: T12838903 | Deputy Head of the Atomic Energy Organisation of Iran | 23.6.2008 |
| 12. | Said Esmail KHALILIPOUR (a.k.a.: LANGROUDI) | DoB: 24/11/1945, PoB: Langroud | Deputy Head of AEOI. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.4.2007 |
| 13. | Ali Reza KHANCHI | Address of NRC: AEOI-NRC P.O.Box: 11365-8486 Tehran/ Iran; Fax: (+9821) 8021412 | Head of AEOI's Tehran Nuclear Research Centre. The IAEA is continuing to seek clarification from Iran about plutonium separation experiments carried out at the TNRC, including about the presence of HEU particles in environmental samples taken at the Karaj Waste Storage Facility where containers used to store depleted uranium targets used in those experiments are located. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.4.2007 |
| 14. | Fereydoun MAHMOUDIAN | Born on 7/11/1943 in Iran. Passport no 05HK31387 issued on 1/1/2002 in Iran, valid until 7/8/2010. Acquired French nationality on 7/5/2008 | Director of Fulmen (see Part B, No 13) | 26.7.2010 |
| 15. | Ebrahim MAHMUDZADEH | | Managing Director of Iran Electronic Industries (see Part B, no 20) | 23.6.2008 |
| 16. | Brigadier-General Beik MOHAMMADLU | | MODAFL Deputy for Supplies and Logistics (see Part B, no 29) | 23.6.2008 |
| 17. | Mohammad MOKHBER | 4th Floor, No 39 Ghandi street Tehran Iran 1517883115 | President of the Setad Ejraie foundation, an investment fund linked to Ali Khameneï, the Supreme Leader. Member of the Management Board of Sina Bank. | 26.7.2010 |

| _ | | | | | |
|----------------------------|-----|---|--------------------------------|--|-----------------|
| | | Name | Identifying information | Reasons | Date of listing |
| | 18. | Mohammad Reza MOVASAGHNIA | | Head of Samen Al A'Emmeh Industries Group (SAIG), also known as the Cruise Missile Industry Group. This organisation was designated under UNSCR 1747 and listed in Annex I to Common Position 2007/140/CFSP. | 26.7.2010 |
| | 19. | Anis NACCACHE | | Administrator of Barzagani Tejarat Tavanmad Saccal companies; his company has attempted to procure sensitive goods for entities designated under Resolution 1737 (2006). | 23.6.2008 |
| | 20. | Brigadier-General Mohammad NADERI | | Head of Aerospace Industries Organisation (AIO) (see Part B, no 1). AIO has taken part in sensitive Iranian programmes. | 23.6.2008 |
| | 21. | Mostafa Mohammad NAJJAR | | IRGC Brigadier-General. Minister for the Interior and former Minister of MODAFL, responsible for all military programmes, including ballistic missiles programmes. | 23.6.2008 |
| | 22. | Mohammad Reza NAQDI | Born in 1953, Nadjaf (Iraq) | Brigadier General, Commander of Basij Resistance Force | 26.7.2010 |
| | 23. | Mohammad PAKPUR | | Brigadier General, Commander of IRGC Ground Forces | 26.7.2010 |
| | 24. | Rostam QASEMI (a.k.a. Rostam GHASEMI) | Born in 1961 | Commander of Khatam al-Anbiya | 26.7.2010 |
| | 25. | Hossein SALAMI | | Brigadier General, Deputy Commander of the IRGC | 26.7.2010 |
| ▼ <u>M1</u> ▼ <u>C1</u> | 26. | Ali Akbar SALEHI | | Minister for Foreign Affairs. Former Head of the Atomic Energy Organi- sation of Iran (AEOI). The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 17.11.2009 |
| <u>▼</u> B | 27. | Rear Admiral Mohammad SHAFI'I RUDSARI | | Former MODAFL Deputy for Coordination (see Part B, no 29). | 23.6.2008 |
| | 28. | Ali SHAMSHIRI | | IRGC Brigadier-General. MODAFL Deputy for Counter-Intelligence, responsible for security of MODAFL personnel and Installations | 23.6.2008 |

| | | Name | Identifying information | Reasons | Date of listing |
|-----------|-----|----------------------------|---|--|-----------------|
| | 29. | Abdollah SOLAT SANA | | Managing Director of the Uranium Conversion Facility (UCF) in Esfahan. This is the facility that produces the feed material (UF6) for the enrichment facilities at Natanz. On 27 August 2006, Solat Sana received a special award from President Ahmadinejad for his role. | 23.4.2007 |
| | 30. | Ahmad VAHIDI | | IRGC Brigadier-General, Minister of the MODAFL and former Deputy Head of MODAFL | 23.6.2008 |
| <u>M1</u> | 31. | Mohammad AHMADIAN | | Formerly acting Head of the Atomic Energy Organisation of Iran (AEOI), and currently Deputy Head of the AEOI. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.05.2011 |
| | 32. | Engineer Naser RASTKHAH | | Deputy Head of the AEOI. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.05.2011 |
| | 33. | Behzad SOLTANI | | Deputy Head of the AEOI. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.05.2011 |
| | 34. | Massoud AKHAVAN-FARD | | Deputy Head of the AEOI for Planning, International and Parliamentary affairs. The AEOI oversees Iran's nuclear programme and is designated under UNSCR 1737 (2006). | 23.05.2011 |
| | 35. | Mohammad HOSSEIN DAJMAR | D.O.B: 19 February 1956. Passport: K13644968 (Iran), expires May 2013. | Chairman and Managing Director of IRISL. He is also Chairman of Soroush Sarzamin Asatir Ship Management Co. (SSA), Safiran Payam Darya Shipping Co. (SAPID), and Hafiz Darya Shipping Co. (HDS), know IRISL affiliates. | 23.05.2011 |

▼<u>B</u>

B. Legal persons, entities and bodies

| | Name | Identifying information | Reasons | Date of listing |
|----|---|--|---|-----------------|
| 1. | Aerospace Industries Organisation, AIO | AIO, 28 Shian 5, Lavizan, Tehran, Iran Langare Street, Nobonyad Square, Tehran, Iran | AIO oversees Iran's production of missiles, including Shahid Hemmat Industrial Group, Shahid Bagheri Industrial Group and Fajr Industrial Group, which were all designated under UNSCR 1737 (2006). The head of AIO and two other senior officials were also designated under UNSCR 1737 (2006) | |

| | Name | Identifying information | Reasons | Date of listin |
|----|--|---|---|----------------|
| | | | | |
| 2. | Armed Forces Geographical Organi- sation | | Assessed to provide geospatial data for the Ballistic Missile programme | 23.6.2008 |
| 3. | Azarab Industries | Ferdowsi Ave, PO Box 11365-171, Tehran, Iran | Energy sector firm that provides manufacturing support to the nuclear programme, including designated proliferation sensitive activities. Involved in the construction of the Arak heavy-water reactor. | 26.7.2010 |
| 4. | Bank Mellat (including all branches) and subsidiaries | Head Office Building, 327 Takeghani (Taleghani) Avenue, Tehran 15817, Iran; P.O. Box 11365-5964, Tehran 15817, Iran | Bank Mellat engages in a pattern of conduct which supports and facilitates Iran's nuclear and ballistic missile programmes. It has provided banking services to UN and EU listed entities or to entities acting on their behalf or at their direction, or to entities owned or controlled by them. It is the parent bank of First East Export Bank which is designated under UNSCR 1929. | 26.7.2010 |
| | (a) Mellat Bank SB CJSC | P.O. Box 24, Yerevan 0010, Republic of Armenia | 100 % owned by Bank Mellat | 26.7.2010 |
| | (b) Persia Inter- national Bank Plc | Number 6 Lothbury, Post Code: EC2R 7HH, United Kingdom | 60 % owned by Bank Mellat | 26.7.2010 |
| 5. | Bank Melli, Bank Melli Iran (including all branches) and subsidiaries | Ferdowsi Avenue, PO Box 11365-171, Tehran, Iran | Providing or attempting to provide financial support for companies which are involved in or procure goods for Iran's nuclear and missile programmes (AIO, SHIG, SBIG, AEOI, Novin Energy Company, Mesbah Energy Company, Kalaye Electric Company and DIO). Bank Melli serves as a facilitator for Iran's sensitive activities. It has facilitated numerous purchases of sensitive materials for Iran's nuclear and missile programmes. It has provided a range of financial services on behalf of entities linked to Iran's nuclear and missile industries, including opening letters of credit and maintaining accounts. Many of the above companies have been designated by UNSCRs 1737 (2006) and 1747 (2007). | |
| | | | Bank Melli continues in this role, by engaging in a pattern of conduct which supports and facilitates Iran's sensitive activities. Using its banking relationships, it continues to provide support for, and financial services | |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|--|-----------------|
| | | | to, UN and EU listed entities in relation to such activities. It also acts on behalf of, and at the direction of such entities, including Bank Sepah, often operating through their subsidiaries and associates. | |
| (a) | Arian Bank (a.k.a. Aryan Bank) | House 2, Street Number 13, Wazir Akbar Khan, Kabul, Afghanistan | Arian Bank is a joint-venture between Bank Melli and Bank Saderat. | 26.7.2010 |
| (b) | Assa Corporation | ASSA CORP, 650 (or 500) Fifth Avenue, New York, USA;Tax ID No. 1368932 (United States) | Assa Corporation is a front company created and controlled by Bank Melli. It was set up by Bank Melli to channel money from the United States to Iran. | 26.7.2010 |
| (c) | Assa Corporation Ltd | 6 Britannia Place, Bath Street, St Helier JE2 4SU, Jersey Channel Islands | Assa Corporation Ltd is the parent organization of Assa Corporation. Owned or controlled by Bank Melli | 26.7.2010 |
| (d) | Bank Kargoshaie (a.k.a. Bank Kargoshaee, a.k.a Kargosai Bank, a.k.a Kargosa'i Bank) | 587 Mohammadiye Square, Mowlavi St., Tehran 11986, Iran | Bank Kargoshaee is owned by Bank Melli. | 26.7.2010 |
| (e) | Bank Melli Iran Investment Company (BMIIC) | No 1 - Didare Shomali Haghani Highway 1518853115 Tehran Iran; Alt. Location: No.2, Nader Alley, Vali-Asr Str., Tehran, Iran, P.O. Box 3898-15875; Alt. Location: Bldg 2, Nader Alley after Beheshi Forked Road, P.O. Box 15875-3898, Tehran, Iran 15116; Alt., Location: Rafiee Alley, Nader Alley, 2 After Serahi Shahid Beheshti, Vali E Asr Avenue, Tehran, Iran; Business Registration Number: 89584. | Affiliated with entities sanctioned by the United States, the European Union or the United Nations since 2000. Designated by the United States for being owned or controlled by Bank Melli. | 26.7.2010 |
| (f) | Bank Melli Iran | Number 9/1, Ulitsa Mashkova, Moscow, 130064, Russia Alternative addr: Mashkova st. 9/1 Moscow 105062 Russia | | 23.6.2008 |

