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# Security Council

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## Note by the President of the Security Council

In paragraph 2 of resolution 2049 (2012), the Security Council requested the Panel of Experts established pursuant to resolution 1929 (2010) to provide a final report to the Council with its findings and recommendations.

Accordingly, the President hereby circulates the report dated 3 June 2013 received from the Panel of Experts (see annex).

* Reissued for technical reasons on 25 June 2013.

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## Annex

### Letter dated 3 June 2013 from the Panel of Experts established pursuant to resolution 1929 (2010) addressed to the President of the Security Council

On behalf of the Panel of Experts established pursuant to Security Council resolution 1929 (2010), I have the honour to transmit herewith, in accordance with paragraph 2 of resolution 2049 (2012), the final report on its work.

(*Signed*) Salomé **Zourabichvili**
Coordinator
Panel of Experts established pursuant to resolution 1929 (2010)

(*Signed*) Jonathan **Brewer**
Expert

(*Signed*) Kenichiro **Matsubayashi**
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Expert

# Final report of the Panel of Experts established pursuant to resolution 1929 (2010)

## Contents

*Summary*

Concerns about the peaceful nature of the nuclear programme of the Islamic Republic of Iran remain unresolved. The international community is continuing to follow a dual-track approach to addressing the issue through both targeted Security Council sanctions and negotiations.

Negotiations between the Islamic Republic of Iran and the E3+3,* led by Catherine Ashton, High Representative of the European Union for Foreign Affairs and Security Policy, have continued. A meeting is planned between Lady Ashton and representatives of the Islamic Republic of Iran for 15 May 2013.**

The Islamic Republic of Iran has heightened concerns by announcing plans for further developments in its nuclear programme. It has begun installation of a more advanced centrifuge, the IR-2m, at the Natanz Fuel Enrichment Plant. The International Atomic Energy Agency (IAEA) reports no progress in the clarification of outstanding safeguards issues or issues relating to the possible military dimensions of the Iranian nuclear programme. At the same time, the Islamic Republic of Iran has converted a portion of its 20 per cent enriched uranium to reactor fuel. This may be, in part, an effort to allay international concerns about a growing stockpile of uranium that could be quickly converted to non-peaceful purposes but it is also a demonstration of technical progress.

The Islamic Republic of Iran has launched ballistic missiles, in violation of its Security Council obligations, however no significant technological developments have been reported. There are reports of at least two failed satellite launches over the last year.

During the Panel's current mandate, the Security Council Committee established pursuant to resolution 1737 (2006) received one report of transfers of conventional arms by the Islamic Republic of Iran. This is not an indication that such transfers are not taking place. The Panel takes note of other information from States regarding conventional arms transfers from the Islamic Republic of Iran to other countries.

The economic and currency crisis faced by the Islamic Republic of Iran is widely recognized, including by the Iranian authorities. It is difficult to distinguish the impact of United Nations targeted sanctions aimed at prohibited activities and designated individuals and entities from that of stronger and more comprehensive sanctions imposed by States on a unilateral basis.

The Islamic Republic of Iran continues to seek items for its prohibited activities from abroad using multiple and increasingly complex procurement methods, including front companies, intermediaries, false documentation and new routes. These methods require States to exercise additional vigilance and expertise in order to identify suspicious transactions.

The issue of below-control-threshold procurement poses challenges to States seeking to maintain legitimate trade with the Islamic Republic of Iran while not contributing to its prohibited activities.

Iranian reliance on procurement abroad provides the international community with an opportunity to limit its ability to maintain and expand prohibited activities. Cooperation between countries and outreach from the Committee and the Panel remain high priorities in efforts to promote implementation of the resolutions and prevent circumventing of the sanctions.

* The E3+3 countries include France, Germany, the United Kingdom of Great Britain and Northern Ireland, China, the Russian Federation and the United States of America.

** The present report was first submitted to the Security Council Committee on 8 May 2013.

# Recommendations

1. The Panel recommends that the Security Council and the Committee established pursuant to resolution 1737 (2006), in accordance with existing practice, designate of the following entity, Pentane Chemistry Industries, to be in violation of paragraph 12 of resolution 1929 (2010) for the procurement of valves for use in the Arak heavy water reactor. This recommended designation is supported by documentary and factual evidence.

2. The Panel recommends that the Committee encourage States to be alert to the attempted procurement of items for prohibited purposes, including items that fall below control thresholds, and to issues relating to end use and end users. This could take the form of an Implementation Assistance Notice.

3. The Panel recommends that the Committee consider making available on its website an information sheet identifying the vessels currently under the control of the designated Irano Hind Shipping Company, along with their International Maritime Organization (IMO) numbers, and reminding States of the need for additional vigilance over their operations. In addition, the Panel recommends that the Committee consider issuing guidance about measures States should take regarding vessels currently owned or controlled by the Irano Hind Shipping Company when they are transferred to companies that are not affiliated with the Irano Hind Shipping Company following the company's liquidation, and request that States report any relevant developments.

4. Noting ambiguities reported by States in the language of the resolutions concerning the phrases "entities acting on their behalf or at their direction", and "entities owned or controlled by them", the Panel recommends that the Committee consider providing guidance to States on how to implement such language.

5. The Panel recommends that the Committee provide States with guidance, possibly in the form of an Implementation Assistance Notice, regarding the issues of timing and content of reports by States to the Committee, of inspection by the Panel and the disposal of items seized or interdicted on the basis of a suspected violation of resolution 1929 (2010) and prior resolutions.

6. The Panel recalls its recommendation that the Committee address discrepancies between the individuals designated and those who now hold the positions identified by such designations.

# I. Introduction

1. The present report has been prepared in accordance with the Expert Panel's mandate as set forth in paragraph 29 of Security Council resolution 1929 (2010) and renewed by its resolution 2049 (2012) of 7 June 2012. It summarizes the Panel's work over the last year, including inspections of reported sanctions violations, consultations with Member States, outreach to States and the private sector, and discussions with outside experts. These activities are described in further detail in paragraphs 6 to 17 below.

2. The Panel, which consists of eight members, was reappointed by the Secretary-General on 5 July 2012 (S/2012/521). The Panel's composition is as follows: Salomé Zourabichvili (France), Coordinator; Jonathan Brewer (United Kingdom of Great Britain and Northern Ireland); Kenichiro Matsubayashi (Japan); Thomas Mazet (Germany); Jacqueline Shire (United States of America); Elena Vodopolova (Russian Federation); Olasehinde Ishola Williams (Nigeria); and Wenlei Xu (China).

## A. Methodology

3. The Panel carries out its work on the basis of the mandate set forth in paragraph 29 of resolution 1929 (2010), mindful of the methodological standards contained in the report of the Informal Working Group of the Security Council on General Issues of Sanctions of 22 December 2006 (S/2006/997) and further described in *Best Practices and Recommendations for Improving the Effectiveness of United Nations Sanctions*. The Panel operates under the direction of the Security Council Committee established pursuant to resolution 1737 (2006).

4. The Panel, as an independent expert body, has endeavoured to ensure that its findings are substantiated, that information contained in its reports derives from credible sources and is as verifiable as possible, and, in the case of reported violations of sanctions, includes, wherever possible, first-hand, on-site observations by the experts themselves. The Panel has also been mindful of the importance of maintaining the confidentiality of sources of information, when requested. The Panel's decisions are reached by consensus; where there are differences, the majority carries and dissenting views are reflected.

## B. Acknowledgments

5. The Panel wishes to acknowledge the high degree of cooperation received from many States during the course of its work. It also acknowledges valuable and proactive engagement from many private sector entities. The Panel wishes to thank and acknowledge the support it has received from the United Nations Secretariat.

# II. The Panel's activities

6. The Panel's activities have been carried out in conformity with its programme of work for the period from 9 June 2012 to 8 June 2013, as required by the Security Council in paragraph 2 of its resolution 2049 (2012). During its current mandate, the

Panel has held consultations with 29 Member States.[1] The Panel conducted investigations on reported alleged sanctions violations and submitted six reports to the Committee. The Panel submitted its midterm report to the Committee on 9 November 2012. At the request of the Committee, the Panel also reported a compilation of publicly available statements regarding arms transfers to Gaza.

## A. Consultations

7. The Panel's visits reflect the priority it gives to consultations with members of the Security Council, States involved in the diplomatic process with the Islamic Republic of Iran, bordering or regional States and relevant international organizations. The consultations also take into account Iranian interests and activities in various regions of the world.

8. The Panel notes the heightened awareness among Member States regarding sanctions implementation, as reflected in the number of reported alleged violations. Although some States remain without sufficient capacity to fully implement United Nations sanctions, the Panel is encouraged by the high level of commitment among most of its interlocutors to the effective implementation of the sanctions contained in the relevant Security Council resolutions.

9. The Panel has held consultations, as appropriate, with United Nations experts belonging to the Office of Disarmament Affairs, the International Atomic Energy Agency (IAEA) and experts working under the mandates contained in other Security Council resolutions.

## B. Outreach and related activities

10. From the beginning of its mandate, the Panel identified outreach as one of its priorities. Consistent with the Committee's direction and its encouragement of such activities, the Panel has been proactive in making contact with States and organizations in the private sector relevant to sanctions implementation, as well as individual experts and non-governmental organizations.

11. The Panel has worked with think tanks to organize regional seminars bringing together practitioners and experts to discuss the implementation of the relevant Security Council resolutions and challenges they pose. Three such seminars have been held during the Panel's current mandate:

(a) Buenos Aires on 19 and 20 November 2012, organized in collaboration with the International Institute for Strategic Studies (IISS), London, and the Non-Proliferation for Global Security Foundation, Buenos Aires;

(b) Auckland, New Zealand, on 16 January 2013, organized in collaboration with IISS;

(c) Lomé on 14 and 15 May 2013, organized by the Togolese Government and the Institute for Security Studies, Pretoria, with the support of the United Nations Regional Centre for Peace and Disarmament in Africa, Lomé.

[1] See annex I for the full list of countries visited by the Panel during its current and previous mandates.

12. The Panel was also invited to participate in conferences and seminars, including the Asian Export Control Seminar in Tokyo; the Financial Action Task Force (FATF) plenary, some FATF working groups and one FATF regional body; and the Workshop on Non-Proliferation and Export Compliance in Carbon Fibre and Metal Alloy Industries, held in Dalian, China.[2]

13. The Panel also met, held teleconferences or corresponded with experts affiliated with think tanks and universities and with representatives of many private companies (manufacturers, freight forwarders, shippers, banks and others).

## C. Assessment of implementation reports

14. During the reporting period only three implementation reports were received under resolution 1929 (2010), bringing the total number of such reports to 84 (see annex II). Over half of the Member States have yet to report. Of those that have reported, many provided minimal details. The Panel concluded that the reports would be more informative if Member States were to provide, on a voluntary basis, detailed information regarding the implementation of sanctions in practice.

15. In July 2012, the Committee, with the assistance of the Panel, held the first open briefing for States Members of the United Nations, in New York. This exercise enabled Member States to hear from the Committee and the Panel, ask questions and gain a better understanding of issues related to sanctions implementation and the work of the Committee.

## D. Reports submitted by the Panel

16. The Panel has conducted investigations or inspections on the basis of six reports submitted by States:[3] one of the reports involved transfers of conventional arms; four were related to procurement of various items alleged to be for prohibited activities; and one concerned launches of ballistic missiles. Summaries of the Panel's inspection reports are contained in paragraphs 18 to 55 below. The Panel also reported, as requested by the Committee, a compilation of public statements regarding alleged transfers of arms to Gaza.

17. The Panel wishes to emphasize the positive example set by those Member States which reported incidents of non-compliance. It would also like to highlight the high level of cooperation it has received from Member States and entities approached during its inspections and investigations.

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[2] Organized by King's College, London, and the China Arms Control and Disarmament Association.

[3] Inspection teams generally consist of up to four Panel experts. The present report will refer to "the Panel" and not "members of the Panel" as all inspections and the subsequent reports engage the Panel as a whole.

# III. Inspections of reported alleged violations[4]

## Procurement of valves (Germany)

18. This case involves the acquisition of 1,767 valves on behalf of Modern Industries Technique Company, beginning in 2007 and continuing into 2011, for the IR-40 heavy water research reactor under construction at Arak. Out of the original total, 1,163 valves reportedly reached the company, which is designated under resolution 1929 (2010) as "responsible for design and construction of the IR-40 heavy water reactor in Arak".

19. The Panel obtained several documents, including one from the company itself, addressed to Pentane Chemistry Industries, which contained detailed technical specifications for the valves. The order fell into three categories of valves that were initially all intended to be procured in Germany. Because of scrutiny from export control authorities and heightened vigilance over such transfers to the Islamic Republic of Iran, some of the valves were commissioned by the same Iranian agent overseeing procurement in Germany to be procured and manufactured in a third country.

20. One group of 856 valves had a number of features consistent with use in the context of a heavy water reactor, including the material specified for valve body construction, welded, bellows sealed valves, valve stem packing material, valve actuators specified according to the Institute of Electrical and Electronic Engineers (IEEE) Standard 382 2006 for nuclear power generating stations and actuators with an Ingress Protection (IP) rating of 67.

21. This procurement involved the use of front companies in other third countries and false end-user documentation. It also highlights the involvement of Pentane Chemistry Industries in procurement on behalf of Iranian heavy water-related activities. A previous case investigated by the Panel and reported to the Committee involving an attempted procurement of phosphor bronze wire mesh also involved this same entity.

22. The Panel concluded that Iranian procurement of these valves is an activity prohibited under resolution 1929 (2010) and that, as such, it constituted a violation of the country's Security Council obligations.

## Interdiction of valves (Sweden)

23. This case involves the attempted acquisition of 18 valves by the Islamic Republic of Iran using a procurement agent based in Sweden, a naturalized Swedish citizen of Iranian origin who had established a company in Sweden in order to procure items on behalf of Iranian entities. The individual had an irregular employment history and no specialized training in the engineering equipment he was seeking to procure. The company, Petroinstrument HB, initially came to the attention of Swedish authorities on the basis of suspicious transactions reports submitted by two Swedish banks in late 2010 and early 2011.

[4] The full text of the inspection and investigation reports submitted since June 2012 is included in a confidential annex available only to members of the Security Council.

24. The attempted shipment involved changing the name and address on the air waybill of the consignee in a third country to one in the Islamic Republic of Iran after the details had been submitted to customs for clearance procedures.

25. A search of the procurement agent's home following the valve seizure turned up documents from previous transactions that shed light on his activities, including several types of blank end-user certificates.