| | Name | Identifying information | Reasons | Date of listing |
|-------------------------|--|--|--|-----------------|
| Pr C | tank Melli rinting and ublishing Company BMPPC) | 18th Km Karaj Special Road, 1398185611 Tehran, Iran, P.O. Box 37515-183; Alt. Location: Km 16 Karaj Special Road, Tehran, Iran; Business Registration Number 382231 | Designated by the United States for being owned or controlled by Bank Melli | 26.7.2010 |
| In D C C In D C C C C C | Gement Investment and Development Company CIDCO) (a.k.a.: Gement Industry Investment and Development Company, CIDCO, CIDCO Cement Holding) | No 20, West Nahid Blvd. Vali Asr Ave. Tehran, Iran, 1967757451 No. 241, Mirdamad Street, Tehran, Iran | Wholly owned by Bank Melli Investment Co. Holding Company to manage all cement companies owned by BMIIC | 26.7.2010 |
| (i) Fi | irst Persian quity Fund | Walker House, 87 Mary Street, George Town, Grand Cayman, KY1-9002, Cayman Islands; Alt. Location: Clifton House, 7z5 Fort Street, P.O. Box 190, Grand Cayman, KY1-1104; Cayman Islands; Alt. Location: Rafi Alley, Vali Asr Avenue, Nader Alley, Tehran, 15116, Iran, P.O.Box 15875-3898 | Cayman-based fund licensed by the Iranian Government for foreign investment in the Tehran Stock Exchange | 26.7.2010 |
| C | Mazandaran Cement Company | No 51, sattari st. Afric Ave. Tehran Iran Alt. Loc.: Africa Street, Sattari Street No. 40, P.O. Box 121, Tehran, Iran 19688; Alt Location: 40 Satari Ave. Afrigha Highway, P.O. Box 19688, Tehran, Iran | Controlled by Bank Melli Iran | 26.7.2010 |
| (k) M | Aehr Cayman td. | Cayman Islands; Commercial Registry Number 188926 (Cayman Islands) | Owned or controlled by Bank Melli | 26.7.2010 |
| C (a | Melli Agro- hemical Company PJS a.k.a: Melli himi Keshavarz) | 5th Floor No 23 15th Street, Gandi Ave. Vanak Sq., Tehran, Iran Alt. Loc.: Mola Sadra Street, 215 Khordad, Sadr Alley No. 13, Vanak Sq., P.O. Box 15875-1734, Tehran, Iran | Owned or controlled by Bank Melli | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|----|---|---|---|-----------------|
| | (m) Melli Bank plc | London Wall, 11th floor, London EC2Y 5EA, United Kingdom | | 23.6.2008 |
| | (n) Melli Investment Holding Inter- national | 514 Business Avenue Building, Deira, P.O. Box 181878, Dubai, United Arab Emirates; | Owned or controlled by Bank Melli | 26.7.2010 |
| | | Registration Certificate Number (Dubai) 0107 issued 30. Nov 2005. | | |
| | (o) Shemal Cement Company (a.k.a: Siman Shomal, a.k.a Shomal | | Controlled by Bank Melli Iran | 26.7.2010 |
| | Cement Company) | Alt. Loc.: Dr Beheshti Ave No. 289, Tehran, Iran 151446; | | |
| | | Alt. Location: 289 Shahid Baheshti Ave., P.O. Box 15146, Tehran, Iran | | |
| 6. | Bank Refah | 40, North Shiraz Street, Mollasadra Ave., Vanak Sq., Tehran, 19917 Iran | Bank Refah has taken over ongoing operations from Bank Melli in the wake of the sanctions imposed on the latter by the European Union. | 26.7.2010 |
| 7. | Bank Saderat Iran (including all branches) and subsidiaries: | Bank Saderat Tower, 43 Somayeh Ave, Tehran, Iran. | Bank Saderat is an Iranian bank partlyowned by the Iranian government. Bank Saderat has provided financial services for entities procuring on behalf of Iran's nuclear and ballistic missile programmes, including entities designated under UNSCR 1737. Bank Saderat handled DIO (sanctioned in UNSCR 1737) and Iran Electronics Industries payments and letters of credit as recently as March 2009. In 2003 Bank Saderat handled letter of credit on behalf of Iranian nuclear-related Mesbah Energy Company (subsequently sanctioned in UNSR 1737). | 26.7.2010 |
| | (a) Bank Saderat PLC (London) | 5 Lothbury, London, EC2R 7 HD, UK | 100 % owned subsidiary of Bank Saderat | |
| 8. | Sina Bank | 187, Avenue Motahari, Teheran, Iran | This bank is very closely linked to the interests of 'Daftar' (Office of the Supreme Leader, with an administration of some 500 collaborators). It contributes in this way to funding the regime's strategic interests. | 26.7.2010 |
| 9. | ESNICO (Equipment Supplier for Nuclear Industries Corporation) | No 1, 37th Avenue, Asadabadi Street, Tehran, Iran | Procures industrial goods, specifically for the nuclear programme activities carried out by AEOI, Novin Energy and Kalaye Electric Company (all designated under UNSCR 1737). ESNICO's Director is Haleh Bakhtiar (designated in UNSCR 1803). | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|--|-----------------|
| 10. | Etemad Amin Invest Co Mobin | Pasadaran Av. Tehran, Iran | Close to Naftar and to Bonyad-e Mostazafan, Etemad Amin Invest Co Mobin contributes to funding the strategic interests of the regime and of the parallel Iranian state. | 26.7.2010 |
| 11. | Export Development Bank of Iran (EDBI) (including all branches) and subsidiaries: | Export Development Building, 21th floor, Tose'e tower, 15th st, Ahmad Qasir Ave, Tehran - Iran, 15138-35711 next to the 15th Alley, Bokharest Street, Argentina Square, Tehran, Iran; Tose'e Tower, corner of 15th St, Ahmad Qasir Ave., Argentine Square, Tehran, Iran; No. 129, 21 's Khaled Eslamboli, No. 1 Building, Tehran, Iran; C.R. No. 86936 (Iran) | The Export Development Bank of Iran (EDBI) has been involved in the provision of financial services to companies connected to Iran's programmes of proliferation concern and has helped UN-designated entities to circumvent and breach sanctions. It provides financial services to MODAFL-subordinate entities and to their front companies which support Iran's nuclear and ballistic missile programmes. It has continued to handle payments for Bank Sepah, post-designation by the UN, including payments related to Iran's nuclear and ballistic missile programmes. EDBI has handled transactions linked to Iran's defence and missile entities, many of which have been sanctioned by UNSC. EDBI served as a leading intermediary handling Bank Sepah's (sanctioned by UNSC since 2007) financing, including WMD-related payments. EDBI provides financial services to various MODAFL entities and has facilitated ongoing procurement activities of front companies associated with MODAFL entities. | 26.7.2010 |
| | (a) EDBI Exchange Company (a.k.a. Export Devel- opment Exchange Broker Co.) | No 20, 13th St., Vozara Ave., Tehran, Iran 1513753411, P.O. Box: 15875-6353Alt. Loc.: Tose'e Tower, corner of 15th St., Ahmad Qasir Ave.; Argentine Square, Tehran, Iran | Tehran-based EDBI Exchange Company is 70 %- owned by Export Development Bank of Iran (EDBI). It was designated by the United States in October 2008 for being owned or controlled by EDBI. | 26.7.2010 |
| | (b) EDBI Stock Brokerage Company | Tose'e Tower, corner of 15th St., Ahmad Qasir Ave.; Argentine Square, Tehran, Iran | Tehran-based EDBI Stock Brokerage Company is a wholly owned subsidiary of Export Development Bank of Iran (EDBI). It was designated by the United States in October 2008 for being owned or controlled by EDBI. | 26.7.2010 |
| | (c) Banco Internacional De Desarrollo CA | Urb. El Rosal, Avenida Francesco de Miranda, Edificio Dozsa, Piso 8, Caracas C.P. 1060, Venezuela | Banco Internacional De Desarrollo CA is owned by the Export Development Bank of Iran. | 26.7.2010 |