26. None of the valves in this case are on the lists contained in IAEA document INFCIRC/254/Rev.7/Part 2.[5] The Panel determined that, based on their technical specifications, four bellows sealed valves could be used in activities prohibited under resolution 1929 (2010) and that the non-bellows sealed valves could have applications in auxiliary systems of prohibited nuclear activities.

27. In the absence of information regarding the end user in the Islamic Republic of Iran, the Panel could not establish whether the attempted exports constitute a violation under the relevant resolutions. However, the Panel noted that in the attempted export efforts, multiple techniques were used to evade effective export controls, including obscuring the end use or end user of the valves by means of false end-user certificates and attempting the acquisition of technology that falls below established control thresholds.

## Interdictions of carbon fibre, aircraft spare parts and water measuring equipment (Bahrain)

### Carbon fibre

28. This case involves the shipment of 28 boxes of carbon fibre from a third country to the Islamic Republic of Iran, which was interdicted in Bahrain. The consignee of the shipment was identified as Science and Technology Park in the Islamic Republic of Iran.

29. According to Bahraini authorities, the carbon fibre met the control thresholds established by IAEA in document INFCIRC/254/Rev.7/Part 2, which would constitute a violation of relevant resolutions. High-quality carbon fibre, in particular, is widely assessed to be a target for procurement by the Islamic Republic of Iran. The Panel was unable to establish the technical specifications of the carbon fibre or to confirm information regarding its grade.

30. The Panel's investigation identified a link between the stated consignee and an entity in the Islamic Republic of Iran associated by two States with procurement for the country's prohibited nuclear activities. The Panel has no further information regarding the alleged end user's relationship to activities prohibited under relevant resolutions.

### Aircraft spare parts

31. In November 2010, a shipment of aircraft spare parts was shipped by air from one country to Bahrain through a third country. The seized consignment consisted of

[5] On 4 March 2013, the Committee updated the list of items referred to in para. 13 as follows: the lists of items in INFCIRC/254/Rev.9/Part 1 and INFCIRC/254/Rev.7/Part 2 were superseded by the lists of items in INFCIRC/254/Rev.11/Part 1 and INFCIRC/254/Rev.8/Part 2.

some 40 items, including seals, valves and related parts for Fokker 27 small passenger planes. According to the consignor, the shipment as a whole was of use only in Fokker 27 aircraft.

32. According to the invoice provided by the Bahraini authorities, the consignee was identified as a Bahraini trading company for transit to ANA Trading in the Islamic Republic of Iran, which the Panel associated with procurement on behalf of the Iranian military. However, the invoice provided to the Panel by the consignor in a third country made no reference to the Islamic Republic of Iran as the ultimate destination.

33. The Panel concluded that it required additional information regarding the end use and/or end user of the spare parts in order for it to establish a violation of United Nations sanctions.

#### Water measuring equipment

34. According to information provided by Bahraini authorities, the seized consignment, described as “pumps” and “water measuring equipment”, originated with a firm in a third country and was imported by a Bahraini trading company. The consignment was to be re-exported to an Iranian firm identified by Bahraini authorities as Behbood Farayand Control Co. The Panel has not identified any links between the Iranian firm and proliferation-sensitive activities.

35. The Panel concluded it would require additional information regarding the items in question and their end use or end user in order to determine whether this transfer constitutes a violation by the Islamic Republic of Iran of relevant resolutions.

### Interdictions of process control equipment, bellows, cables and batteries (State X)

#### Process control equipment

36. Components of a programmable logic controller and related process control equipment and software were confiscated while in transit to the Islamic Republic of Iran. They were reportedly for use in the Iranian nuclear programme and for re-shipment to Kalaye Electric, a designated entity. They were sent by express parcel service from a company abroad to an individual in Tehran.

37. The Panel’s investigations demonstrated that the items could be used in Iranian prohibited nuclear activities, although they also have other industrial applications. The items are not controlled by lists in relevant resolutions. The Panel established that the individual is a manager or director of the Iranian Simatec Development Company. Several States linked Iranian Simatec Development with procurement on behalf of the Kalaye Electric Company.

38. Based on information available to the Panel, it was not possible to conclude whether this attempted procurement was a violation of the relevant resolutions.

#### Bellows

39. Two hundred stainless steel bellows in transit to the Islamic Republic of Iran were confiscated. They were reportedly for use in the Iranian nuclear programme

and for re-shipment to the Kalaye Electric Company. They were sent by express parcel service from a company abroad to an individual in Tehran. The bellows were of single-ply construction with dimensions suitable for use in bellows sealed valves or as pipework connections (they were not suitable for use in centrifuge rotors).

40. The Panel's investigations indicated that the bellows had many industrial applications and could be used in Iranian prohibited nuclear activities. They are not controlled by lists in relevant resolutions. The individual's address as shown on the shipping documentation was found to be identical to that of the Eyvaz Technic Company. Several Member States associated that company with proliferation-sensitive activities in connection with uranium enrichment sites at Natanz and Qom/Fordow.

41. Based on information available to the Panel at the time, it was not possible to conclude whether this attempted procurement was a violation of the relevant resolutions.

### High-quality cables

42. Fourteen rolls of cables in transit to the Islamic Republic of Iran were confiscated. They were reportedly for re-shipment to the Shahid Hemmat Group, a designated entity. Shipping documentation listed both the consignor and consignee (Daryabar, Tehran) as freight forwarders.

43. The Panel's investigations indicated that the cables appeared to be industrial standard cables used to perform transfer of signal data. On the basis of available evidence, the Panel was not in a position to establish whether this attempted procurement was a violation of relevant Security Council resolutions.

### Lead acid batteries

44. A shipment of lead acid batteries was confiscated. The batteries were reportedly to be reshipped to the Iranian Setnic Company, which supplies batteries to Iranian uranium enrichment installations. The batteries were suitable for ensuring uninterrupted supply in the event of power failure.

45. On the basis of the available evidence, the Panel was not in a position to establish whether this attempted procurement was a violation of relevant Security Council resolutions.

## The *Jihan* (Yemen)

46. Yemeni authorities interdicted the vessel *Jihan* with a shipment of arms suspected of coming from the Islamic Republic of Iran. The Panel conducted a physical examination of the seized items and the vessel, interviewed the detained crew and analysed waypoint data retrieved from Global Positioning System (GPS) devices.

47. According to the crew members, all Yemenis, they sailed from Yemen to Chabahar in the Islamic Republic of Iran and were transferred via Bandar Abbas to Bandar Lengeh. They were then taken on a small boat towards the *Jihan*, which was floating off the coast, and subsequently started a voyage towards Yemen. At no time were immigration or emigration procedures carried out in the Islamic Republic of Iran.

48. The journey by boat from the shore to the *Jihan* was estimated by four crew members to be between 15 and 30 minutes. One of the crew members said that the small boat spent half an hour looking for the *Jihan*, which was 1 to 2 km from the shore when they found it. Another crew member estimated between 40 to 45 minutes for the journey, and one said that it took one hour. The speed of the small boat is not known but the Captain stated that the *Jihan* was located approximately two miles off the coast when the crew got on board the vessel.

49. En route to Yemen, the *Jihan* underwent two inspections by the Coast Guard of a third country, and the ship was eventually interdicted in Yemeni territorial water by a joint team of the Yemeni Coast Guard and the United States Navy.

50. The Panel has no information regarding the location at which the *Jihan* was loaded with arms, nor by whom.

51. The seized items consisted of ammunition, weapons and other military and non-military items and materials, including man-portable air defence systems, 122 mm rockets, rocket-propelled grenade launchers, C-4 plastic explosive blocks and electrical equipment that can be used to manufacture improvised explosive devices. A comparison of ammunition and weapons with those observed during previous inspections of seized arms and related materiel by the Panel identified several visual similarities, in particular among the labels stuck on ammunition boxes reading “Ministry of Sepah”.

52. The Panel’s investigation also identified several methods of concealment involved in the shipment, including falsified ship registration and relevant certificates for the *Jihan*. The seized items were concealed in four compartments hidden by diesel fuel tanks, which could not be accessed from the deck. These hidden compartments could be accessed only after the diesel fuel tanks were emptied.

53. Five members of the Panel found that all available information placed the Islamic Republic of Iran at the centre of the *Jihan* operation: the crew bypassed routine immigration and airport security procedures while in the country; and the voyage originated in Iranian territorial waters when the crew boarded the vessel at a point approximately two miles off the coast of Bandar Lengeh. The Panel identified similarities among some of the arms, as well as their packaging, with previously reported cases of arms shipments inspected by the Panel and found to have originated in the Islamic Republic of Iran.

54. Three members of the Panel noted that: no information was found about the time and location that the arms and other items were loaded on the *Jihan*; the statements of the crew on the boarding point were inconsistent; and one of the two key individuals arranging the shipment was a Yemeni businessman and the other’s nationality was unknown. Some of the arms and other items had visual similarities with items the Panel previously inspected and several concealment methods were involved.

55. Based on the above findings, the Panel reached two sets of conclusions: five members concluded that the shipment is a violation of paragraph 5 of resolution 1747 (2007); and three members concluded that it is a probable violation of paragraph 5 of resolution 1747 (2007).

### Ongoing investigations

56. The Panel has a number of ongoing investigations of reported cases, described below. In addition, the Panel is aware of a number of other cases that are expected to be reported to the Committee.

57. On 23 January 2013, Spain reported a violation concerning an export of machine tools. At the time the incident was reported, Spanish authorities noted that details of the operation could not be shared with the Committee because the matter was still part of a legal process. The Panel is awaiting additional information before commencing its investigation.

58. On 4 February 2013, Germany reported a violation concerning the export of technical equipment for use in satellite technology.

59. On 15 February 2013 and 4 March 2013, State X reported the confiscation of a variety of goods and materials suspected to be of use in prohibited programmes.

60. On 29 April 2013, the United States reported a violation involving the transfer and attempted transfer of items to Iran related to its prohibited nuclear activities. The items included vacuum equipment for test stands, pressure transducers and vacuum pumps, as well as materials for the fabrication of centrifuge machine components, including magnetic tape, maraging steel and aluminium alloys.

61. On 29 April 2013, the United States reported a violation involving the transfer of specialized metals to several entities in the Islamic Republic of Iran associated with the ballistic missile programme, including entities designated under resolution 1929 (2010) and previous resolutions.

62. On 11 April 2013, France reported that it received an export licence request for a fibre-optic gyroscope for a third country declared as the end user. The authorities of that third country interdicted the shipment once it became clear that an intermediary intended to re-export the goods to the Islamic Republic of Iran. The goods were then returned to France.

## IV. Analysis of compliance by the Islamic Republic of Iran with its Security Council obligations

63. This section details the Panel's assessment of the implementation by the Islamic Republic of Iran of its obligations under resolution 1929 (2010) and previous resolutions. It addresses developments in the areas of nuclear and ballistic missile activities, conventional arms transfers and activities involving designated individuals and entities.

### A. Nuclear programme

#### Recent developments

64. Below the Panel highlights recent developments in the Iranian nuclear programme and provides analysis of nuclear-related procurement priorities.

65. IAEA has reported extensively on the status of Iranian compliance with both its obligations under the Agency's safeguards and under Security Council resolutions.[6] In brief, IAEA has found that the Islamic Republic of Iran: continues to expand its uranium enrichment activities in violation of those obligations; is continuing construction of a heavy water research reactor; is continuing, contrary to its Safeguards Agreement, not to implement modified code 3.1; is not implementing its Additional Protocol; and has made no progress in resolving outstanding questions related to the possible military dimensions of its nuclear programme. Annex III contains a table illustrating developments in Iranian enrichment activity over the past year.

**Advanced centrifuges**

66. Among significant recent developments, the Panel notes the decision by the Islamic Republic of Iran to install advanced centrifuges with increased enrichment capacity. In February 2013, IAEA reported that the country was planning to install IR-2m centrifuges, which have a carbon fibre rotor, in a unit of Production Hall A.[7] Production Hall A consists of eight units of 18 cascades each. A single unit of 18 cascades would consist therefore of approximately 3,000 centrifuges (assuming cascades of up to 174 centrifuges). As of February 2013, these centrifuges were in the process of being installed.

67. It will take time to establish how well the IR-2m centrifuge is performing (its potential enrichment capacity is assessed by experts to be approximately four to five times greater than the IR-1 centrifuge). It should be noted that although the Islamic Republic of Iran has been testing IR-2 generation centrifuges at the Natanz Pilot Fuel Enrichment Plant since early 2008, it has operated only a single cascade of the IR-2m centrifuges since August 2011. Little is known about the manufacturing and engineering of the IR-2m by the Islamic Republic of Iran or how many it ultimately plans to install. The country is also testing other advanced centrifuges.

**Uranium mining activity**

68. Since the Panel's last report, the Islamic Republic of Iran has announced the opening of its second declared uranium mine, at Saghand, as well as the Shahid Rezayeenejad yellowcake processing facility. On 9 April 2013, President Ahmadinejad formally inaugurated the two facilities.[8] The Saghand mine is believed to have a capacity to process 50 tons of uranium annually. The Panel has noted previously that the combined annual output of the two declared uranium mines is inadequate to fuel a single 1000 MW reactor.

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[6] "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran", IAEA report of 21 February 2013 (GOV/2013/6) and previous reports.

[7] GOV/2013/6, paras. 11-13.

[8] Fars News Agency, "Iran Inaugurates Two More Uranium Facilities on Nuclear Technology Day", 9 April 2013.

## Procurement priorities

69. There is little publicly available information regarding current Iranian indigenous production capabilities, stocks of components and raw materials related to the country's prohibited nuclear activities. The Panel has received some information from States regarding specific targets for procurement by the Islamic Republic of Iran and has investigated a number of reported incidents providing some insight into procurement priorities.[9] The following provides an overview of the specific items investigated by the Panel, and their potential or established role in prohibited activities.

### Valves

70. The Iranian demand for high-quality valves was demonstrated by two cases investigated by the Panel. In one, the Panel was able to show through documentary and other evidence that the valves were intended for use in the IR-40 Arak heavy water research reactor. In the other case, it could not be established that the valves were intended for use in nuclear-related activities. However, the methods used, including false shipping documents, raised doubts about the nature of the procurement. In both cases the valves fell below established control thresholds.

### Process control equipment

71. Process control equipment, including pressure transducers, electro-pneumatic positioners, a programmable logic controller and related equipment and software were intercepted en route to the Islamic Republic of Iran. The technical specifications of the items seen by the Panel placed them below the established control thresholds. The Panel determined that all have applications in a number of industrial settings, including the operation of a nuclear reactor or centrifuge cascade. Several States informed the Panel that these items are procurement priorities for the Islamic Republic of Iran. Information available did not allow the Panel to establish whether the attempted procurement was a violation of the country's obligations under resolution 1929 (2010).

### Bellows

72. The Panel investigated a shipment of 200 stainless steel bellows, which it concluded were most consistent in size and shape for use in bellows sealed valves, or for use as a fitting or connector. The Panel noted that such bellows have a wide range of industrial uses, but could also be used in valves with prohibited applications. These bellows also fell outside of the control lists referenced in paragraph 13 of resolution 1929 (2010). Information available to the Panel was insufficient to establish whether the procurement was a violation of Iranian obligations under resolution 1929 (2010).

[9] The United Kingdom continues its practice, as noted in the Panel's final report of 4 June 2012 (S/2012/395), of sharing information regarding denials of export licenses in the context of its membership of the Nuclear Suppliers Group.

### Carbon fibre

73. One interdicted shipment of carbon fibre dating from 2010 was investigated by the Panel during this mandate.[10] The Panel was not able to establish the quality of the carbon fibre or whether it would be usable in prohibited nuclear activities (such as the construction of centrifuge rotors). There was circumstantial evidence to suggest that the carbon fibre may have been counterfeit. This carbon fibre was packaged in materials bearing the label of a well-known carbon fibre manufacturer. The attempted procurement suggests that the Islamic Republic of Iran was intending to acquire carbon fibre that can be used for prohibited nuclear activities. The Panel notes that carbon fibre has widespread industrial applications.

74. The Panel is aware of other carbon fibre procurement attempts highlighted by States during consultations. In one case, a subsidiary of a leading producer of carbon fibre reported receiving several suspicious inquiries in 2012 for several tons of high grade carbon fibre, suitable for use in gas centrifuges. One State expressed concern about the development of a secondary carbon fibre resale market dealing in surplus stocks of soon-to-expire carbon fibre at below market prices. A different State reported that investigations showed that Iranian procurers are likely to use Internet trading sites to make contact with intermediaries in order to procure carbon fibre.

75. Two other States have informed the Panel of recent carbon fibre interdictions that are yet to be reported to the Committee. These States also noted significant exports of carbon fibre both to the Islamic Republic of Iran and to other countries in its region. In other cases shared with the Panel, the declared end user raised suspicions.[11]

### Other items

76. In addition to the items noted above, States have informed the Panel that over the last six months, the Islamic Republic of Iran is known to have sought the following items with relevance to its prohibited nuclear activities:

(a) **Ring magnets**: ring magnets are used in the top bearing and suspension assembly of the gas centrifuge. Each gas centrifuge requires two ring magnets: one fitted to the top end cap of the high-speed rotor assembly and one fitted to a stationary mount;

(b) **Stainless steel tubes**: stainless steel tubing/piping can be used to connect gas centrifuges together to form cascades of gas centrifuges. Very small diameter stainless steel tubing is used to connect each gas centrifuge to a larger diameter cascade “header” pipework. A gas centrifuge plant, which consists of many cascade units and thousands of gas centrifuges, thus requires large quantities of stainless steel tubing/piping;

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[10] The issue of carbon fibre was addressed in detail in the Panel’s 2012 final report (S/2012/395).

[11] One example was a construction company in the Islamic Republic of Iran seeking a large quantity of carbon fibre; another involved an Iranian trading company that was known primarily for household consumer products and had no known reason for seeking high grades of carbon fibre.

(c) **Aluminium**: high strength aluminium alloys (such as the 7000-series) are used for the manufacture of centrifuge rotor tubes, baffles and end caps; medium strength alloys (6000-series alloys) can be used for centrifuge vacuum casings;

(d) **Inverters**: inverters or frequency changers are used to supply the high frequency electrical power required for the drive motor of the gas centrifuge. Depending on the design approach, one small inverter can be used for each gas centrifuge, or a larger inverter can be used to supply multiple gas centrifuges;

(e) **Semi-hard magnetic alloy**: semi-hard magnetic alloy, such as the cobalt-iron-vanadium magnetic alloy (for example, Vicalloy), in thin-strip or tape form is used for hysteresis type motors, including those used in some gas centrifuge models.

**Procurement of below-threshold items**

77. The Panel continues to be told by many States that the Islamic Republic of Iran is seeking items that fall below established control thresholds but could be used for prohibited activities. All of the nuclear-related cases investigated by the Panel during its current mandate involve items that are not found among the lists contained in paragraph 13 of resolution 1929 (2010). The issue of below-threshold procurement poses unique challenges to States seeking to maintain legitimate trade with the Islamic Republic of Iran while not contributing to prohibited activities. One State emphasized that “critical dual-use items are more at the centre of procurement than listed goods”.

**High-quality items**

78. The cases investigated by the Panel demonstrate that the Islamic Republic of Iran prefers to procure high-quality items from well-known suppliers. This is illustrated by the acquisition of valves for the Arak heavy water reactor, where German-made valves were preferred, although the country was ultimately forced to accept the manufacture of some valves made in another country.

**Continuing reliance on procurement abroad**

79. Although Iranian nuclear fuel cycle capabilities are well established in many areas, its reliance on procurement abroad continues to provide the international community with opportunities to limit its ability to maintain and expand certain activities.

**Procurement by the Islamic Republic of Iran of below threshold items**

80. The issue of identifying items that are not included on the control lists poses challenges to States seeking to maintain legitimate trade with the Islamic Republic of Iran while not contributing to prohibited nuclear activities.

## B. Ballistic missiles

81. This section provides a brief summary of recent developments related to Iranian ballistic missile activities and an analysis of those activities. These are based on information from States, non-governmental experts and media sources, in particular statements by senior Iranian officials.

## Recent developments

### Missile launches

82. Unlike the Iranian nuclear programme, much of which is under IAEA safeguards, the country's ballistic missile activities remain non-transparent to the international community, with the exception of periodic launches or tests, and statements, some of which may be exaggerated, by senior Iranian officials.

83. The Islamic Republic of Iran has a large, diverse arsenal of ballistic missiles, including both liquid and solid fuelled missiles of varying ranges.[12] The Panel notes that while the country engages in periodic exercises or test launches of its missiles, its longest range solid fuelled ballistic missile, the Sejil (Ashura), has not been seen publicly over the last year or involved in any launches of which the Panel is aware.

84. The most recent confirmed Shahab launches took place in July 2012, when the Islamic Republic of Iran staged the "Great Prophet 7" military exercises, conducted by the Aerospace Force of the Islamic Revolutionary Guard Corps. These included launches of the Shahab 1 and 3, Zelzal, Fateh-110 and Tondar missiles, as well as an anti-ship ballistic missile, the Khalij Fars. In January 2013, the Panel submitted a report to the Committee with its assessment of the launches, which concluded that "the Iranian launches of the Shahab 1 and 3 missiles during the Great Prophet 7 exercises held from 2 to 4 July 2012 constituted a violation by the Islamic Republic of Iran of paragraph 9 of resolution 1929 (2010)".

85. The Panel's analysis of the exercises, supported by independent satellite imagery, showed that a majority of the launched missiles hit their targets. "Nearly all the missiles fell within 2 km of the centre of the 6 $km^2$ air base".[13] This result was presented by the Islamic Republic of Iran as confirmation of the increased accuracy of its missiles. No new modifications or types of missiles were tested during these exercises. The Shahab 3 missiles launched were characterized by one Member State as a "classic" Shahab 3 missile, with a range of approximately 1,000 km.[14]

86. On 4 August 2012 the Islamic Republic of Iran test-fired what was described by Iranian officials as a new variant of the Fateh-110 short-range ballistic missile with an upgraded guidance system. Defence Minister Ahmed Vahidi was quoted saying that "the fourth generation of high-precision Fateh-110 missiles with a range of over 300 km was test-fired by the defence ministry's aerospace industries organization".[15] On 27 April, Defence Minister Vahidi announced that new cruise and ballistic missiles would be unveiled within six months.[16]

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[12] The Panel's 2012 final report (S/2012/395) provides details about the Iranian missile arsenal.

[13] "Satellite Imagery Shows Accuracy of Iran's Ballistic Missiles", *Jane's Defence Weekly*, 31 October 2012.

[14] "Iran's Nuclear and Missile Potential: A Joint Threat Assessment by U.S. and Russian Technical Experts", East West Institute, May 2009, and "Iran's Ballistic Missile Capabilities: A Net Assessment", International Institute for Strategic Studies, 2010.

[15] Fars News Agency, 4 August 2012. See also *Jane's Intelligence Weekly*, "Iran test-fires upgraded Fateh-110 missile", 6 August 2012.

[16] Mehr News Agency, "Minister Says Iran to Unveil New Ballistic Missile", 27 April 2013.

### Space launch activities

87. There are conflicting reports regarding Iranian space launch activities. In February, Ahmad Fazeli, the head of the Iranian Space Agency, announced that several new satellites, made primarily by Iranian university students, would be sent into orbit over the next year, starting with a communications satellite.[17] The Panel notes that there have been no announced successful launches of satellites. There are reports of two failed launches in the mandate period, one on 22 September 2012 and one on 17 or 18 January 2013.[18]

88. In January 2013, Iranian State television broadcast images of a Pishgam rocket taking off carrying a primate and Government officials announced the successful launch and landing of a bio-capsule containing a primate.[19] The Defence Ministry's Aerospace Industries Organization said that "the capsule was sent to an orbit beyond 120 km in altitude and carried out telemetry of the environmental data records". Iranian officials later denied allegations of differences in photos of the primate before and after the launch, insisting that the bio-capsule returned to earth safely.[20]

89. Until now, all satellites (the Omid, Rasad-1, and Navid)[21] have been launched using variants of a two-stage liquid-fuelled Safir space launch vehicle. The Simorgh, a two-stage liquid-propellant space launch vehicle, with a potential capacity to launch heavier objects into higher altitudes, was unveiled on 3 February 2010, but it is not yet in operational use. No new space launch vehicles were tested or launched during the reporting period.

### Launch facilities

90. According to statements by Defence Minister Vahidi, as of June 2012, approximately 80 per cent of the construction of the Khomeini Space Centre near Semnan in the northern part of the Islamic Republic of Iran was completed. Commercial satellite imagery confirmed that the country is expanding its rocket launch capabilities at the Semnan Space Centre to accommodate larger missiles and space launch vehicles, likely to include the Simorgh 3 space launch vehicle.[22] Some experts suggest that the country will be able to launch the new Simorgh space launch vehicle by mid-2013.

### Cooperation between the Democratic People's Republic of Korea and the Islamic Republic of Iran

91. Assessments of cooperation between the Democratic People's Republic of Korea and the Islamic Republic of Iran are contradictory. Some experts continue to believe that the Democratic People's Republic of Korea provides scientific and material support to the Islamic Republic of Iran. Others have concluded that cooperation between the two States is limited to expertise. The Panel has sought information from States and the Democratic People's Republic of Korea Panel

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[17] Fars News Agency, "Iran to Send Six New Home-Made Satellites into Orbit Next Year", 19 February 2013.

[18] "For Third Time in Two Years, Iran Fails to Launch Satellite", Times of Israel, 27 February 2013. "Iran suspected of suffering launch failure in February", Spaceflight101, 20 March 2013.

[19] Fars News Agency, "Iran Takes First Step to Send Man to Space", 28 January 2013.

[20] Mehr News Agency, "Iran's Space Monkey Mission was not Fake, Pictures Reveal", 3 February 2013.

[21] Launches took place on February 2009, 16 June 2011 and 3 February 2012, respectively.

[22] "Iran's rocket programme", *Jane's Intelligence Review*, vol. 24, Issue 10 (1 October 2012).

regarding such cooperation. Although there are reports of Iranian officials present at launches of missiles by the Democratic People's Republic of Korea, the Panel has seen no evidence of specific technical cooperation.

**Nuclear warhead development**

92. Since November 2011, there has been no additional information reported by IAEA regarding alleged Iranian activities to integrate a nuclear payload onto a ballistic missile.[23]

## Procurement priorities

93. The Panel has received little information regarding Iranian procurement efforts explicitly for ballistic missile-related items. The Panel investigated the seizure of high-quality cables, which were suspected to have been procured on behalf of the Shahid Hemmat Industrial Group, an entity designated under resolution 1737 (2006). The cables involved were designed for data transmission. In this case, the Panel was not able to establish a link to illicit procurement on behalf of Iranian prohibited missile activities or that this attempted procurement was a violation of the relevant resolutions.

94. The Panel is currently investigating additional reported seizures that allegedly implicate the Islamic Republic of Iran in procurement on behalf of its ballistic missile programme, including aluminium rods, steel bars, vibration measuring devices, a fibre-optic gyrocompass and specialized metals.

95. The Panel continues to receive information from Member States regarding Iranian attempts to procure high grade carbon fibre on behalf of the nuclear programme. The Panel notes that carbon fibre is also used in ballistic missile programmes.

96. The relative lack of success achieved with space launches by the Islamic Republic of Iran over the mandate period, and the absence of tests of Sejil variants, could reflect procurement difficulties. If true, this would indicate that States are exercising heightened vigilance over sensitive ballistic missile-related items. Nonetheless, Iranian officials continue to announce, at regular intervals, advancements or innovations in activities involving ballistic missile technology.

## Findings

97. No significant, new missile capabilities were demonstrated by the Islamic Republic of Iran during the mandate period. The country has continued to violate its obligations under the relevant Security Council resolutions with launches of ballistic missiles.

98. Despite at least partial success in making its ballistic missile programme indigenous, the Islamic Republic of Iran remains reliant on foreign suppliers for technology, some components and raw materials. Preventing supply of these items is critical for international efforts to slow prohibited Iranian ballistic missiles activities.

[23] See GOV/2011/65.

## C. Conventional arms and related materiel

99. This section describes transfers of arms and related materiel by the Islamic Republic of Iran during the reporting period. It reflects, primarily, the Panel's analysis of the incidents on which it has submitted reports to the Committee based on findings from inspections and information provided to it during consultations and obtained from open sources.

### Recent developments

100. During the reporting period only one incident of non-compliance was reported to the Committee concerning conventional arms transfers by the Islamic Republic of Iran. On 14 February 2013 Yemen reported a transfer of conventional arms and related materiel involving the Islamic Republic of Iran. In addition, at the direction by the Committee, the Panel reported a compilation of public statements made by senior Iranian and local officials regarding Iranian arms transfers to Gaza.

101. Some States, other Security Council expert groups and reports available in the public domain suggest continuing arms transfers by the Islamic Republic of Iran within the region and to African States such as Côte d'Ivoire, Kenya and Somalia. The Panel was also informed that the country continues to seek ways and means to transfer arms to groups in the region, despite the limitations imposed by the sanctions measures under the relevant Security Council resolutions.