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| | Name | Identifying information | Reasons | Date of listing |
|-----|---|--|---|-----------------|
| 12. | Fajr Aviation Composite Industries | Mehrabad Airport, PO Box 13445-885, Tehran, Iran | A subsidiary of the IAIO within MODAFL (see no 29), which primarily produces composite materials for the aircraft industry, but also linked to the development of carbon fibre capabilities for nuclear and missile applications. Linked to the Technology Cooperation Office. Iran has recently announced its intention to mass produce new generation centrifuges which will require FACI carbon fibre production capabilities. | 26.7.2010 |
| 13. | Fulmen | 167 Darya boulevard - Shahrak Ghods, 14669 - 8356 Tehran. | Fulmen was involved in the installation of electrical equipment on the Qom/Fordoo site before its existence had been revealed. | 26.7.2010 |
| | (a) Arya Niroo Nik | | Arya Niroo Nik is a front company used by Fulmen for some of its operations. | 26.7.2010 |
| 14. | Future Bank BSC | Block 304. City Centre Building. Building 199, Government Avenue, Road 383, Manama, Bahrain. PO Box 785; Business Regis- tration 2k Document: 54514-1 (Bahrain) expires 9 Jun 2009; Trade License No 13388 (Bahrain) | Two-thirds of Bahrain-based Future Bank are owned by Iranian banks. EU-designated Bank Melli and Bank Saderat each own one-third of the shares, the remaining third being held by Ahli United Bank (AUB) of Bahrain. Although AUB still owns its shares of Future Bank, according to its 2007 annual report, AUB no longer exercises significant influence over the bank which is effectively controlled by its Iranian parents both of which are singled out in UNSCR 1803 as Iranian banks requiring particular 'vigilance'. The tight links between Future Bank and Iran are further evidenced by the fact that the Chairman of Bank Melli has also held concurrently the position of Chairman of Future Bank. | 26.7.2010 |
| 15. | Industrial Development & Renovation Organization (IDRO) | | Government body responsible for acceleration of Iran's industrialisation. Controls various companies involved in work for the nuclear and missile programmes and involved in the foreign procurement advanced manufacturing technology in order to support them. | 26.7.2010 |

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|-------------------------|-----|--|--|---|-----------------|
| | | Name | Identifying information | Reasons | Date of listing |
| | 16. | Iran Aircraft Industries (IACI) | | A subsidiary of the IAIO within MODAFL (see no 29). Manufactures, repairs, and conducts overhauls of airplanes and aircraft engines and procures aviation-related parts often of US-origin typically via foreign intermediaries. IACI and its subsidiaries have also been detected using a worldwide network of brokers seeking to procure aviation-related goods. | 26.7.2010 |
| | 17. | Iran Aircraft Manufacturing Company (a.k.a: HESA, HESA Trade Center, HTC, IAMCO, IAMI, Iran Aircraft Manufacturing Company, Iran Aircraft Manufacturing Industries, Karkhanejate Sanaye Havapaymaie Iran, Hava Peyma Sazi-e Iran, Havapeyma Sazhran, Havapeyma Sazi Iran, Hevapeimasazi) | P.O. Box 83145-311, 28 km Esfahan – Tehran Freeway, Shahin Shahr, Esfahan, Iran; P.O. Box 14155-5568, No. 27 Ahahamat Ave., Vallie Asr Square, Tehran 15946, Iran; P.O. Box 81465-935, Esfahan, Iran; Shahih Shar Industrial Zone, Isfahan, Iran; P.O. Box 8140, No. 107 Sepahbod Gharany Ave., Tehran, Iran | Owned or controlled by, or acts on behalf of; MODAFL (see no 29). | 26.7.2010 |
| ▼ <u>M1</u> ▼ <u>C1</u> | 18. | Iran Centrifuge Technology Company (a.k.a. TSA or TESA) | 156 Golestan Street, Saradre Jangal, Tehran | Iran Centrifuge Technology Company has taken over the activities of Farayand Technique (designated under UNSCR 1737). It manufactures uranium enrichment centrifuge parts, and is directly supporting proliferation sensitive activity that Iran is required to suspend by UNSCRs. Carries out work for Kalaye Electric Company (designated under UNSCR 1737). | 26.07.2010 |
| <u>▼</u> B | 19. | Iran Communications Industries (ICI) | PO Box 19295-4731, Pasdaran Avenue, Tehran, Iran; Alternative address: PO Box 19575-131, 34 Apadana Avenue, Tehran, Iran; Alternative address: Shahid Langary Street, Nobonyad Square Ave, Pasdaran, Tehran | Iran Communications Industries, a subsidiary of Iran Electronics Industries (see no 20), produces various items including communication systems, avionics, optics and electro-optics devices, micro-electronics, information technology, test and measurement, telecommunication security, electronic warfare, radar tube manufacture and refurbishment, and missile launchers. These items can be used in programmes that are under sanction per UNSCR 1737. | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|---|-----------------|
| 20. | Iran Electronics Industries (including all branches) and subsidiaries: | P. O. Box 18575-365, Tehran, Iran | Wholly-owned subsidiary of MODAFL (and therefore a sister-organisation to AIO, AvIO and DIO). Its role is to manufacture electronic components for Iranian weapons systems. | 23.6.2008 |
| | (a) Isfahan Optics | P.O. Box 81465-313 Kaveh Ave. Isfahan - Iran P.O. Box 81465-117, Isfahan, Iran | Owned, controlled by, or acts on behalf of Iran Electronics Industries | 26.7.2010 |
| 21. | Iran Insurance Company (a.k.a. Bimeh Iran) | 121 Fatemi Ave., P.O. Box 14155-6363 Tehran, Iran P.O. Box 14155-6363, 107 Fatemi Ave., Tehran, Iran | Iran Insurance Company has insured the purchase of various items that can be used in programmes that are sanctioned by UNSCR 1737. Purchased items insured include helicopter spare parts, electronics, and computers with applications in aircraft and missile navigation. | 26.7.2010 |
| 22. | Iranian Aviation Industries Organ- ization (IAIO) | Ave. Sepahbod Gharani P.O. Box 15815/1775 Tehran, Iran Ave. Sepahbod Gharani P.O. Box 15815/3446 Tehran, Iran 107 Sepahbod Gharani Avenue, Tehran, Iran | A MODAFL (see no 29) organisation responsible for planning and managing Iran's military aviation industry. | 26.7.2010 |
| 23. | IRGC Air Force | | Operates Iran's inventory of short and medium range ballistic missiles. The head of the IRGC air force was designated by UNSCR 1737 (2006) | 23.6.2008 |
| 24. | IRGC-Air Force Al- Ghadir Missile Command | | The IRGC-Air Force Al-Ghadir Missile Command is a specific element within the IRGC Air Force that has been working with SBIG (designated under UNSCR 1737) with the FATEH 110, short range ballistic missile as well as the Ashura medium range ballistic missile. This command appears to be the entity that actually has the operational control of the missiles. | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|--|-----------------|
| 25. | IRGC Qods Force | Tehran, Iran | Iran's Islamic Revolutionary Guard Corps (IRGC) Qods Force is responsible for operations outside Iran and is Tehran's principal foreign policy tool for special operations and support to terrorists and Islamic militants abroad. Hizballah used Qods Force-supplied rockets, antiship cruise missiles (ASCMs), manportable air defense systems (MANPADS), and unmanned aerial vehicles (UAVs) in the 2006 conflict with Israel and benefited from Qods Force training on these systems, according to press reporting. According to a variety of reports, the Qods Force continues to re-supply and train Hizballah on advanced weaponry, anti-aircraft missiles, and long-range rockets. The Qods Force continues to provide limited lethal support, training, and funding to Taliban fighters in southern and western Afghanistan including small arms, ammunition, mortars, and short-range battlefield rockets. Commander has been sanctioned under UNSCR | 26.7.2010 |
| 26. | Islamic Republic of Iran Shipping Lines (IRISL) (including all branches) and subsidiaries: | No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., PO Box 19395-1311. Tehran. Iran; No. 37,. Corner of 7th Narenjestan, Sayad Shirazi Square, After Noboyand Square, Pasdaran Ave., Tehran, Iran | IRISL has been involved in the shipment of military-related cargo, including proscribed cargo from Iran. Three such incidents involved clear violations that were reported to the UN Security Council Iran Sanctions Committee. IRISL's connection to proliferation was such that the UNSC called on states to conduct inspections of IRISL vessels, provided there are reasonable grounds to believe that the vessel is transporting proscribed goods, in UNSCRs 1803 and 1929. | 26.7.2010 |
| | (a) Bushehr Shipping Company Limited (Tehran) | 143/1 Tower Road Sliema, Slm 1604, Malta; c/o Hafiz Darya Shipping Company, Ehteshamiyeh Square 60, Neyestani 7, Pasdaran, Tehran, Iran | Owned or controlled by IRISL | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|--|---|-----------------|
| | Hafize Darya Shipping Lines (HDSL) (a.k.a HDS Lines) | No 35 Ehteshamieh SQ. Neyestan 7, Pasdaran, Tehran, Iran P.O. Box: 1944833546 Alt. Loc.: No. 60 Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran, Iran; Alternative Address: Third Floor of IRISL's Aseman Tower | Acts on behalf of IRISL performing container operations using vessels owned by IRISL. | 26.7.2010 |
| | Hanseatic Trade Trust & Shipping (HTTS) GmbH | Schottweg 7, 22087 Hamburg, Germany; Opp 7th Alley, Zarafshan St, Eivanak St, Qods Township; HTTS GmbH, | Controlled and/or acting on behalf of IRISL. | 26.7.2010 |
| | Irano Misr Shipping Company | No 37 Asseman tower, Shahid Lavasani (Farmanieh) Junction, Pasdaran Ave. Tehran - Iran P.O. Box: 19395- 1311 Alt. Loc.: No 41, 3rd Floor, Corner of 6th Alley, Sunaei Street, Karim Khan Zand Ave, Tehran; 265, Next to Mehrshad, Sedaghat St., Opposite of Mellat Park, Vali Asr Ave., Tehran 1A001, Iran; 18 Mehrshad Street, Sadaghat St., Opposite of Mellat Park, Vali Asr Ave., Tehran 1A001, Iran; | Acts on behalf of IRISL, along the Suez Canal and in Alexandria and Port Said. 51 %-owned by IRISL. | 26.7.2010 |
| (e) | Irinvestship Ltd | Global House, 61 Petty France, London SW1H 9EU, United Kingdom; Business Registration Document # 4110179 (United Kingdom) | Owned by IRISL. Provides financial, legal, and insurance services for IRISL as well as marketing, chartering, and crew management. | 26.7.2010 |
| | IRISL (Malta) Ltd | Flat 1, 181 Tower Road, Sliema SLM 1605, Malta | Acts on behalf of IRISL in Malta. A joint venture with German and Maltese shareholding. IRISL has been using the Malta route since 2004 and uses Freeport as a transshipment hub between the Persian Gulf and Europe. | 26.7.2010 |
| (g) | IRISL Club | No 60 Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran | Owned by IRISL. | 26.7.2010 |
| | IRISL Europe GmbH (Hamburg) | Schottweg 5, 22087 Hamburg, Germany V.A.T. Number DE217283818 (Germany) | IRISL's agent in Germany. | 26.7.2010 |