### Analysis

102. **The *Jihan* (Yemen) case**: the *Jihan* (Yemen) is described in paragraphs 46 to 55 above.

103. **Transfer of explosives to Kenya**: two Iranians have been convicted for importing explosives from the Islamic Republic of Iran in connection with planning terrorism-related activities in Kenya.[24] Information obtained from one State suggests that the Quds Force of the Islamic Revolutionary Guard Corps. was involved in this matter. The Panel has been in contact with Kenyan authorities and will continue to investigate, as appropriate.

104. **Alleged arms transfers to Gaza**: the Panel reported to the Committee a compilation of public statements on arms transfers to Gaza. The Panel noted that senior Iranian officials, including the Commander-in-Chief of the Islamic Revolutionary Guard Corps.[25] have publicly stated that they provided military and financial assistance to non-State actors in Gaza. The recipients acknowledged receiving weapons and rockets from the Islamic Republic of Iran in November 2012. The Panel was requested to continue monitoring this issue.

105. During its visit to Israel, the Panel examined the remnants of several types of rockets that had recently landed in Israeli territory. The physical markings of the remnants appeared similar to those of the 107 mm rockets observed by the Panel

[24] BBC, "Iranians jailed for life in Kenya over terror charges", 6 May 2013.

[25] The predecessor, Major General Yahya Rahim Safavi, is on the Consolidated List of Individuals and Entities under reference number I.37.E.1.

during an inspection of a previous violation by the Islamic Republic of Iran. The Panel notes that further technical analysis is necessary to confirm these similarities and the origin. The Panel has been informed by one State that reduction of media reports of arms transfers to Gaza is the result of disabling and closing tunnels.

106. **Alleged arms transfers to the Syrian Arab Republic via Iraqi airspace**: States have reported that the Islamic Republic of Iran is continuing to send arms and related materiel to the Syrian Arab Republic via Iraqi airspace. In particular, two States reported that in 2012 the Islamic Republic of Iran used Iran Air and Mahan Air to transport arms from Teheran to Damascus.[26] The Committee has not received reports of such transfers. Iraqi authorities informed the Panel that their inspection of two aircraft on their way from the Islamic Republic of Iran did not confirm such transfers. Media have reported a third inspection but also without any arms being found.[27]

107. States also reported to the Panel attempts by the Islamic Republic of Iran to transfer raw material, spare parts and technology in order for the recipient countries to later assemble and produce armaments.

108. **Arms and related materiel in African States**: the Panel has been following the issue of Iranian arms and ammunition found in African States, in particular in:

(a) **Sudan**: information from two States indicates that alleged Iranian arms transfers to the Sudan were ongoing in the last few years. These transfers were said to be part of a memorandum of understanding on military cooperation concluded in 2007 between the two States. An air raid in January 2012 destroyed a factory in southern Khartoum that was allegedly engaged in manufacture or assembly of weapons under the same memorandum of understanding;

(b) **Somalia**: Iranian arms transfers to Al-Shabab in Somalia have also been widely reported;[28]

(c) **Côte d'Ivoire**: the Group of Experts on Côte d'Ivoire, in its 2013 final report, described ammunition found that was "similar to Iranian production".[29] The Group could not determine when the ammunition was transferred to Côte d'Ivoire or by whom. The report includes photographs of ammunition and packaging, in particular green plastic bags, some of which appear visually similar to those seen by the Panel during its previous inspections.

109. The Panel continues to seek additional information and evidence to confirm these allegations independently.

## D. Procurement methods

110. The following provides the Panel's assessment of the methods and strategies used by the Islamic Republic of Iran for the procurement of items that can be used

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[26] One of these States reported that from October 2011 to October 2012 the frequency of such flights diminished but at the same time flights between these airports and Baghdad Al Muthanna Airport increased.

[27] "Iraq inspects Iranian Cargo Plane Bound for Syria", Agence France-Presse, 15 April 2013.

[28] "Iran denies shipping arms to Islamist militants in Somalia", Reuters, 14 February 2013.

[29] S/2013/228, para. 49.

for prohibited programmes. Much of this assessment is based on the Panel's investigations of cases reported to the Committee during the mandate period.

**Use of front companies**

111. In several cases investigated by the Panel, front companies were established with the aim of overseeing procurement and shipments to the Islamic Republic of Iran, or providing a false address for the delivery of items. One case investigated by the Panel involved the shipment of items to a front company in a third country, established to be the consignee. Another case, which could not be linked conclusively to procurement on behalf of prohibited nuclear activities, involved a dual-national who was reportedly approached by Iranians to establish a trading company in a European country solely for the purpose of procuring items to be shipped to the Islamic Republic of Iran.

112. Other types of front companies that might be used for prohibited procurement could be so-called "shell" companies, often set up in jurisdictions which offer quick and inexpensive registration procedures and which may hide legal ownership of an entity. Such companies may be used by individuals or companies to conduct all sorts of business transactions, including financial transactions.[30] They typically have limited liability and no significant assets or employment, and no physical presence other than a mailing address.

113. Offshore centres may host thousands of registered businesses or financial institutions and, with limited regulatory resources, may rely on corporate service providers, which themselves may operate through "introducers", to carry out due diligence. Such centres could be vulnerable to exploitation by the Islamic Republic of Iran for the purpose of circumventing sanctions.

114. Front companies could also be short-term businesses set up for the purposes of carrying out a single procurement operation before being closed down.

**Intermediaries in the procurement chain**

115. Some cases of procurement investigated by the Panel involved multiple intermediaries or trading agents (including brokers, shippers and freight forwarders), which served to obscure the identity of the ultimate end users thus adding to the difficulty of detecting procurement of prohibited items. In one case intermediaries in third countries were used to provide false end-user certificates or to take receipt of items before transferring them to the Islamic Republic of Iran.

**Involvement of freight forwarders**

116. The Panel has previously highlighted the practice of altering shipping documentation at the last minute in order to conceal the Islamic Republic of Iran as the ultimate destination of shipments. In one case investigated by the Panel, a procurement agent arranged with a freight forwarder for air waybills to be altered in more than two dozen cases, following the initiation of the customs clearance process and shortly prior to shipment. Detecting last-minute changes to shipping documentation remains a challenge for customs authorities.

[30] The compliance officer of one international bank stated that in his experience financing-related front companies usually conducted their business in jurisdictions separate from the physical location of the company whose transactions they handle.

**Use of false end-user certificates**

117. The Panel has seen several examples of false end-user certificates presented to authorities or companies in attempted transfers. In one case, the end-user certificate was a crude attempt to appear legitimate, using language found on the Internet, which was determined by authorities to have come from a Government website. A private sector firm that received the certificate quickly identified it as suspect and reported it to authorities. In another case the Panel found an end-user certificate for a third country, from which the items concerned would be reshipped to the Islamic Republic of Iran.

**Favourable terms of trade**

118. In several cases investigated by the Panel, Iranian procurers or their agents purchased items on an "ex-works" basis. This is attractive for sellers because the purchaser has responsibility for obtaining any necessary export licence for insurance coverage and freight forwarding arrangements. One State said that it regarded trade on an "ex-works" basis to be a "red-flag" that would trigger additional scrutiny.

**Use of European Union internal market**

119. In its 2012 final report, the Panel highlighted examples of attempts by the Islamic Republic of Iran to take advantage of the European Union (EU) internal market to shift goods from one member State of the Union to another before export, in an effort to disguise the ultimate end user abroad. The Panel was informed of an example in which a freight forwarder shipped prohibited items within the EU and arranged for documentation to be altered before the items were exported outside the EU.

**Use of the Iranian diaspora**

120. In two cases investigated by the Panel, and in a third case reported to the Committee as prosecuted under national jurisdiction, the Islamic Republic of Iran turned to expatriates or dual nationals living abroad to establish companies for the purpose of procurement and to approach suppliers. The Panel has heard of other such examples in the course of consultations with States.

121. The Panel notes that the variety and complexity of procurement methods employed by Iran gives rise to the possibility that legitimate businesses can be unwittingly drawn into procurement for prohibited activities.

## E. Prohibited activities by Iranian entities

122. This section describes the activities of the designated Irano Hind Shipping Company and entities involved in prohibited activities by the Islamic Republic of Iran.

### Irano Hind Shipping Company

123. Developments within the Irano Hind Shipping Company following its designation under resolution 1929 (2010) were discussed in the Panel's 2012 final

report.[31] Evidence collected by the Panel during its current mandate suggests that measures implemented by States against the company are negatively affecting its operations.

124. In July 2012, shareholders of the company publicly confirmed their decision to dissolve it. While the process towards dissolution and liquidation appears to be ongoing, operations of its vessels are continuing. Several changes in registration and ownership took place in the company fleet during the reporting period, including de-flagging. These changes are illustrated in annex IV.

125. Two crude oil tankers, the *Amin 2* and *Tour 2*, remain under the beneficial ownership of a company affiliated with the Irano Hind Shipping Company, although they were transferred to a different registered owner that ceased to exist soon after. The *Amin 2* and *Tour 2* repeatedly sailed between the Islamic Republic of Iran and the Syrian Arab Republic during the reporting period (see annex V). According to one State, following de-flagging they began having difficulties passing through the Suez Canal (see annex VI). It appears that the de-flagging effectively hindered the operations of vessels controlled by the Irano Hind Shipping Company.

126. A third oil tanker, the *Volga*, was transferred to a different owner who does not appear to be affiliated with the Irano Hind Shipping Company. After the change of ownership, it began sailing the same shipping routes connecting the Islamic Republic of Iran and the Syrian Arab Republic as the *Amin 2* and *Tour 2* but without the difficulties encountered by those two tankers (see annex V).

127. The *Amin 2* has now been left with no option other than to fly the flag of the Islamic Republic of Iran. The same situation also appears to apply to other vessels related to the Islamic Republic of Iran Shipping Lines, which is not a designated entity as a whole (see annex VII).

## Findings

128. States face serious challenges in establishing ownership or monitoring changes of ownership of vessels belonging to the Irano Hind Shipping Company. Where jurisdictions provide off-shore facilities to establish shell companies quickly and inexpensively, vigilance or other measures by States on the basis of owner companies alone may be insufficient.

129. The case of the designated Irano Hind Shipping Company, as described above, offers a lesson: the activities of designated shipping companies can be hindered more effectively if sanctions include specific measures directly targeting vessels owned or controlled by the companies. This can be achieved by listing their vessels with unchangeable IMO numbers and applying other measures such as the prevention of registration of these vessels.

[31] The assessment in this section, including the annexes, is based on information from States and the Panel's research, including from Lloyd's List Intelligence tool, Seasearcher (last accessed on 28 April 2013). For the sake of simplicity, the current (as of 28 April 2013) name of the vessels is used.

### Entity involved in sanctions violations

#### Pentane Chemistry Industry

130. Pentane Chemistry Industry was engaged as a procurement front in a violation case (see paras. 18-22 above). In that case, it was commissioned by a designated Iranian entity, Modern Industries Technique Company, to procure valves usable for heavy water-related activities. Modern Industries Technique Company is designated as being responsible for the design and construction of the IR-40 heavy water reactor in Arak. Pentane Chemistry Industry was also specified by one State as being a recipient, in the Islamic Republic of Iran, of phosphor bronze wire mesh, which is also usable for heavy water-related activities.

### Entities “owned or controlled by”

131. On the basis of their connections with prohibited activities by the Islamic Republic of Iran, 78 entities have been designated by the Security Council or Committee and their assets have been frozen. In addition, the resolutions require the freezing of assets belonging to entities “acting on behalf of, or at the direction of” or “owned or controlled by” designated entities. The Panel notes that ambiguity as to the meaning of these terms allows the Islamic Republic of Iran to shift procurement activities to non-designated entities, thus minimizing disturbance to its procurement networks.

132. During the course of the mandate, several States brought the names of entities that were assessed by them to be involved in prohibited activities but which are not designated under the resolutions to the attention of the Panel. The Panel’s research shows that some of those entities are subsidiaries of, or partners with, designated entities. For example, several States highlighted the importance of the Iran Centrifuge Technology Company, also known as TESA, which reportedly operates an IR-1 centrifuge assembly facility at Natanz, to the national gas centrifuge programme. The company took over the activities of Farayand Technique, which is designated under resolution 1737 (2007). The company is also a subsidiary of the Atomic Energy Organization of Iran.

## V. Analysis of implementation of sanctions by Member States

133. Below the Panel provides its assessment of the challenges confronting States in their implementation of sanctions and their responses.

### A. Challenges to implementation faced by Member States

134. Since its establishment by resolution 1929 (2010), the Panel has visited almost a third of the States Members of the United Nations for consultations. These consultations have demonstrated a high level of awareness of States about the requirements of Security Council resolutions on the Islamic Republic of Iran. The great majority of States have incorporated appropriate controls into domestic legislation, and most have established intragovernmental coordination mechanisms to promote and monitor implementation of the requirements by relevant

Government departments and the private sector. In addition, customs procedures and export controls have been appropriately modified, controls have been incorporated into the financial sector, and programmes of outreach to the private sector have been established by most States, which have also put measures into place to address the need for vigilance.

135. The Panel notes that many States promote the establishment of internal compliance programmes, while some make it a requirement for obtaining export licences for sensitive goods. Some States offer simplified export procedures for trusted companies.

**Capacity**

136. Some States lack sufficient resources and trained and experienced officials to give proper priority to the effective implementation of sanctions. Such States would benefit from support, including training and the development of technical expertise.

**Complexity of procurement methods**

137. States are confronted with a wide range of methods and techniques used by the Islamic Republic of Iran to procure goods and materials for its prohibited activities. These are described in section IV above.

**Indirect trade**

138. Many States told the Panel that they believe circumventions of sanctions have little chance of taking place because all trade with the Islamic Republic of Iran, including legitimate trade, had significantly declined (or in many cases had virtually ceased). Such assumptions could be erroneous because prohibited procurement can take place through third countries. A simple reduction in trade with the Islamic Republic of Iran may not indicate that prohibited procurement is not taking place.

**Business facilitation**

139. Many States have introduced regulatory regimes and policies designed to facilitate business and generate economic growth. Such measures can include streamlined processes for establishing and registering trading companies or shell companies, as noted in paragraph 112 above (the latter particularly in some island jurisdictions). There is a need for careful balance between facilitation of economic activity and appropriate controls in order to minimize possible dangers of exploitation of the economic infrastructure by the Islamic Republic of Iran. It is important that company registration details be publicly available in sufficient detail to facilitate identification by potential business partners (full addresses, phone numbers, names of Board Members, etc.).

**Visa-free regimes**

140. The Panel notes that some States have visa-free regimes with the Islamic Republic of Iran. One State that recently introduced a visa-free regime as a means of promoting trade and economic cooperation reported several attempts to use its territory to trans-ship potentially controlled equipment to the Islamic Republic of Iran. One State's long-standing visa-free regime has been identified by several States as one of the reasons why it is a hub for procurement activity. Visa-free

regimes could also be used to sustain *hawala* (transfer)-type practices, although the Panel has not seen specific examples of this practice.

**Customs**

141. The Panel notes that customs and border authorities in several States have introduced strict risk management systems and specific procedures in connection with direct trade with the Islamic Republic of Iran. The practical impact of this can be that flows of both legitimate and potentially illicit trade increase significantly through third countries. This can raise challenges for both the originating country and intermediary countries, which may need to implement additional measures to identify the illicit items amidst increased trade volume.

**Financial sector**

142. The identification of financial transactions underpinning prohibited procurements by the Islamic Republic of Iran represents a serious challenge. The Panel has investigated one reported case that came to the attention of authorities as a consequence of suspicious transactions reports from financial institutions.

143. None of the investigations and inspections carried out by the Panel have provided evidence of the connections between channels used by the entities within the Islamic Republic of Iran responsible for financing procurement with the corresponding payments to suppliers overseas. Part of the problem is that the volumes of goods and materials associated with illicit procurement are small in comparison with legitimate commerce, and the size of the financial transactions does not stand out. In several cases shipping documents record no or low value, which may reduce the likelihood of the shipment coming to attention.

144. Most States have regulatory mechanisms in place to monitor attempts by the Islamic Republic of Iran to initiate financial links covered by paragraphs 23 and 24 of resolution 1929 (2010); several States reported continuing interest from Iranian financial institutions in establishing such links:

(a) One State rejected two applications to open banks because of lack of supporting information;

(b) One neighbouring State said that two new Iranian banks (Parsian and Karafarin) had opened as new branches of Bank Melli.

145. In the context of exercising vigilance over the activities of Bank Saderat and Bank Melli, one State reported that a Director of a branch of Bank Saderat in a third country was also a Director of a bank suspected of involvement in Iranian proliferation financing networks, which was located in an offshore financial centre.[32]

[32] Separately, the compliance officer of a bank noted that, although in 2010 the website of the bank in the offshore centre contained the names of Iranians on the Board, this information had subsequently been removed, but could still be accessed from archive sites.

146. A number of States have shared information regarding how procurement may be financed. Such methods include cash smuggling,[33] working with banks that do not implement unilateral financial sanctions, *hawala* (particularly in neighbouring countries), increased use of money exchange businesses (especially in known transit hubs in the region), the use of Iranian banks not subject to the SWIFT embargo, the use of gold and new payment methods.[34] One State reported that it was investigating a substantial sum transferred apparently illicitly from an Iranian-owned local account to banks in third countries.

147. The Panel notes media reports asserting that two private sector firms have acknowledged trading commodities, in particular aluminium oxide (also known as alumina), with the Islamic Republic of Iran. Some of the aluminium oxide is alleged to have been supplied to an entity in the country, the Iranian Aluminium Company (Iralco), which is associated with procurement for the Iranian nuclear programme.[35] The aluminium oxide was swapped with the firms for processed aluminium from the Islamic Republic of Iran, which was reportedly able to retain any surpluses from the exchange. If confirmed, such transactions may reflect an avenue for procurement of a raw material in a manner that circumvents sanctions. The companies involved have stated that they have halted the transactions.

148. In exercising vigilance over transactions related to the Islamic Republic of Iran, banks are increasingly seeking additional documentation to establish the legitimacy of the transfers. Use of forged documents has been cited repeatedly by States as a way of circumventing banking system controls, which undermines due diligence.

149. The complexities of rigorous implementation of United Nations financial sanctions on Iran have been addressed by FATF. FATF has introduced standards on financing of proliferation in connection with Security Council resolutions (fourth round of FATF recommendations, February 2012). FATF is also preparing guidance on implementation of activity-based financial sanctions and vigilance provisions of Security Council resolutions.

## Safety implications of concealment practices

150. As recorded in the Panel's previous reports, the Islamic Republic of Iran continues to transport concealed and undocumented shipments of arms and related materiel by sea. This is a dangerous practice which puts ports and sea lanes at risk. Several States have alleged the use by the Islamic Republic of Iran of civil aircraft for arms transport.

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[33] In addition to cash smuggling, two States also said that the Islamic Republic of Iran transferred cash into their jurisdictions by requiring Iranian tourists to bring their full personal allowance with them. Iranian officials were observed collecting these funds from individual tourists and then using exchange bureaux to buy dollars or euros, which they then transferred out of the country.

[34] For example, prepaid cards, mobile telephone transactions and Internet banking, as discussed at the meeting of the Association of Certified Anti-Money Laundering Specialists in Dubai on 20 and 21 January 2013.

[35] Rupert Neate, "Glencore traded with Iranian supplier to nuclear programme", *The Guardian*, 21 April 2013; and Reuters, "Trafigura says supplied Iranian firm linked by European Union to atomic work", 4 March 2013.

## Challenges linked to European Union legislation

151. Two specific challenges have arisen with respect to implementation of United Nations sanctions by the European Union. Security Council resolutions on the Islamic Republic of Iran are incorporated into European Union sanctions regulations and become binding domestic legislation for the member States of the Union:

(a) National implementing authorities (such as customs, police and other bodies), even if aware that a given infringement involved Security Council sanctions, might not appreciate that it should be reported through the relevant authority to the Security Council Committee;

(b) The Court of Justice of the European Union annulled the Union's asset freeze measures against Bank Mellat on 29 January 2013[36] and against Bank Saderat on 5 February 2013.[37] The Court's decisions are under appeal, but the possibility arises that, if successful, these attempts could lead to other challenges to the Union's sanctions. Several States indicated that this could bring European Union sanctions implementation into conflict with United Nations sanctions implementation.

## Private sector in sanctions implementation

152. Internal compliance programmes help entities more easily identify suspicious enquiries and more effectively strengthen export controls.[38] A challenge for the private sector is to ensure that company compliance procedures implemented at headquarters are satisfactorily translated to subsidiaries in different jurisdictions, and even more so in the case of overseas brokers or distributors.

153. Some States encourage reporting of suspicious enquiries by the private sector.[38] In one of the cases investigated by the Panel, a company notified the authorities of a suspicious procurement attempt detected by its internal compliance department on the basis of irregularities in the end-user documentation. Examples of suspicious indicators are contained in annex VIII.

154. Authorities face a particular challenge in the fast-growing trade through Internet platforms. The role of such platforms in carbon fibre surplus procurement has been highlighted by several States.

155. Many resources and databases that are accessible through the Internet offer simple and quick checks of telephone numbers and addresses of entities that may be suspected of being front companies. As the Panel has found during its own investigations, such checks can sometimes reveal connections to designated individuals or entities.

---

[36] Judgment of the General Court of 29 January 2013, *Bank Mellat v. Council* (Case T-496/10) (*Official Journal of the European Union*, C79/12).

[37] Judgment of the General Court of 5 February 2013, *Bank Saderat Iran v. Council* (Case T-494/10) (*Official Journal of the European Union*, C71/16).

[38] A case study is described by Daniel Salisbury and David Lowrie in "Targeted: A case study in Iranian illicit missile procurement", *Bulletin of the Atomic Scientists*, vol. 69, issue 3, pp. 23-30, May/June 2013.

### Intangible transfer challenges in education

156. Several States commented on the difficulties of monitoring Iranians seeking access to advanced academic or technical training in sensitive areas. In some States, educational institutions may be reluctant to compromise their academic independence by cooperating with authorities in monitoring the activities of students or researchers or participants at seminars or conferences. States have taken a range of approaches to address this challenge. One State prevents any access to courses in sciences or engineering. Another has promoted internal compliance programmes for universities and research centres to avoid technology transfer.

## B. Reporting of interdictions and incidents by Member States

157. The Committee received 11 reports of interdictions and incidents, covering a significantly higher number of cases than those received during the Panel's previous mandate. This reflects increased awareness of reporting responsibilities among States, and could also result from enhanced implementation.

158. Several States told the Panel that they had not reported interdictions or other incidents because of confidentiality requirements of domestic legal proceedings or legislation, although some of the information may be in the public domain. Some States have managed to accommodate such restrictions by providing a partial report to the Committee while legal proceedings were still under way, and have even invited the Panel for inspection. Another State has adopted legislation that explicitly authorizes relevant information, even if confidential, to be passed on to the United Nations.

159. The Panel considers that it is important for States to understand that reporting does not indicate weaknesses in its control measures, or of ineffectiveness in implementation of sanctions. In fact, reporting would indicate the reverse.

## C. Disposal of seized items

160. A challenge for Member States is that the resolutions are ambiguous with regard to the requirements for the disposal of seized items. Limited guidance is provided in the relevant resolutions.

161. In some cases, shipments had been returned by the State before reporting to the Committee, thus making it impossible for the Panel to carry out a physical examination and making it difficult for it to reach a conclusion.

# Annex I

## Member States visited by the Panel*

1. Armenia
2. **Australia**
3. **Austria**
4. Azerbaijan
5. **Bahrain**
6. Belarus
7. Belgium
8. Brazil
9. Bulgaria
10. Canada
11. China
12. **Djibouti**
13. **Egypt**
14. **Ethiopia**
15. **France**
16. **Georgia**
17. **Germany**
18. **Guatemala**
19. **Hungary**
20. India
21. **Iraq**
22. **Israel**
23. Italy
24. **Japan**
25. **Jordan**
26. **Kazakhstan**
27. **Luxembourg**
28. Malaysia
29. Malta
30. Morocco
31. **Namibia**
32. **Netherlands**
33. **New Zealand**
34. Nigeria
35. Norway
36. Oman
37. **Panama**
38. Qatar
39. Republic of Korea
40. Romania
41. Russian Federation
42. **Saudi Arabia**
43. Singapore
44. Spain
45. **Sweden**
46. Switzerland
47. **Togo**
48. Turkey
49. **Turkmenistan**
50. Ukraine
51. **United Arab Emirates**
52. **United Kingdom of Great Britain and Northern Ireland**
53. **United States of America**
54. Viet Nam
55. **Yemen**

* Names of States visited by the Panel during the current mandate are in bold.

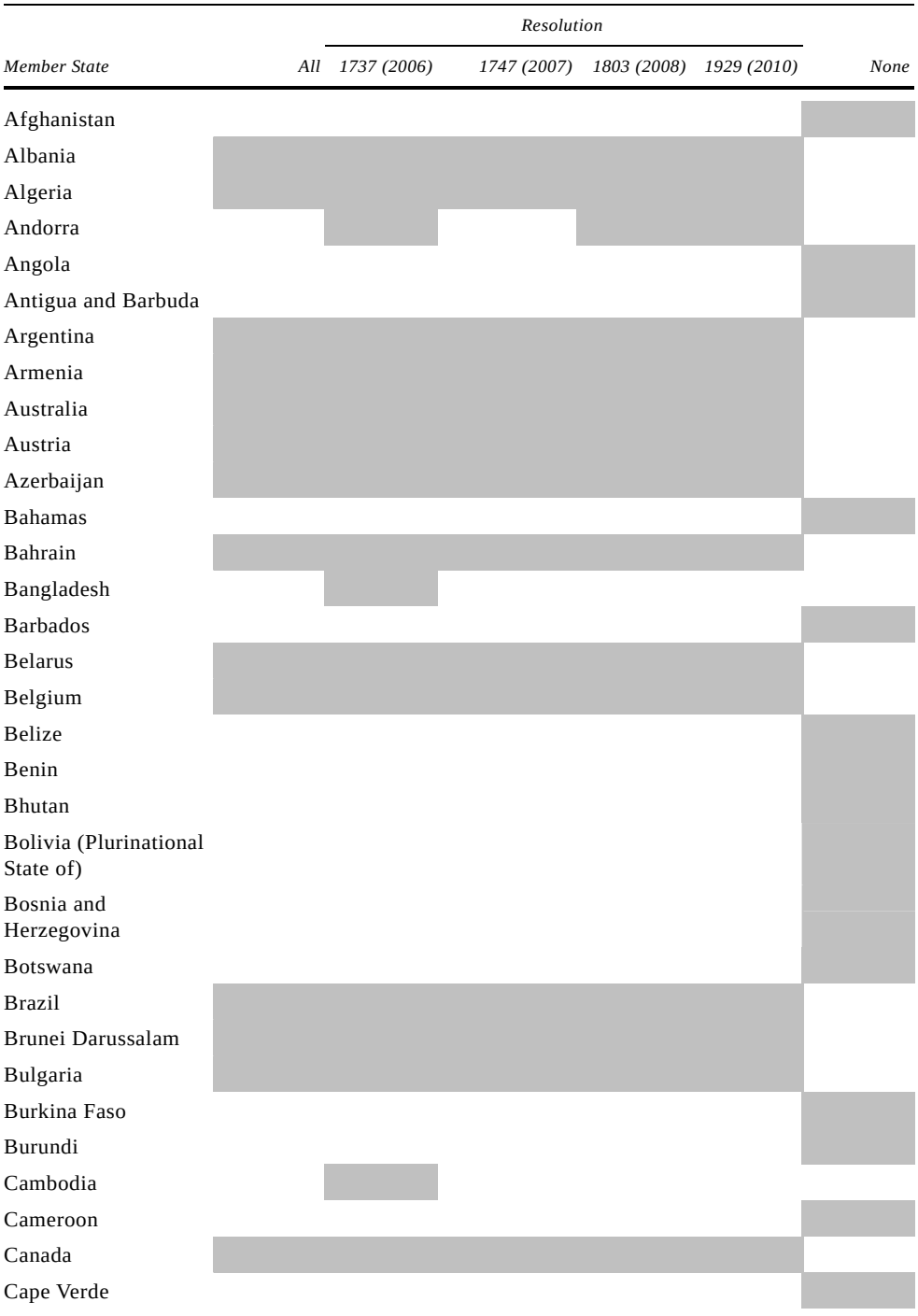
**Seaports**: Rotterdam (Netherlands), Quetzal (Guatemala), Djibouti (Djibouti), Aden (Yemen), Turkmen-bashi (Turkmenistan).