| ▼ <u>B</u> | | | | |
|------------|--|---|---|-----------------|
| | Name | Identifying information | Reasons | Date of listing |
| | (i) IRISL Marine Services and Engineering Company | Sarbandar Gas Station PO Box 199, Bandar Imam Khomeini, Iran; Karim Khan Zand Ave, Iran Shahr Shomai, No 221, Tehran, Iran; No 221, Northern Iranshahr Street, Karim Khan Ave, Tehran, Iran | Owned by IRISL. Provides fuel, bunkers, water, paint, lubricating oil and chemicals required by IRISL's vessels. The company also provides maintenance supervision of ships as well as facilities and services for the crew members. IRISL subsidiaries have used US dollar-denominated bank accounts registered under cover-names in Europe and the Middle East to facilitate routine fund transfers. IRISL has facilitated repeated violations of provisions of UNSCR 1747. | 26.7.2010 |
| | (j) IRISL Multimodal Transport Company | No 25, Shahid Arabi Line, Sanaei St, Karim Khan Zand Zand St Tehran. Iran | Owned by IRISL. Responsible for the transporting of cargo by rail. It is a wholly controlled subsidiary of IRISL. | 26.7.2010 |
| | (k) IRITAL Shipping SRL | Commercial Registry Number: GE 426505 (Italy); Italian Fiscal Code: 03329300101 (Italy); V.A.T. Number: 12869140157 (Italy) Ponte Francesco Morosini 59, 16126 Genova (GE), Italy; | Point of contact for ECL and PCL services. Used by the DIO subsidiary Marine Industries Group (MIG; now known as Marine Industries Organization, MIO) which is responsible for the design and construction of various marine structures and both military and non-military vessels. DIO was designated under UNSCR 1737. | 26.7.2010 |
| | (l) ISI Maritime Limited (Malta) | 147/1 St. Lucia Street, Valetta, Vlt 1185, Malta; c/ o IranoHind Shipping Co. Ltd., Mehrshad Street, PO Box 15875, Tehran, Iran | Owned or controlled by IRISL | 26.7.2010 |
| | (m) Khazer Shipping Lines (Bandar Anzali) | No. 1; End of Shahid Mostafa Khomeini St., Tohid Square, O.O. Box 43145, Bandar Anzali 1711-324, Iran; M. Khomeini St., Ghazian, Bandar Anzali, Gilan, Iran | 100 % owned subsidiary of IRISL. Total fleet of six vessels. Operates in the Caspian Sea. Has facilitated shipments involving UN- and US-designated entities, such as Bank Mellli, by shipping cargo of proliferation concern from countries like Russia and Kazakhstan to Iran. | 26.7.2010 |
| | (n) Leading Maritime Pte Ltd (a.k.a Lead- marine, a.k.a. Asia Marine Network Pte Ltd a.k.a. IRISL Asia Pte Ltd; a.k.a. Leadmaritime) | 200 Middle Road #14-01 Prime Centre Singapore 188980 (alt. 199090) | Leadmarine, acts on behalf of HDSL in Singapore. Previously known as Asia Marine Network Pte Ltd and IRISL Asia Pte Ltd, and acted on behalf of IRISL in Singapore. | 26.7.2010 |
| | (o) Marble Shipping Limited (Malta) | 143/1 Tower Road, Sliema, Slm 1604, Malta | Owned or controlled by IRISL. | 26.7.2010 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|--|--|-----------------|
| (p) | Oasis Freight Agency | Al Meena Street, Opposite Dubai Ports & Customs, 2nd Floor, Sharaf Building, Dubai UAE; | Acts on behalf of IRISL in the UAE providing fuel and stores, equipment, spare parts, and ship repairs. Also acts on behalf of HDSL. | 26.7.2010 |
| | | Sharaf Building, 1st Floor, Al Mankhool St., Bur Dubai, P.O. Box 5562, Dubai, United Arab Emirates; | | |
| | | Sharaf Building, No. 4, 2nd Floor, Al Meena Road, Opposite Customs, Dubai, United Arab Emirates, | | |
| | | Kayed Ahli Building, Jamal Abdul Nasser Road (Parallel to Al Wahda St.), P.O. Box 4840, Sharjah, United Arab Emirates | | |
| (q) | Safiran Payam Darya (a.k.a. Safiran Payam Darya Shipping | No 1 Eighth Narengestan, Artesh Street, Farmanieh, PO Box 19635-1116, Tehran, Iran; | Acts on behalf of IRISL performing bulk services | 26.7.2010 |
| | Lines, a.k.a SAPID Shipping Company) | Alternative address: 33 Eighth Narenjestan, Artesh Street, PO Box 19635-1116, Tehran, Iran; | | |
| | | Alternative Address: Third Floor of IRISL's Aseman Tower | | |
| (r) | Santexlines (a.k.a. IRISL China Shipping Company Ltd, a.k.a. Yi Hang Shipping Company) | Suite 1501, Shanghai Zhongrong Plaza, 1088, Pudong(S) road, Shanghai 200122, Shanghai, China Alternative Address: F23A- D, Times Plaza No. 1, Taizi | Santexlines act on behalf of HDSL. Previously known as IRISL China shipping Company, it acted on behalf of IRISL in China. | 26.7.2010 |
| | Company) | Road, Shekou, Shenzhen 518067, China | | |
| (s) | Shipping Computer Services Company (SCSCOL) | No 37 Asseman Shahid Sayyad Shirazee sq., Pasdaran ave., P.O. Box 1587553 1351, Tehran, Iran; | Owned or controlled by, or acts on behalf of, IRISL | 26.7.2010 |
| | | No 13, 1st Floor, Abgan Alley, Aban ave., Karimkhan Zand Blvd, Tehran 15976, Iran. | | |
| (t) | SISCO Shipping Company Ltd (a.k.a IRISL Korea Ltd) | Has offices in Seoul and Busan, South Korea. | Acts on behalf of IRISL in South Korea | 26.7.2010 |
| (u) | Soroush Saramin Asatir (SSA) | No 5, Shabnam Alley, Golriz St., Shahid Motahhari Ave., Tehran- Iran, P.O. Box 19635- 114 | Acts on behalf of IRISL. A Tehran- based ship management company acts as technical manager for many of SAPID's vessels | 26.7.2010 |
| | | No 14 (alt. 5) Shabnam Alley, Fajr Street, Shahid Motahhari Avenue, PO Box 196365-1114, Tehran Iran | | |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|--|-----------------|
| | (v) South Way Shipping Agency Co Ltd | No. 101, Shabnam Alley, Ghaem Magham Street, Tehran, Iran | Controlled by IRISL and acts for IRISL in Iranian ports overseeing such tasks as loading and unloading. | 26.7.2010 |
| | (w) Valfajr 8th Shipping Line Co. (a.k.a. Valfajr) | No 119, Corner Shabnam Ally, Shoaa Square Ghaem- Magam Farahani, Tehran - Iran P.O. Box 15875/4155 Alt. Loc.: Abyar Alley, Corner of Shahid Azodi St. & Karim Khan Zand Ave. Tehran, Iran; Shahid Azodi St. Karim Khan Zand Zand Ave., Abiar Alley. PO Box 4155, Tehran, Iran | A 100 % owned subsidiary of IRISL. It conducts transfers between Iran and the Gulf States such as Kuwait, Qatar, Bahrain, UAE, and Saudi Arabia. Valfajr is a Dubai-based subsidiary of Islamic Republic of Iran Shipping Lines (IRISL) that provides ferry and feeder services, and sometimes couriers freight and passengers across the Persian Gulf. Valfajr in Dubai booked ship crews, booked supply vessel services, prepared ships for arrival and departure and for loading and unloading in port. Valfajr has port calls in the Persian Gulf and India. As of mid-June 2009, Valfajr shared the same building with IRISL in Port Rashid in Dubai, United Arab Emirates (UAE), and also shared the same building with IRISL in Tehran, Iran. | 26.7.2010 |
| 27. | Islamic Revolutionary Guard Corps (IRGC) | Tehran, Iran | Responsible for Iran's nuclear programme. Has operational control for Iran's ballistic missile programme. Has undertaken procurement attempts to support Iran's ballistic missiles and nuclear programmes | 26.7.2010 |
| 28. | Javedan Mehr Toos | | Engineering firm that procures for the Atomic Energy Organisation of Iran which was designated under UNSCR 1737. | 26.7.2010 |
| 29. | Kala Naft | Kala Naft Tehran Co, P.O. Box 15815/1775, Gharani Avenue, Tehran, Iran; No 242 Shahid Kalantri Street - Near Karim Khan Bridge - Sepahbod Gharani Avenue, Teheran; Kish Free Zone, Trade Center, Kish Island, Iran; Kala Ltd., NIOC House, 4 Victoria Street, London Sw1H1 | Trades equipment for oil and gas sector that can be used for Iran's nuclear programme. Attempted to procure material (very hard-wearing alloy gates) which have no use outside the nuclear industry. Has links to companies involved in Iran's nuclear programme. | 26.7.2010 |