**Airports**: Luxemburg (Luxemburg), The Hague (Netherlands), Guatemala City (Guatemala), Budapest (Hungary).

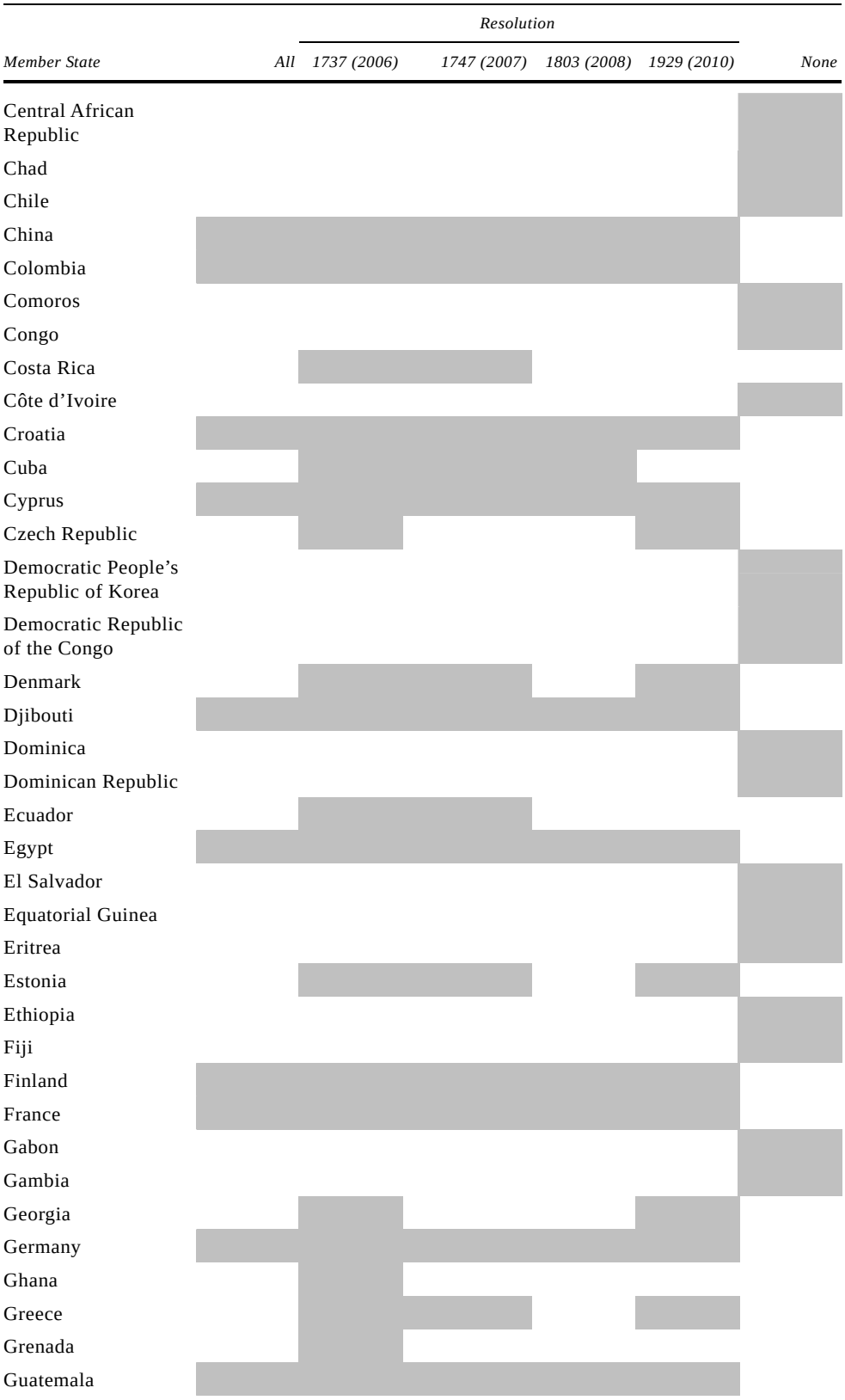
**Border crossings**: Georgia [with Armenia], Turkmenistan [with the Islamic Republic of Iran].

# Annex II

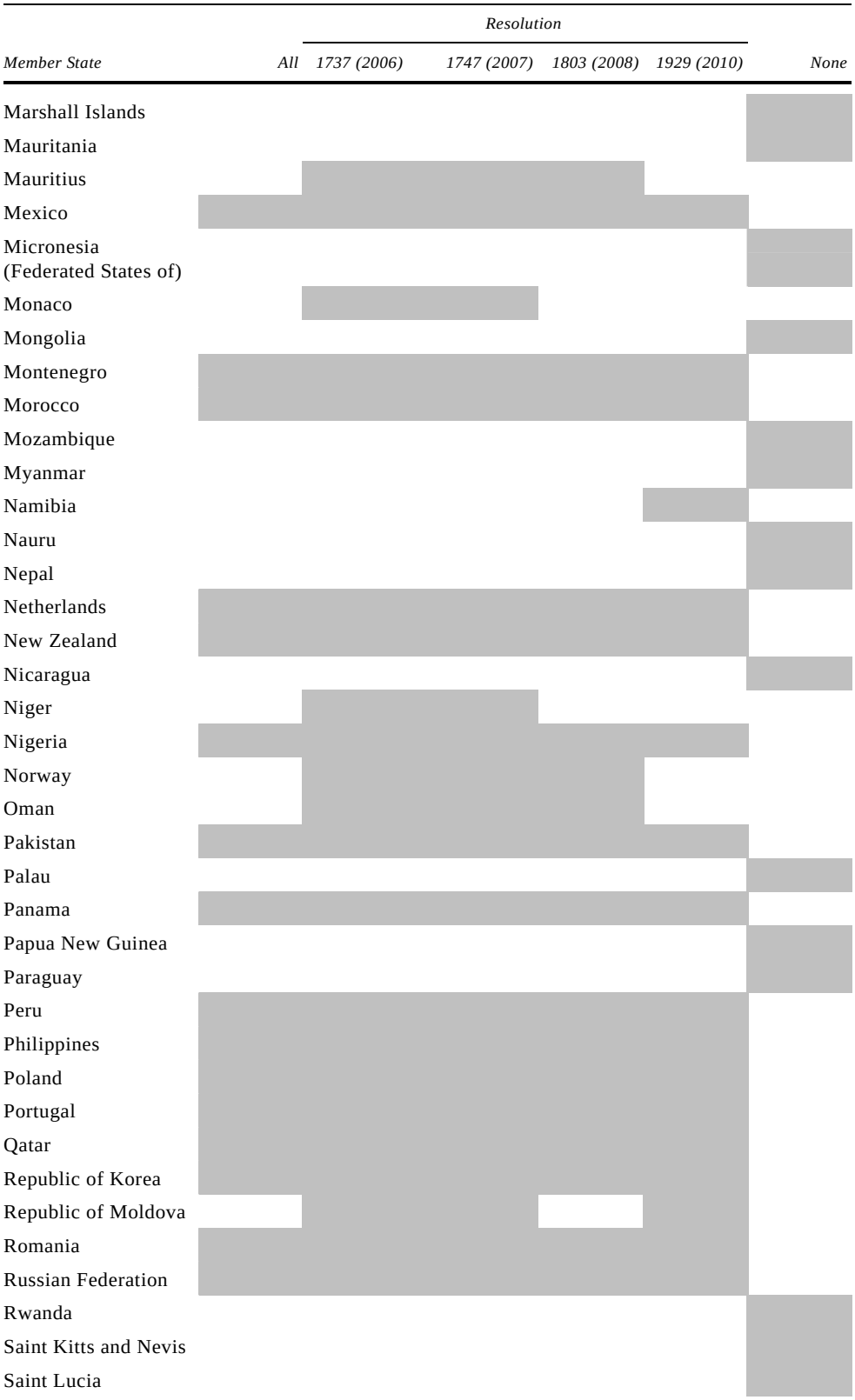
## Reporting by Member State by resolution*

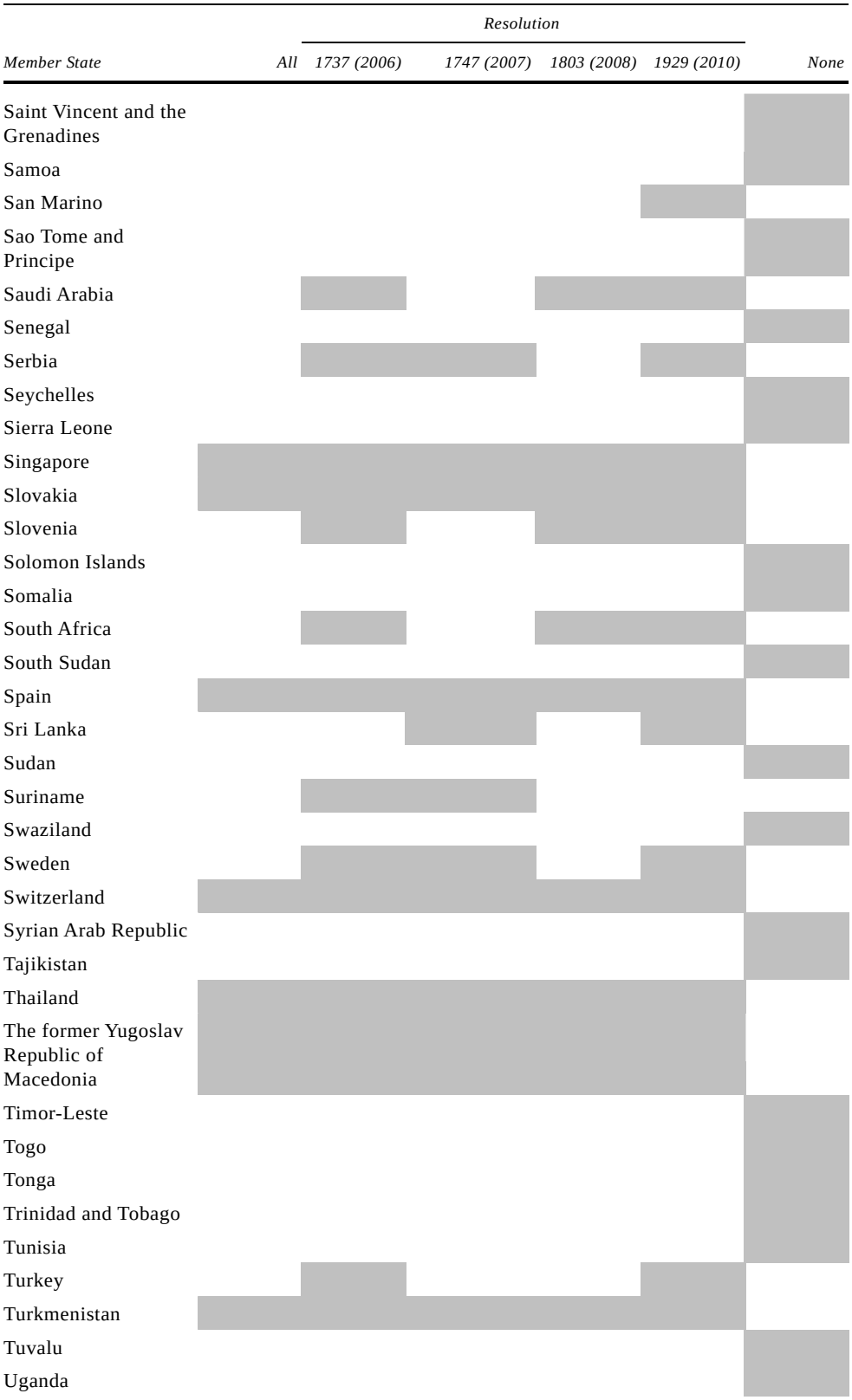



* Shading indicates reports submitted.


Resolution
Member State
All
1737 (2006)
1747 (2007)
1803 (2008)
1929 (2010)
None
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo
Costa Rica
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's Republic of Korea
Democratic Republic of the Congo
Denmark
Djibouti
Dominica
Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Fiji
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guatemala

| Member State | All | Resolution 1737 (2006) | 1747 (2007) | 1803 (2008) | 1929 (2010) | None |
|---|---|---|---|---|---|---|
| Guinea | | | | | | ■ |
| Guinea Bissau | | | | | | ■ |
| Guyana | | | | | | ■ |
| Haiti | | | | | | ■ |
| Honduras | | | | | | ■ |
| Hungary | ■ | ■ | ■ | ■ | ■ | |
| Iceland | | | | | | ■ |
| India | ■ | ■ | ■ | ■ | ■ | |
| Indonesia | | ■ | | ■ | | |
| Iran (Islamic Republic of) | | | | | | ■ |
| Iraq | ■ | ■ | ■ | ■ | ■ | |
| Ireland | ■ | ■ | ■ | ■ | ■ | |
| Israel | ■ | ■ | ■ | ■ | ■ | |
| Italy | ■ | ■ | ■ | ■ | ■ | |
| Jamaica | | | | ■ | | |
| Japan | ■ | ■ | ■ | ■ | ■ | |
| Jordan | ■ | ■ | ■ | ■ | ■ | |
| Kazakhstan | ■ | ■ | ■ | ■ | ■ | |
| Kenya | | | | | | ■ |
| Kiribati | | | | | | ■ |
| Kuwait | | ■ | ■ | ■ | | |
| Kyrgyzstan | | ■ | ■ | ■ | | |
| Lao People’s Democratic Republic | | | | | | ■ |
| Latvia | ■ | ■ | ■ | ■ | ■ | |
| Lebanon | | | | | | ■ |
| Lesotho | | | | | | ■ |
| Liberia | | | | | | ■ |
| Libya | | ■ | ■ | ■ | | |
| Liechtenstein | | ■ | | ■ | ■ | |
| Lithuania | ■ | ■ | ■ | ■ | ■ | |
| Luxembourg | ■ | ■ | ■ | ■ | ■ | |
| Madagascar | | | | | | ■ |
| Malawi | | | | | | ■ |
| Malaysia | | | | | | ■ |
| Maldives | | | | | | ■ |
| Mali | | | | | | ■ |
| Malta | ■ | ■ | ■ | ■ | ■ | |


Resolution
Member State
All
1737 (2006)
1747 (2007)
1803 (2008)
1929 (2010)
None
Marshall Islands
Mauritania
Mauritius
Mexico
Micronesia (Federated States of)
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Oman
Pakistan
Palau
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Republic of Korea
Republic of Moldova
Romania
Russian Federation
Rwanda
Saint Kitts and Nevis
Saint Lucia