| | | Name | Identifying information | Reasons | Date of listing |
|----------------------------|-----|--|---|--|-----------------|
| | 30. | Machine Sazi Arak | 4th km Tehran Road, PO Box 148, Arak, Iran | Energy sector firm affiliated with IDRO that provides manufacturing support to the nuclear programme, including designated proliferation sensitive activities. Involved in the construction of the Arak heavy-water reactor. UK distributed an export denial notice in July 2009 against Machine Sazi Arak for an 'alumina graphite stopper rod.' In May 2009 Sweden denied the export to Machine Sazi Arak of 'cladding of dish ends for pressure vessels'. | 26.7.2010 |
| | 31. | Marine Industries | Pasdaran Av., PO Box 19585/ 777, Tehran | A subsidiary of the DIO | 23.4.2007 |
| | 32. | MASNA (Moierat Saakht Niroogahye Atomi Iran) Managing Company for the Construction of Nuclear Power Plants | | Subordinate to AEOI and Novin Energy (both designated under UNSCR 1737). Involved in the development of nuclear reactors. | 26.7.2010 |
| | 33. | Mechanic Industries Group | | Took part in the production of components for the ballistics programme. | 23.6.2008 |
| ▼ <u>M1</u> ▼ <u>C1</u> | 34. | Ministry Of Defense And Support For Armed Forces Logistics (a.k.a. Ministry Of Defense For Armed Forces Logistics; a.k.a. MODAFL; a.k.a. MODSAF) | Located on the west side of Dabestan Street, Abbas Abad District, Tehran, Iran | Responsible for Iran's defence research, development and manufacturing programmes, including support to missile and nuclear programmes. | 23.06.2008 |
| ▼ <u>B</u> | 35. | Naserin Vahid | | Naserin Vahid produces weapons parts on behalf of the IRGC. An IRGC front company. | 26.7.2010 |
| | 36. | Nuclear Fuel Production and Procurement Company (NFPC) | AEOI-NFPD, P.O.Box: 11365-8486, Tehran/Iran P.O. Box 14144-1339, Endof North Karegar Ave., Tehran, Iran | Nuclear Fuel Production Division (NFPD) of AEOI runs research and development in the field of nuclear fuel cycle including uranium exploration, mining, milling, conversion and nuclear waste management. The NFPC is the successor to the NFPD, the subsidiary company under the AEOI that runs research and development in the nuclear fuel cycle including conversion and enrichment. | 23.4.2007 |

| | Name | Identifying information | Reasons | Date of listin |
|-----|---------------------------------|--|--|----------------|
| 37. | Parchin Chemical Industries | | Worked on propulsion techniques for the Iranian ballistics programme. | 23.6.2008 |
| 38. | Parto Sanat Co | No. 1281 Valiasr Ave., Next to 14th St., Tehran, 15178 Iran. | Manufacturer of frequency changers and it is capable of developing/modifying imported foreign frequency changers in a way that makes them usable in gas centrifuge enrichment. It is deemed to be involved in nuclear proliferation activities. | 26.7.2010 |
| 39. | Passive Defense Organization | | Responsible for the selection and construction of strategic facilities, including – according to Iranian statements - the uranium enrichment site at Fordow (Qom) built without being declared to the IAEA contrary to Iran's obligations (affirmed in a resolution by the IAEA Board of Governors). Brigadier General Gholam-Reza Jalali, former IRGC is PDO's chairman. | 26.7.2010 |
| 40. | Post Bank | 237, Motahari Ave., Tehran, Iran 1587618118 | Post Bank has evolved from being an Iranian domestic bank to a bank which facilitates Iran's international trade. Acts on behalf of Bank Sepah (designated under UNSCR 1747), carrying out Bank Sepah's transactions and hiding Bank Sepah's connection with transactions in order to circumvent sanctions. In 2009 Post Bank facilitated business on behalf of Bank Sepah between Iran's defence industries and overseas beneficiaries. Has facilitated business with front company for DPRK's Tranchon Commercial Bank, known for facilitating proliferation-related-related business between Iran and the DPRK. | 26.7.2010 |
| 41. | Raka | | A department of Kalaye Electric Company (designated under UNSCR 1737). Established in late 2006, it was responsible for the construction of the Uranium enrichment plant at Fordow (Qom). | 26.7.2010 |

| v <u>Б</u> | | | | | |
|----------------------------|-----|--|--|--|-----------------|
| | | Name | Identifying information | Reasons | Date of listing |
| ▼ <u>M1</u> ▼ <u>C1</u> | | | | | |
| | 42. | Research Institute of Nuclear Science and Technology a.k.a. Nuclear Science and Technology Research Institute | AEOI, PO Box 14395-836, Tehran | Subordinate to the AEOI and continuing the work of its former Research Division. Its managing director is AEOI Vice President Mohammad Ghannadi (designated in UNSCR 1737). | 26.07.2010 |
| ▼ <u>B</u> | | | | | |
| | 43. | Schiller Novin | Gheytariyeh Avenue - no 153 - 3rd Floor - PO BOX 17665/153 6 19389 Teheran | Acting on behalf of Defense Industries Organisation (DIO). | 26.7.2010 |
| | 44. | Sepanir Oil and Gas Energy Engineering Company (a.k.a. Sepah Nir) | | A subsidiary of Khatam al-Anbya Construction Headquarters which was designated under UNSCR 1929. Sepanir Oil and Gas Engineering Company is participating in Iran's South Pars offshore Phase 15-16 gas field development project. | 26.7.2010 |
| | 45. | Shahid Ahmad Kazemi Industrial Group | | SAKIG develops and produces surface-to-air missiles systems for Iran's military. It maintains military, missile, and air defense projects and procures goods from Russia, Belarus, and North Korea. | 26.7.2010 |
| | 46. | Shakhese Behbud Sanat | | Involved in the production of equipment and parts for the nuclear fuel cycle. | 26.7.2010 |
| | 47. | State Purchasing Organisation (SPO) | | The SPO appears to facilitate the import of whole weapons. It appears to be a subsidiary of MODAFL | 23.6.2008 |
| | 48. | Technology Cooperation Office (TCO) of the Iranian President's Office | Tehran, Iran | Responsible for Iran's technological advancement through relevant foreign procurement and training links. Supports the nuclear and missile programmes. | 26.7.2010 |
| | 49. | Yasa Part, (including all branches) and subsidiaries: | | Company dealing with procurement activities related to the purchase of materials and technologies necessary to nuclear and ballistic programmes. | 26.7.2010 |
| | | (a) Arfa Paint Company | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (b) Arfeh Company | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (c) Farasepehr Engineering Company | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (d) Hosseini Nejad Trading Co. | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (e) Iran Saffron Company or Iransaffron Co. | | Acting on behalf of Yasa Part. | 26.7.2010 |