Resolution
Member State
All
1737 (2006)
1747 (2007)
1803 (2008)
1929 (2010)
None
Saint Vincent and the Grenadines
Samoa
San Marino
Sao Tome and Principe
Saudi Arabia
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
Somalia
South Africa
South Sudan
Spain
Sri Lanka
Sudan
Suriname
Swaziland
Sweden
Switzerland
Syrian Arab Republic
Tajikistan
Thailand
The former Yugoslav Republic of Macedonia
Timor-Leste
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Tuvalu
Uganda

| *Member State* | *All* | *Resolution* | | | | *None* |
|---|---|---|---|---|---|---|
| | | *1737 (2006)* | *1747 (2007)* | *1803 (2008)* | *1929 (2010)* | |
| Ukraine | ■ | ■ | ■ | ■ | ■ | |
| United Arab Emirates | | ■ | ■ | | ■ | |
| United Kingdom of Great Britain and Northern Ireland | ■ | ■ | ■ | ■ | ■ | |
| United Republic of Tanzania | | | | | | ■ |
| United States of America | ■ | ■ | ■ | ■ | ■ | |
| Uruguay | | | ■ | ■ | ■ | |
| Uzbekistan | | ■ | ■ | ■ | | |
| Vanuatu | | | | | | ■ |
| Venezuela (Bolivarian Republic of) | | | | | | ■ |
| Viet Nam | ■ | ■ | ■ | ■ | ■ | |
| Yemen | | ■ | | | | |
| Zambia | | | | | | ■ |
| Zimbabwe | | | | | | ■ |
| **Total** | **64** | **99** | **86** | **80** | **84** | **91** |

# Annex III

## Developments in the uranium enrichment programme of the Islamic Republic of Iran

| | *International Atomic Energy Agency Board report (24 Feb. 2012) (GOV/2012/9)* | *International Atomic Energy Agency Board report (21 Feb. 2012) (GOV/2013/6)* | *Increase over the year* |
|---|---|---|---|
| IR-1 centrifuges at the Natanz Fuel Enrichment Plant | 9,156 centrifuges installed | 12,669 centrifuges installed | 3,513 centrifuges installed |
| IR-2m centrifuges at Natanz Fuel Enrichment Plant | N/A | 180 centrifuges and casings | 180 centrifuges and casings |
| Quantity of 5 per cent UF6 at Natanz Fuel Enrichment Plant | 5,451 kg UF6 | 8,271 kg UF6 | 2,820 kg UF6 |
| Quantity of 20 per cent UF6 at Pilot Fuel Enrichment Plant | 95.4 kg UF6 | 149.9 kg UF6 | 54.5 kg UF6 |
| IR-1 centrifuges at Fordow Fuel Enrichment Plant | 696 centrifuges installed | 2,710 centrifuges installed | 2,014 centrifuges installed |
| Quantity of 20 per cent UF6 at Fordow Fuel Enrichment Plant | 13.8 kg UF6 | 129.9 kg UF6 | 116.1 kg UF6 |

A comparison of data contained in the International Atomic Energy Agency (IAEA) Board reports dated 24 February 2012 and 21 February 2013 illustrate developments in the Iranian uranium enrichment programme over a period approximately concurrent with the Panel’s mandate.

# Annex IV

## Changes in name, ownership and flagging of vessels owned by the Irano Hind Shipping Company

**(1 April 2012-28 April 2013)**

The table below details the changes in name, ownership and flagging between 1 April 2012 and 28 April 2013 among vessels beneficially owned by Irano Hind Shipping Company as of 1 April 2012. Changes in names, flags and registered owners are ongoing.

The changes demonstrate the following:

Two crude oil tankers, the *Volga* and *Desh Shobha*, were transferred to other beneficial owners.

Flag changes show some patterns, as colour-coding in the table shows, among both bulk carriers and crude oil tankers. One tanker has subsequently been flagged in the Islamic Republic of Iran.

Among the six vessels, all the bulk carriers are registered with a single company and all the tankers with another company.

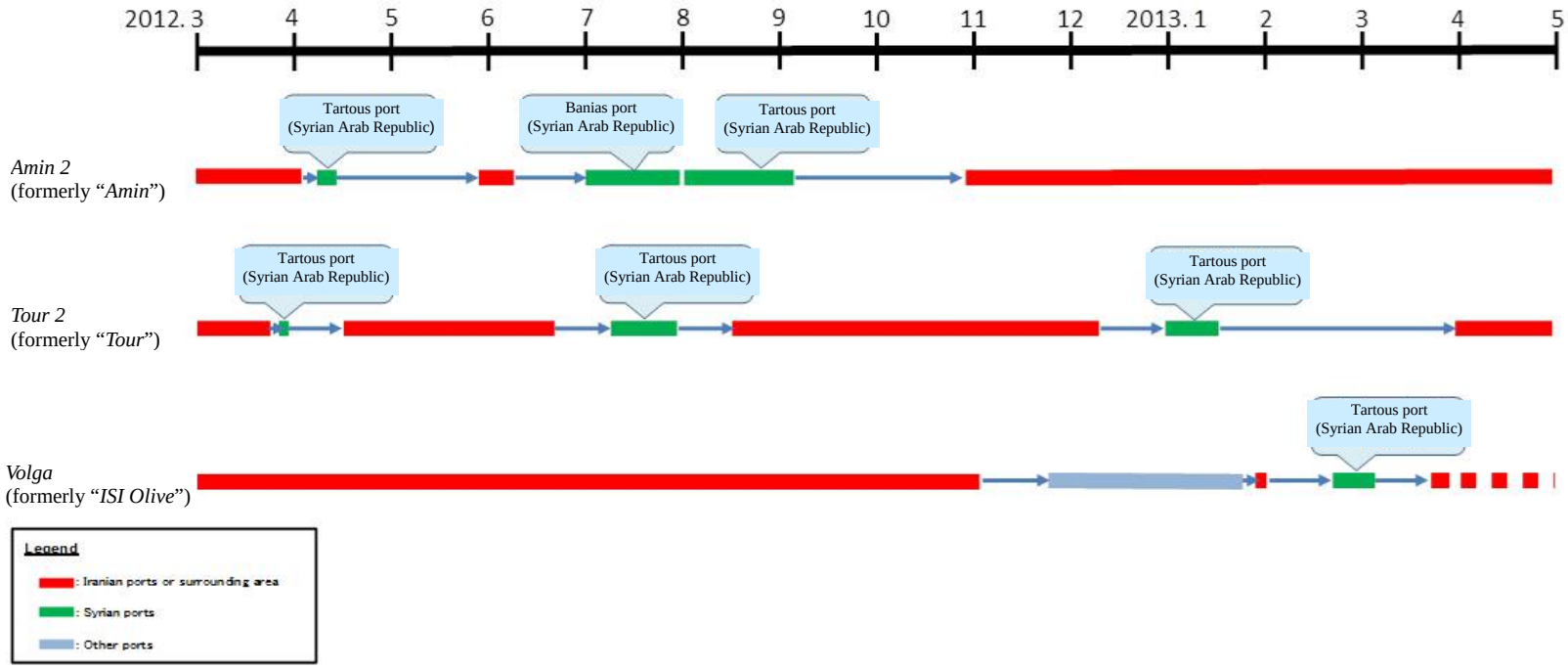
| | Name | | Flag* | | | | | Registered Owner | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Current name | Previous name | Current flag | Previous flags | | | | Current registered owner | Previous registered owners | |
| Bulk Carrier | *Attar* (IMO 9074092) | | TZA | MLT | | | | Alicia Marine Co. Ltd (BLZ) | ISIM ATR Ltd (MLT) | |
| Bulk Carrier | *Sattar* (IMO 9040479) | | Unknown | TZA | | | | Alicia Marine Co. Ltd (BLZ) | ISIM Sat Ltd (MLT) | |
| Bulk Carrier | *Sinin* (IMO 9274941) | | Unknown | TZA | MLT | | | Alicia Marine Co. Ltd (BLZ) | Isim Sinin Ltd (MLT) | |
| Bulk Carrier | *Teen* (IMO 9101649) | | Unknown | TZA | MLT | | | Alicia Marine Co. Ltd (BLZ) | Blis Maritime Ltd (MLT) | |
| Crude oil tankers | *Amin 2* (IMO 9422366) | *Amin* | IRN | TGO | SLE | BOL | MLT | Auris Marine Co. Ltd (MHL) | Isim Amin ltd (MLT) | |
| Crude oil tankers | *Tour 2* (IMO 9364112) | *Tour* | Unknown | TGO | SLE | BOL | MLT | Auris Marine Co. Ltd (MHL) | Isim Tour Ltd (MLT) | |
| Crude oil tankers | *Volga* (IMO 9003237) | *ISI Olive* | TGO | SLE | BOL | MLT | | Tabuk Maritime Inc (PAN) | Auris Marine Co. Ltd (MHL) | ISIM Olive Ltd (MLT) |
| Crude oil tankers | *Desh Shobha* (IMO 9459046) | *Taj Mahal* | IND | MLT | | | | Shipping Corp. of India Ltd (IND) | Irano Hind Shipping Co. (IRN) | |

* Name of flag States is indicated in ISO three-digit country codes: BLZ: Belize, BOL: Bolivia (Plurinational State of), IND: India, IRN: Iran (Islamic Republic of), MHL: Marshall Islands, MLT: Malta, PAN: Panama, SLE: Sierra Leone, TZA: United Republic of Tanzania.

# Annex V

## Movements of crude oil tankers owned by the Irano Hind Shipping Company

**(March 2012-April 2013)**



# Annex VI

## Difficulties encountered by *Amin 2* and *Tour 2* following de-flagging

### 1. *Amin 2* (June to October 2012)

The flag State took action to revoke the registration of the *Amin 2* during or after its passage through the Suez Canal towards Syrian ports. The *Amin 2* remained at Banias port in the Syrian Arab Republic for approximately one month. It then departed from Banias port in the direction of the Suez Canal but had to return to Tartous port, Syrian Arab Republic, as indicated in figure I. After staying at Tartous port for approximately one month, it departed for the Islamic Republic of Iran, taking an unusually lengthy route around the entire African continent, which took more than one month (see figure II).

Figure I

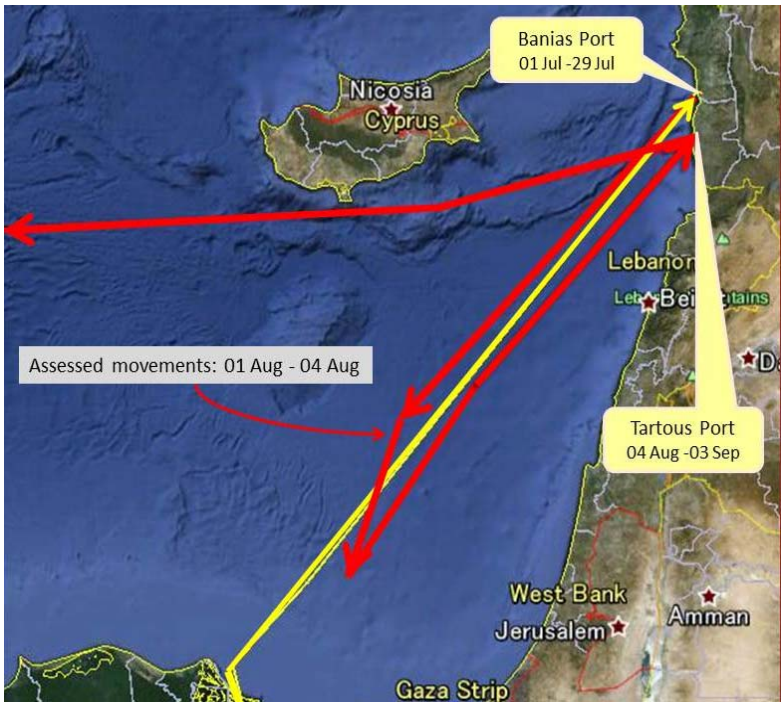
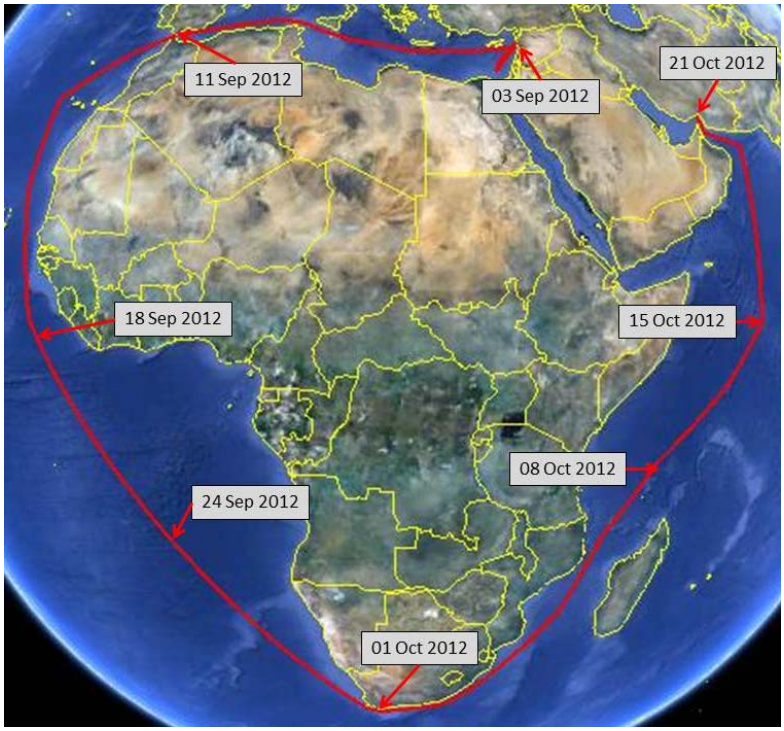


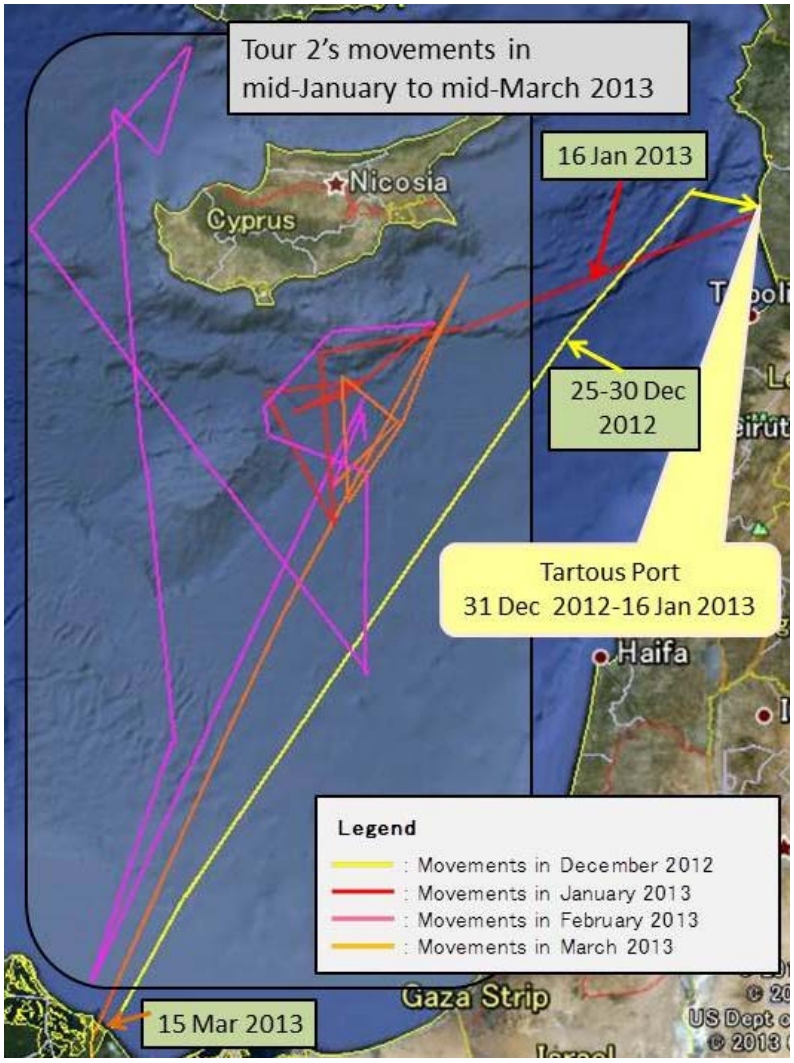
Figure II


11 Sep 2012
03 Sep 2012
21 Oct 2012
18 Sep 2012
15 Oct 2012
08 Oct 2012
24 Sep 2012
01 Oct 2012

**2. *Tour 2* (December 2012 to March 2013)**

A separate flag State also took action to revoke this vessel's registration while the *Tour 2* was berthed at Tartous port. *Tour 2* departed Tartous port in mid-January 2013 and sailed the eastern Mediterranean until it passed through the Suez Canal on about 15 March 2013 (see figure III below).

Figure III



# Annex VII

## Changes in the ownership structures of vessels owned by the Islamic Republic of Iran Shipping Lines

**(1 April 2012-28 April 2013)**

Figure I below illustrates a comparison of the fleet owned by the Islamic Republic of Iran Shipping Lines as a whole between 1 April 2012 and 28 April 2013. It shows that vessels under beneficial ownership of the company and its related companies, Sapid Shipping Company and Hafiz Darya Shipping Line, continuously changed names, flags and registered owners during this period.*

Figure I also shows a significant increase in the number of Iranian-flagged vessels, shown in red (from 42 out of 124 vessels to 106 out of 117 vessels).

* *Acronyms/abbreviations*: IRISL: Islamic Republic of Iran Shipping Lines; Sapid: Sapid Shipping Company; HDSL: Hafiz Darya Shipping Line; Kish Roaring: Kish Roaring Ocean Shipping Company; Oghyanous: Oghyanous Khoroshan Kish Shipping Company; Mosakhar: Mosakhar Darya Shipping Company.

Figure I

**Ownership structure (as of 1 April 2012)**

IRISL (68 vessels / 41 with Iranian flag)

| | | | |
|---|---|---|---|
| Aaj | Abtin 1 | Alvan | Amitees |
| Apollo | Brelyan | Dorita | Gilda |
| Hamd | Hormuz 2 | Iran Charak | Iran Hormuz 12 |
| Iran Hormuz 14 | Iran Hormuz 22 | Iran Hormuz 25 | Iran Parak |
| Iran Shahed | Iran Shalak | Iran Shalamcheh | Iran Youshat |
| Kados | Nardis | Negeen | Parand |
| Parin | Parmis | Partis | Sabrina |
| Sania | Sarina | Sarmad | Shabgoun |
| Shayan 1 | Sobhan | Somia | Taban 1 |
| Tardis | Viana | Vista | Yaran |
| Zamoroud | Andia | Ardavan | Artaria |
| Avang | Batis | Kiazand | Nisa |
| Parisan | Warta | Aysan | Basht |
| Behnavaz | Golsan | Iran Shahar-E-Kord | Touska |
| Behta | Pendar | Shahraz | Abyan |
| Arezoo | Shabdis | Zardis | Artavand |
| Darush | Gas A. | Huanghai Advance | Huanghai Glory |

HDSL (8 vessels / No Iranian flag)

| | | | |
|---|---|---|---|
| Dianthe | Artam | Glory | Saviz |
| Perarin | Sana | Shamim | Shiba |

Oghyanous (1 vessel/No Iranian flag)

| |
|---|
| Parshan |

Sapid (46 vessels/1 with Iranian flag)

| | | | |
|---|---|---|---|
| Abba | Abila | Acrobat | Adventist |
| Alias | Angel | Aquarian | Aries |
| Arsham | Artabaz | Artenos | Artin |
| Artman | Arzin | Atlantic | Azargoun |
| Bahjat | Baskar | Bavand | Behafarid |
| Behdad | Behshad | Deldad | Delruba |
| Evita | Ganj | Goldis | Jairan |
| Mahnam | Mehrafarin | Neshat | Oura |
| Parshad | Ronak | Roshak | Shadfar |
| Shadrokh | Tridad | Atrium | Golzar |
| Amina | Arvin | Behdokht | Negar |
| Orang | Delnavaz | | |

Kish Roaring (1 vessel/No Iranian flag)

| |
|---|
| Sarvin |

**Total: 124 vessels (42 with Iranian flag)**

**Ownership structure (as of 28 April 2013)**

IRISL (44 vessels / 43 with Iranian flag)

| | | | |
|---|---|---|---|
| Aaj | Abtin 1 | Alvan | Amitees |
| Apollo | Brelyan | Dorita | Gilda |
| Hamd | Hormuz 2 | Iran Charak | Iran Hormuz 12 |
| Iran Hormuz 14 | Iran Hormuz 22 | Iran Hormuz 25 | Iran Parak |
| Iran Shahed | Iran Shalak | Iran Shalamcheh | Iran Youshat |
| Kados | Nardis | Negeen | Parand |
| Parin | Parmis | Partis | Sabrina |
| Sania | Sarina | Sarmad | Shabgoun |
| Shayan 1 | Sobhan | Somia | Taban 1 |
| Tardis | Viana | Vista | Yaran |
| Firouzeh | Tiba | Zamoroud | Atrium |

Mosakhar (7 vessels with Iranian flag)

| | | |
|---|---|---|
| Golzar | Aysan | Basht |
| Behnavaz | Golsan | Iran Shahr-E-Kord |
| Touska | | |

Oghyanous (7 vessels with Iranian flag)

| | | |
|---|---|---|
| Sarvin | Abyan | Arezoo |
| Shabdis | Zardis | Saviz |
| Golbon | | |

Sapid (51 vessels/42 with Iranian flag)

| | | | |
|---|---|---|---|
| Abba | Abila | Acrobat | Adventist |
| Alias | Angel | Aquarian | Aries |
| Arsham | Artabaz | Artenos | Artin |
| Artman | Arzin | Atlantic | Azargoun |
| Bahjat | Baskar | Bavand | Behafarid |
| Behdad | Behshad | Deldad | Delruba |
| Evita | Ganj | Goldis | Jairan |
| Mahnam | Mehrafarin | Neshat | Oura |
| Parshad | Ronak | Roshak | Parnia |
| Shadfar | Shadrokh | Tridad | Parshan |
| Andia | Ardavan | Artaria | Avang |
| Batis | Kiazand | Nisa | Parisan |
| Warta | Artam | Glory | |

HDSL (1 vessel / NO Iranian flag)

| |
|---|
| Dianthe |

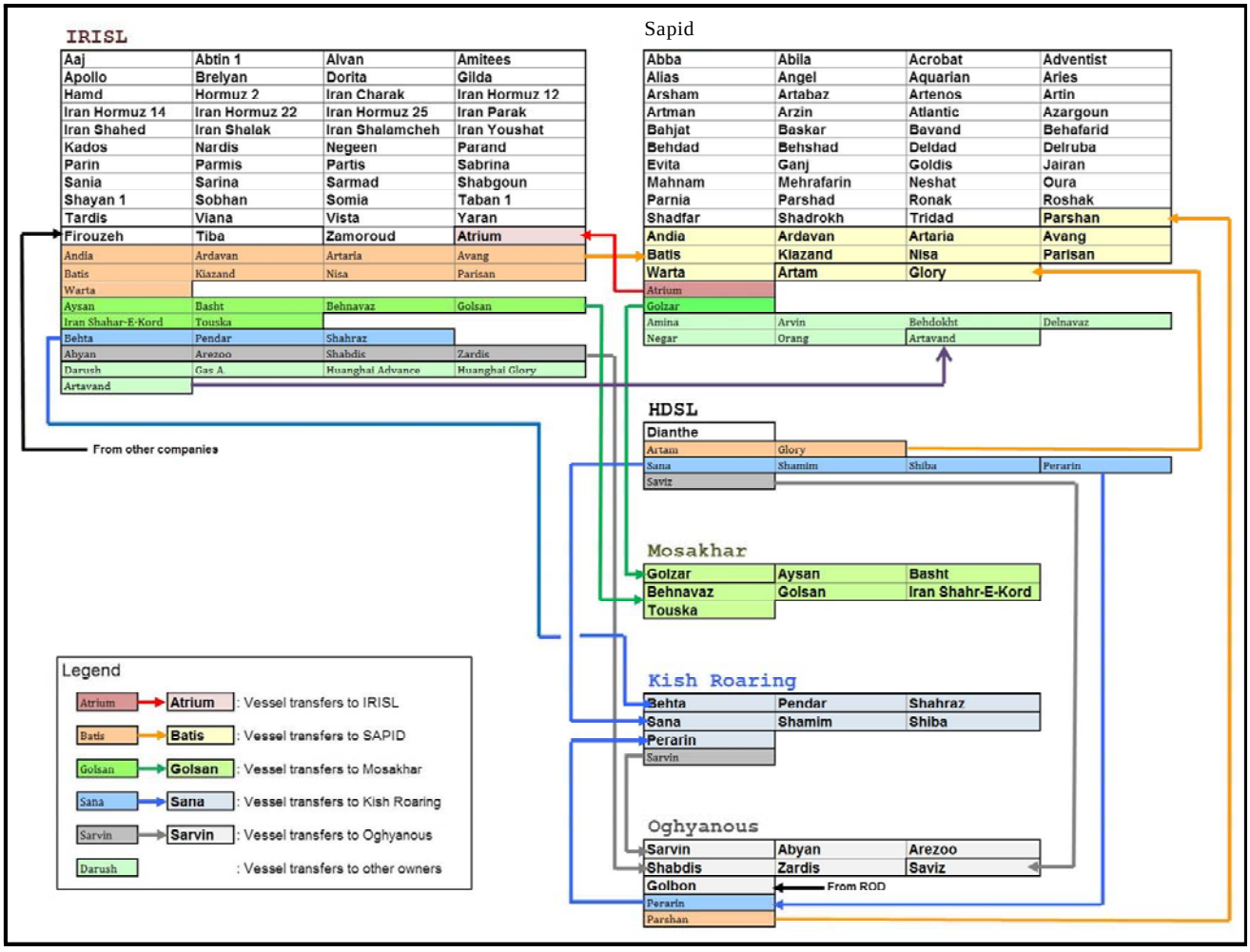
Kish Roaring(7 vessels with Iranian flag)

| | | |
|---|---|---|
| Behta | Pendar | Shahraz |
| Sana | Shamim | Shiba |
| Perarin | | |

**Total: 117 vessels (106 with Iranian flag)**

Figure II below illustrates the complexity of changes in beneficial ownership structure of the fleet owned by the Islamic Republic of Iran Shipping Lines. It shows that approximately 20 vessels have been transferred to three Iranian shipping companies: Mosakhar Darya Shipping Company, Kish Roaring Ocean Shipping Company and Oghyanous Khoroshan Kish Shipping Company.

Figure II



# Annex VIII

## Indicators of suspicious enquiries

Several companies highlighted the following as indicators of possibly suspicious enquiries:

- Reluctance by the customer to share information on end use and end user;
- Inconsistency between enquiries and the customer's business activities;
- Inconsistency between the technical properties of the items of interest and the technical capability of their country of destination;
- Potential purchasers with little or no relevant business background;
- Offers of abnormally favourable terms of payment;
- Purchasers' eagerness to acquire products despite unfamiliarity with the products' properties;
- Purchasers' refusal to accept standard post-sales services, such as installation, maintenance or training;
- Enquiries which lack specific dates by when delivery is necessary;
- Trading or transportation companies named as consignees;
- Unusual transportation routes for export, or unusually remote destination;
- Use of postal address by purchaser.

# Annex IX

## Incidents of non-compliance reported to the Committee since June 2012

**Valves (Germany)**: COMM.61 (23 Aug. 2012)

**Great Prophet Exercise (United States of America, United Kingdom of Great Britain and Northern Ireland, France and Germany)**: COMM.73 (9 Oct. 2012)

**Machine tools (Spain)**: COMM.8 (23 Jan. 2013)

**Satellite technology (Germany)**: COMM.13 (4 Feb. 2013)

**Jihan vessel (Yemen)**: COMM.15 (7 Feb. 2013)

**Report on the shipments confiscated during the second quarter of 2012 (State X)**: COMM.19 (15 Feb. 2013)

**Report on the shipments confiscated during the third and fourth quarters of 2012 (State X)**: COMM.27 (5 March 2013)

**Valves (Sweden)**: COMM.30 (8 March 2013)

**Milad Jafari case (United States)**: COMM.41 (29 April 2013)

**Parviz Khaki case (United States)**: COMM.42 (29 April 2013)

**Fibre-optic gyroscope (France)**: COMM.44 (1 May 2013)

# Annex X

## Panel reports to the Committee since June 2012

1. Compilation of public statements of transfers of arms to Gaza by the Islamic Republic of Iran (1737 Committee request): COMM.93 (14 Dec. 2012)
2. Great Prophet Exercise (United States of America, United Kingdom of Great Britain and Northern Ireland, France and Germany): Note.6 (11 Jan. 2013)
3. Bahraini interdictions (Bahrain): Note.45 (21 March 2013)
4. *Jihan* (Yemen): Note.55 (22 Apr 2013)
5. Valves (Germany): Note.64 (1 May 2013)
6. Valves (Sweden): Note.63 (1 May 2013)
7. Interdictions of process control equipment, bellows, cables and batteries (State X): Note.65 (3 May 2013)