| ' <u>D</u> | | | | | |
|--------------------|-----|---|--|---|-----------------|
| | | Name | Identifying information | Reasons | Date of listing |
| | | (f) Shetab G. | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (g) Shetab Gaman | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (h) Shetab Trading | | Acting on behalf of Yasa Part. | 26.7.2010 |
| | | (i) Y.A.S. Co. Ltd | | Acting on behalf of Yasa Part. | 26.7.2010 |
| ▼ <u>M1</u> | | | | | |
| | 50. | Europäisch-Iranische Handelsbank (EIH) | Head Office: Depenau 2, D-20095 Hamburg; Kish branch, Sanaee Avenue, PO Box 79415/148, Kish Island 79415 Tehran branch, No. 1655/1, Valiasr Avenue, PO Box 19656 43 511, Tehran, Iran | EIH has played a key role in assisting a number of Iranian banks with alternative options for completing transactions disrupted by EU sanctions targeting Iran. EIH has been noted acting as the advising bank and intermediary bank in transactions with designated Iranian entities. For example, EIH froze the accounts of EU-designated bank Saderat Iran and Bank Mellat located at EIH Hamburg in early August 2010. Shortly afterwards, EIH resumed Euro-denominated business with Bank Mellat and Bank Saderat Iran using EIH accounts with a non-designated Iranian bank. In August 2010, EIH was setting up a system to enable routine payments to be made to Bank Saderat London and Future Bank Bahrain, in such a way as to avoid EU sanctions. As of October 2010, EIH was continuing to act as a conduit for payments by sanctioned Iranian banks, including Bank Mellat and Bank Saderat. These sanctioned banks are to direct their payments to EIH via Iran's Bank of Industry and Mine. In 2009, EIH was used by Post Bank in a sanctions evasion scheme which involved handling transactions on behalf of UN-designated Bank Mellat is one of EIH's parent banks. | 23.05.2011 |
| | 51. | Onerbank ZAO (a.k.a. Eftekhar Bank, Honor Bank) | Ulitsa Klary Tsetkin 51, Minsk 220004, Belarus | Belarus-based bank owned by Bank Refah Kargaran, Bank Saderat and the Export Development Bank of Iran | 23.05.2011 |
| | 52. | Aras Farayande | Unit 12, No 35 Kooshesh Street, Tehran | Involved in procurement of materials for EU-sanctioned Iran Centrifuge Technology Company | 23.05.2011 |
| | 53. | EMKA Company | | A subsidiary company of the UN- sanctioned TAMAS, responsible for the discovery and extraction of uranium. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|--|---|--|-----------------|
| 54. | Neda Industrial Group | No 10 & 12, 64th Street, Yusef Abad, Tehran | Industrial automation company that has worked for the UN-sanctioned Kalaye Electric Company (KEC) at the uranium fuel enrichment plant at Natanz. | 23.05.2011 |
| 55. | Neka Novin | Unit 7, No 12, 13th Street, Mir-Emad St, Motahary Avenue, Tehran, 15875- 6653 | Involved in procurement of specialist equipment and materials that have direct application in Iranian nuclear programme. | 23.05.2011 |
| 56. | Noavaran Pooyamoj | No 15, Eighth Street, Pakistan Avenue, Shahid Beheshti Avenue, Tehran | Involved in procurement of materials that are controlled and have direct application in the manufacture of centrifuges for Iran's uranium enrichment programme. | 23.05.2011 |
| 57. | Noor Afza Gostar, (a.k.a. Noor Afzar Gostar) | Opp Seventh Alley, Zarafrshan Street, Eivanak Street, Qods Township | A company that is a subsidiary of the UN-sanctioned Atomic Energy Organisation of Iran (AEOI). Involved in the procurement of equipment for the nuclear programme. | 23.05.2011 |
| 58. | Pouya Control | No 2, Sharif Alley, Shariati Street, Tehran | A company involved in procurement of inverters for Iran's proscribed enrichment programme. | 23.05.2011 |
| 59. | Raad Iran (a.k.a Raad Automation Company) | Unit 1, No 35, Bouali Sina Sharghi, Chehel Sotoun Street, Fatemi Square, Tehran | A company involved in procurement of inverters for Iran's proscribed enrichment programme. RaadIran was established to produce and design controlling systems and provides the sale and installation of inverters and programmable Logic Controllers. | 23.05.2011 |
| 60. | SUREH (Nuclear Reactors Fuel Company) | Head Office: 61 Shahid Abtahi St, Karegar e Shomali, Tehran Complex: Persian Gulf Boulevard, Km20 SW Esfahan Road | A company subordinate to the Atomic Energy Organisation of Iran (AEOI) consisting of the Uranium Conversion Facility, the Fuel Manufacturing Plant and the Zirconium Production Plant. | 23.05.2011 |
| 61. | Sun Middle East FZ Company | | A company that procures sensitive goods for the Nuclear Reactors Fuel Company (SUREH). Sun Middle East uses intermediaries based outside of Iran to source goods SUREH requires. Sun Middle East provides these intermediaries with false end user details for when the goods are sent to Iran, thereby seeking to circumvent the relevant country's Customs regime. | 23.05.2011 |
| 62. | Ashtian Tablo | Ashtian Tablo - No 67, Ghods mirheydari St, Yoosefabad, Tehran | A manufacturer of electrical equipment (switchgear)involved in the construction of the Fordow (Qom) facility, built without being declared to the IAEA. | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|-----|--|--|--|-----------------|
| 63. | Bals Alman | | A manufacturer of electrical equipment (switchgear) involved in the ongoing construction of the Fordow (Qom) facility built without being declared to the IAEA. | 23.05.2011 |
| 64. | Hirbod Co | Hirbod Co - Flat 2, 3 Second Street, Asad Abadi Avenue, Tehran 14316 | A company that has procured goods and equipment destined for Iran's Nuclear and Ballistic Missile programmes for the UN-sanctioned Kalaye Electric Company (KEC). | 23.05.2011 |
| 65. | Iran Transfo | 15 Hakim Azam St, Shirazeh, Shomali St, Mollasadra, Vanak Sq, Tehran | Transformer manufacturer involved in the ongoing construction of the Fordow (Qom) facility built without being declared to the IAEA. | 23.05.2011 |
| 66. | Marou Sanat (a.k.a. Mohandesi Tarh Va Toseh Maro Sanat Company) | 9, Ground Floor, Zohre Street, Mofateh Street, Tehran | Procurement firm that has acted for Mesbah Energy which was designated under UNSCR 1737 | 23.05.2011 |
| 67. | Paya Parto (a.k.a. Paya Partov) | | Subsidiary of Novin Energy, which was sanctioned under UNSCR 1747, involved in laser welding. | 23.05.2011 |
| 68. | Safa Nicu | | Communications firm that supplied equipment for the Fordow (Qom) facility built without being declared to the IAEA. | 23.05.2011 |
| 69. | Taghtiran | | Engineering firm that procures equipment for Iran's IR-40 heavy water research reactor | 23.05.2011 |
| 70. | Pearl Energy Company Ltd | Level 13(E) Main Office Tower, Jalan Merdeka, Financial Park Complex, Labuan 87000 Malaysia | Pearl Energy Company Ltd. is a wholly-owned subsidiary of First East Export Bank (FEEB), which was designated by the UN under Security Council Resolution 1929 in June 2010. Pearl Energy Company was formed by FEEB in order to provide economic research on an array of global industries. The Head of Bank Mellat, Ali Divandari, serves as the Chairman of Pearl Energy Company's Board of Directors. | 23.05.2011 |
| 71. | Pearl Energy Services, SA | 15 Avenue de Montchoisi, Lausanne, 1006 VD, Switzerland; Business Registration Document #CH- 550.1.058.055-9 | Pearl Energy Services S.A. is a wholly-owned subsidiary of Pearl Energy Company Ltd, located in Switzerland; its mission is to provide financing and expertise to entities seeking to enter in to Iran's petroleum sector. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|--|-----------------|
| 72. | West Sun Trade GMBH | Winterhuder Weg 8, Hamburg 22085, Germany; Telephone: 0049 40 2270170; Business Regis- tration Document # HRB45757 (Germany) | Owned or controlled by Machine Sazi Arak | 23.05.2011 |
| 73. | MAAA Synergy | Malaysia | Involved in procurement of components for Iranian fighter planes | 23.05.2011 |
| 74. | Modern Technologies FZC (MTFZC) | PO Box 8032, Sharjah, United Arab Emirates | Involved in procurement of components for Iranian nuclear programme | 23.05.2011 |
| 75. | Qualitest FZE | Level 41, Emirates Towers, Sheikh Zayed Road, PO Box 31303, Dubai, United Arab Emirates | Involved in procurement of components for Iranian nuclear programme | 23.05.2011 |
| 76. | Bonab Research Center (BRC) | Jade ye Tabriz (km 7), East Azerbaijan, Iran | Affiliated to AEOI | 23.05.2011 |
| 77. | Tajhiz Sanat Shayan (TSS) | Unit 7, No. 40, Yazdanpanah, Afriqa Blvd., Teheran, Iran | Involved in procurement of components for Iranian nuclear programme | 23.05.2011 |
| 78. | Institute of Applied Physics (IAP) | | Conducts research into military applications of Iranian nuclear programme | 23.05.2011 |
| 79. | Aran Modern Devices (AMD) | | Affiliated to MTFZC network | 23.05.2011 |
| 80. | Sakhte Turbopomp va Kompressor (SATAK) (a.k.a. Turbo Compressor Manufacturer, TCMFG) | 8, Shahin Lane, Tavanir Rd., Valiasr Av., Teheran, Iran | Involved in procurement efforts for Iranian missile programm | 23.05.2011 |
| 81. | Electronic Components Industries (ECI) | Hossain Abad Avenue, Shiraz, Iran | Subsidiary of Iran Electronics Industries | 23.05.2011 |
| 82. | Shiraz Electronics Industries | Mirzaie Shirazi, P.O. Box 71365-1589, Shiraz, Iran | Subsidiary of Iran Electronics Industries | 23.05.2011 |
| 83. | Iran Marine Industrial Company (SADRA) | Sadra Building No. 3, Shafagh St., Poonak Khavari Blvd., Shahrak Ghods, P.O. Box 14669- 56491, Tehran, Iran | Owned or controlled by Khatam al- Anbiya Construction Headquarters | 23.05.2011 |
| 84. | Shahid Beheshti University | Daneshju Blvd., Yaman St., Chamran Blvd., P.O. Box 19839-63113, Tehran, Iran | Owned or controlled by Ministry of Defence and Armed Forces Logistics (MODAFL) Carries out scientific research on nuclear weapons | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|-----|---|---|--|-----------------|
| 85. | Bonyad Taavon Sepah (a.k.a. IRGC Cooperative Foun- dation; Bonyad-e Ta'avon-Sepah; Sepah Cooperative Foundation) | Niayes Highway, Seoul Street, Tehran, Iran | Bonyad Taavon Sepah, also known as the IRGC Cooperative Foundation, was formed by the Commanders of the IRGC to structure the IRGC's investments. It is controlled by the IRGC. Bonyad Taavon Sepah's Board of Trustees is composed of nine members, of whom eight are IRGC members. These officers include the IRGC's Commander in Chief, who is the Chairman of the Board of Trustees, the Supreme Leader's representative to the IRGC, the Basij commander, the IRGC Ground Forces commander, the IRGC Air Force commander, the IRGC Navy commander, the largc Navy commander, the largc Navy commander, the IRGC officer from the Armed Forces General Staff, and a senior IRGC officer from MODAFL. | 23.05.2011 |
| 86. | Ansar Bank (a.k.a. Ansar Finance and Credit Fund; Ansar Financial and Credit Institute; Ansae Institute; Ansar al- Mojahedin No- Interest Loan Institute; Ansar Saving and Interest Free-Loans Fund). | No. 539, North Pasdaran Avenue, Tehran; Ansar Building, North Khaje Nasir Street, Tehran, Iran | Bonyad Taavon Sepah created Ansar Bank to provide financial and credit services to IRGC personnel. Initially, Ansar Bank operated as a credit union and transitioned in to a fully fledged bank in mid 2009, upon receiving a licence from Iran's Central bank. Ansar Bank, formerly known as Ansar al Mojahedin, has been linked to the IRGC for over 20 years. IRGC members received their salaries through Ansar bank. In addition, Ansar bank provided special benefits to IRGC personnel, including reduced rates for home furnishings and free, or reduced-cost, health care. | 23.05.2011 |
| 87. | Mehr Bank (a.k.a Mehr Finance and Credit Institute; Mehr Interest-Free Bank) | 204 Taleghani Ave., Tehran, Iran | Mehr Bank is controlled by Bonyas Taavon Sepah and the IRGC. Mehr Bank provides financial services to the IRGC. According to an open source interview with the head of Bonyad Taavon Sepah, Parviz Fattah (b. 1961), Bonyad Taavon Sepah created Mehr Bank to serve the Basij (paramilitary arm of the IRGC). | 23.05.2011 |
| 88. | Darya Capital Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94311 (Germany) issued 21 Jul 2005Schottweg 6, 22087 Hamburg, Germany; Business Registration No. HRB96253, issued Jan 30, 2006 | Darya Capital Administration is a wholly owned subsidiary of IRISL Europe GmbH. Its Managing Director is Mohammad Talai. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|-------|--|--|---|-----------------|
| 89. | Nari Shipping and Chartering GmbH & Co. KG | | Owned by Ocean Capital Administration and IRISL Europe. Ahmad Sarkandi is also the director of Ocean Capital Administration GmbH and Nari Shipping and Chartering GmbH & Co. KG. | 23.05.2011 |
| 90. | Ocean Capital Administration GmbH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB92501 (Germany) issued 4 Jan 2005; Telephone: 004940278740 | A German-based IRISL holding company that, together with IRISL Europe, owns Nari Shipping and Chartering GmbH & Co. KG. Ocean Capital Administration and Nari Shipping and Chartering also share the same address in Germany as IRISL Europe GmbH | 23.05.2011 |
| 91. | First Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94311 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 91.a. | First Ocean GMBH & Co. Kg | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA102601 (Germany) issued 19 Sep 2005 Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 92. | Second Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94312 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 92.a. | Second Ocean GMBH & Co. Kg | Schottweg 5, Hamburg 22087, Germany; c/o Hafiz Darya Shipping Co, No 60, Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran, Iran; Business Registration Document # HRA102502 (Germany) issued 24 Aug 2005; Email Address info@hdslines.com; Website www.hdslines.com; Telephone: 00982126100733; Fax: 00982120100734 | Owned or controlled by IRISL | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|-------|----------------------------------|---|------------------------------|-----------------|
| 93. | Third Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94313 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 93.a. | Third Ocean GMBH & Co. Kg | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA102520 (Germany) issued 29 Aug 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 94. | Fourth Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94314 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 94.a. | Fourth Ocean GMBH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA102600 (Germany) issued 19 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00494070383392; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 95. | Fifth Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94315 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |

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|-------|---|--|------------------------------|-----------------|
| | Name | Identifying information | Reasons | Date of listing |
| 95.a. | Fifth Ocean GMBH & CO. KG | c/o Hafiz Darya Shipping Co, No 60, Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran, Iran; Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRA102599 (Germany) issued 19 Sep 2005; Email Address info@hdslines.com; Website www.hdslines.com; Telephone: 00494070383392; Telephone: 00982126100733; Fax: 00982120100734 | Owned or controlled by IRISL | 23.05.2011 |
| 96. | Sixth Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94316 (Germany) issued 21 Jul 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 96.a. | Sixth Ocean GMBH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Hafiz Darya Shipping Co, No 60, Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran, Iran; Business Registration Document # HRA102501 (Germany) issued 24 Aug 2005; Email Address info@hdslines.com; Website www.hdslines.com; Telephone: 00982126100733; Fax: 00982120100734 | Owned or controlled by IRISL | 23.05.2011 |
| 97. | Seventh Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94829 (Germany) issued 19 Sep 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 97.a. | Seventh Ocean GMBH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA102655 (Germany) issued 26 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|--------|----------------------------------|--|------------------------------|-----------------|
| 98. | Eighth Ocean Administration GMBH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94633 (Germany) issued 24 Aug 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 98.a. | Eighth Ocean GmbH & CO. KG | c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRA102533 (Germany) issued 1 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 99. | Ninth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94698 (Germany) issued 9 Sep 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 99.a. | Ninth Ocean GmbH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA102565 (Germany) issued 15 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 100. | Tenth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany | Owned or controlled by IRISL | 23.05.2011 |
| 100.a. | Tenth Ocean GmbH & CO. KG | c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRA102679 (Germany) issued 27 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|--------|--|--|------------------------------|-----------------|
| 101. | Eleventh Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94632 (Germany) issued 24 Aug 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 101.a. | Eleventh Ocean GmbH & CO. KG | c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRA102544 (Germany) issued 9 Sep 2005; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 004940302930; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 102. | Twelfth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRB94573 (Germany) issued 18 Aug 2005 | Owned or controlled by IRISL | 23.05.2011 |
| 102.a. | Twelfth Ocean GmbH & CO. KG | c/o Hafiz Darya Shipping Co, No 60, Ehteshamiyeh Square, 7th Neyestan Street, Pasdaran Avenue, Tehran, Iran; Schottweg 5, Hamburg 22087, Germany; Business Registration Document # HRA102506 (Germany) issued 25 Aug 2005; Email Address info@hdslines.com; Website www.hdslines.com; Telephone: 00982126100733; Fax: 00982120100734 | Owned or controlled by IRISL | 23.05.2011 |
| 103. | Thirteenth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany | Owned or controlled by IRISL | 23.05.2011 |
| 103.a. | Thirteenth Ocean GmbH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA104149 (Germany) issued 10 Jul 2006; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|--------|--|--|------------------------------|-----------------|
| 104. | Fourteenth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany | Owned or controlled by IRISL | 23.05.2011 |
| 104.a. | Fourteenth Ocean GmbH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA104174 (Germany) issued 12 Jul 2006; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 105. | Fifteenth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany | Owned or controlled by IRISL | 23.05.2011 |
| 105.a. | Fifteenth Ocean GmbH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Business Registration Document # HRA104175 (Germany) issued 12 Jul 2006; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |
| 106. | Sixteenth Ocean Administration GmbH | Schottweg 5, Hamburg 22087, Germany | Owned or controlled by IRISL | 23.05.2011 |
| 106.a. | Sixteenth Ocean GmbH & CO. KG | Schottweg 5, Hamburg 22087, Germany; c/o Islamic Republic of Iran Shipping Lines (IRISL), No. 37, Aseman Tower, Sayyade Shirazee Square, Pasdaran Ave., P.O. Box 19395-1311, Tehran, Iran; Email Address smd@irisl.net; Website www.irisl.net; Telephone: 00982120100488; Fax: 00982120100486 | Owned or controlled by IRISL | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|--------|--------------------|--|---|-----------------|
| 107. | Loweswater Ltd | Manning House, 21 Bucks Road, Douglas, Isle of Man, IM1 3DA | Isle of Man-administered company that controls ship-owning companies in Hong Kong. The ships are operated by EU-sanctioned Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned by IRISL. | 23.05.2011 |
| | | | The Hong Kong companies are: Insight World Ltd, Kingdom New Ltd, Logistic Smart Ltd, Neuman Ltd and New Desire Ltd. | |
| | | | Technical management of the vessels is carried out by EU-sanctioned Soroush Saramin Asatir (SSA). | |
| 107.a | Insight World Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Insight World Ltd is a Hong Kong based company, owned by Loweswater Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 107.b. | Kingdom New Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Kingdom New Ltd is a Hong Kong based company, owned by Loweswater Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 107.c. | Logistic Smart Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Logistic Smart Ltd is a Hong Kong based company, owned by Loweswater Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 107.d. | Neuman Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Neuman Ltd is a Hong Kong based company, owned by Loweswater Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|--------|------------------|--|--|-----------------|
| 107.e. | New Desire LTD | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | New Desire LTD is a Hong Kong based company, owned by Loweswater Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 108. | Mill Dene Ltd | Manning House, 21 Bucks Road, Douglas, Isle of Man. IM1 3DA | Isle of Man-administered company that controls ship-owning companies in Hong Kong. The ships are operated by EU-sanctioned Safiran Payma Darya Shipping lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned by IRISL. One shareholder is Gholamhossein Golpavar, managing director of SAPID shipping IRISL's commercial director. The Hong Kong Companies are: Advance Novel, Alpha Effort Ltd, Best Precise Ltd, Concept Giant Ltd and Great Method Ltd. Technical management of the vessels is carried out by EU-sanctioned Soroush Saramin Asatir (SSA). | 23.05.2011 |
| 108.a. | Advance Novel | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Advance Novel is a Hong Kong based company, owned by Mill Dene Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 108.b. | Alpha Effort Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Alpha Effort Ltd is a Hong Kong based company, owned by Mill Dene Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 108.c. | Best Precise Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Best Precise Ltd is a Hong Kong based company, owned by Mill Dene Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|--------|---|--|--|-----------------|
| 108.d | Concept Giant Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Concept Giant Ltd is a Hong Kong based company, owned by Mill Dene Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 108.e. | Great Method Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Great Method Ltd is a Hong Kong based company, owned by Mill Dene Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 109. | Shallon Ltd | Manning House, 21 Bucks Road, Douglas, Isle of Man. IM1 3DA | Isle of Man-administered company that controls ship-owning companies in Hong Kong. The ships are operated by EU-sanctioned Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned by IRISL. One shareholder is Mohammed Mehdi Rasekh, an IRISL board member. The Hong Kong companies are Smart Day Holdings Ltd, System Wise Ltd (AKA Sysyem Wise Ltd), Trade Treasure, True Honour Holdings Ltd. Technical management of the vessels is carried out by EU-sanctioned Soroush Saramin Asatir (SSA). | 23.05.2011 |
| 109.a. | Smart Day Holdings Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Smart Day Holdings Ltd is a Hong Kong based company, owned by Shallon Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 109.b. | System Wise Ltd (a.k.a Sysyem Wise Ltd) | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | System Wise Ltd is a Hong Kong based company, owned by Shallon Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|--------|-----------------------------|--|---|-----------------|
| 109.c. | Trade Treasure | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Trade Treasure is a Hong Kong based company, owned by Shallon Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL | 23.05.2011 |
| 109.d. | True Honour Holdings Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | True Honour Holdings Ltd is a Hong Kong based company, owned by Shallon Ltd, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL | 23.05.2011 |
| 110. | Springthorpe Limited | Manning House, 21 Bucks Road, Douglas, Isle of Man, IM1 3DA | Isle of Man-administered company that controls ship-owning companies in Hong Kong. The ships are operated by Safiran Payam Darya Shipping Lines (SAPID) which took over IRISL's bulk services and routes and uses vessels previously owned by IRISL. One shareholder is Mohammed Hossein Dajmar, the managing director of IRISL. The Hong Kong companies are: New Synergy Ltd, Partner Century Ltd, Sackville Holdings Ltd, Sanford Group and Sino Access Holdings. Technical Management of the vessels is carried out by EU-sanctioned Soroush Saramin Asatir (SSA). | 23.05.2011 |
| 110.a. | New Synergy Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | New Synergy Ltd is a Hong Kong based company, owned by Springthorpe Limited, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 110.b. | Partner Century Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Partner Century Ltd is a Hong Kong based company, owned by Springthorpe Limited, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|--------|--|--|--|-----------------|
| 110.c. | Sackville Holdings Ltd | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Sackville Holdings Ltd is a Hong Kong based company, owned by Springthorpe Limited, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 110.d | Sanford Group | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Sanford Group is a Hong Kong based company, owned by Springthorpe Limited, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 110.e. | Sino Access Holdings | 15th Floor, Tower One, Lippo Centre, 89 Queensway, Hong Kong | Sino Access Holdings is a Hong Kong based company, owned by Springthorpe Limited, whose ships are operated by Safiran Payam Darya Shipping Lines (SAPID) that took over IRISL's bulk services and routes and uses vessels previously owned and operated by IRISL. | 23.05.2011 |
| 111. | Kerman Shipping Company Ltd | 143/1 Tower Road, Sliema, SLM1604, Malta. C37423, Incorporated in Malta in 2005 | Kerman Shipping Company Ltd is a wholly-owned subsidiary of IRISL. Located at the same address in Malta as Woking Shipping Investments Ltd and the companies it owns. | 23.05.2011 |
| 112. | Woking Shipping Investments Ltd | 143/1 Tower Road, Sliema, SLM1604, Malta. C39912 issued 2006 | Woking Shipping Investments Ltd is an IRISL subsidiary that owns Shere Shipping Company Limited, Tongham Shipping Co. Ltd., Uppercourt Shipping Company Limited, Vobster Shipping Company which are all located at the same address in Malta. | 23.05.2011 |
| 112.a | Shere Shipping Company Limited | 143/1 Tower Road, Sliema, SLM1604, Malta | Shere Shipping Company Limited is a wholly owned subsidiary of Woking Shipping Investments Ltd, owned by IRISL. | 23.05.2011 |
| 112.b. | Tongham Shipping Co. Ltd | 143/1 Tower Road, Sliema, SLM1604, Malta | Tongham Shipping Co. Ltd is a wholly owned subsidiary of Woking Shipping Investments Ltd, owned by IRISL. | 23.05.2011 |
| 112.c. | Uppercourt Shipping Company Limited | 143/1 Tower Road, Sliema, SLM1604, Malta | Uppercourt Shipping Company Limited is a wholly owned subsidiary of Woking Shipping Investments Ltd, owned by IRISL. | 23.05.2011 |

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| | Name | Identifying information | Reasons | Date of listing |
|--------|----------------------------------|--|---|-----------------|
| 112.d. | Vobster Shipping Company | 143/1 Tower Road, Sliema, SLM1604, Malta | Vobster Shipping Company is a wholly owned subsidiary of Woking Shipping Investments Ltd, owned by IRISL. | 23.05.2011 |
| 113. | Lancelin Shipping Company Ltd | Fortuna Court, Block B, 284 Archiepiskopou Makariou C' Avenue, 2nd Floor, 3105 Limassol, Cyprus. Business Registration #C133993 (Cyprus), issued 2002 | Lancelin Shipping Company Ltd is wholly-owned by IRISL. Ahmad Sarkandi is the manager of Lancelin Shipping. | 23.05.2011 |
| 114. | Ashtead Shipping Company Ltd | Business registration #108116C, Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man | Ashtead Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 115. | Byfleet Shipping Company Ltd | Byfleet Shipping Company Ltd - Business Registration #118117C, Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man | Byfleet Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 116. | Cobham Shipping Company Ltd | Business Registration #108118C, Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man | Cobham Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 117. | Dorking Shipping Company Ltd | Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man Business Registration #108119C | Dorking Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |

| | Name | Identifying information | Reasons | Date of listing |
|------|-----------------------------------|--|---|-----------------|
| 118. | Effingham Shipping Company Ltd | Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man Business Registration #108120C | Effingham Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 119. | Farnham Shipping Company Ltd | Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man Business Registration #108146C | Farnham Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 120. | Gomshall Shipping Company Ltd | Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man Business Registration #111998C | Gomshall Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |
| 121. | Horsham Shipping Company Ltd | Manning House, 21 Bucks Road, Douglas, IM1 3DA, Isle of Man Horsham Shipping Company Ltd - Business Registration #111999C | Horsham Shipping Company Ltd is an IRISL front company located in the Isle of Man. It is 100 percent owned by IRISL and is the registered owner of a vessel owned by IRISL or an IRISL affiliate. Ahmad Sarkandi is a director of the company. | 23.05.2011 |