

Strengthening Technical and Operational Capacity to Implement and Enforce Dual-Use and Arms Trade Controls

A workshop under the aegis of the Technical Expert Working Group (TEWG) on Dual-Use and Arms Trade Controls | Vienna, Austria

Introduction

Twenty seven participants including practitioners, officials and academics from China and a number of Wassenaar Arrangement (WA) Participating States attended this two-day workshop to discuss solutions to the challenges in implementing and enforcing dual-use and arms trade controls¹.

The workshop was one of a series of activities under a project jointly implemented by Saferworld and the Chinese Academy of International Trade and Economic Cooperation (CAITEC), an institution under the Chinese Ministry of Commerce, with sponsorship from the UK Foreign and Commonwealth Office (FCO). The project aims to examine the opportunities and challenges that China and other leading producers and exporters of arms and dual-use goods and technologies have in promoting and strengthening arms and dual-use export controls.²

This paper provides an overview of the discussions from the workshop. A more comprehensive record of the proceedings can be found in Annex 1. The report reflects the impressions and views of Saferworld and CAITEC, based on their account of the proceedings

¹ The workshop was jointly held by Saferworld, the Chinese Academy of International Trade and Economic Cooperation (CAITEC) and the Austrian Institute for International Affairs (OIIP) on 21 and 22 January 2016.

² At the core of the project is a technical expert working group (TEWG). The TEWG is comprised of four Chinese officials and officials from the Republic of Korea (RoK), Russia, the United Kingdom (UK) and the United States (US) and has been established as the engine of the project to maximise dialogue opportunities between these countries.

The TEWG first met at a closed-door workshop in Beijing in September 2015, during which its members shared experiences on the implementation and enforcement of export controls, with a particular focus on dual-use items and technologies and the relevant international standards and best practices. A briefing paper summarising the outcomes of the first workshop can be viewed at: <http://www.saferworld.org.uk/resources/view-resource/1026-sharing-perspectives-on-achievements-and-challenges-relating-to-export-controls-of-dual-use-items-and-technologies>

and exchanges of views among the workshop participants. It is not intended to reflect a consensus view of all participants.

Workshop proceedings

The workshop in Vienna was structured in two parts: presentations and case studies. It enabled the discussion to focus not only on policy but also on technical and operational aspects and the enhancement of capacities to control exports of arms and dual-use items.

The first half of the workshop explored some of the key elements that constitute an effective national system of arms and dual-use trade controls.

The first session discussed issues related to control lists of arms and dual-use items and technologies. Presentations conveyed, among others, the experiences of the European Union (EU), United States (US) and the Republic of Korea (RoK) on their identification systems and 'catch all' controls.

This was followed by presentations on the different approaches to strengthening the efficacy of end-use verification and risk assessment. Experiences from the US and China were shared. The session also considered the implications of the Arms Trade Treaty (ATT) for national end-use and risk assessments.

In the third session, the UK and EU's work on controlling brokering services and intangible transfers of technology (ITT) and their role in controlling the spread of strategic technologies were also shared with the participants.

The first part of the workshop ended with a debate on how to embed commercial export control compliance as one component of an effective national control system. The challenges of reaching out to small and medium-sized enterprises (SMEs) to establish effective internal compliance programmes (ICP) was also raised, and one expert from a leading producer

of civilian and defence aero engines provided his perspective on what makes an effective ICP.

The second half of the workshop focused on five case studies from the UK, Sweden, Russia, China and the US. The case studies illustrated export control policy and practice in action, including the challenges faced in the daily implementation of export controls and how these are addressed. A number of real-life cases were presented to demonstrate responses to challenges such as the export of dual-use items that are not subject to controls, the risk of diversion, especially when the end-use is deemed to be sensitive, as well as a full criminal investigation.

The UK case study highlighted some of the challenges, information requirements and inter-agency cooperation needed to successfully implement a 'catch-all' control. It also demonstrated the UK government's understanding of what underpins effective controls and an effective 'catch all' mechanism.

The Swedish case study presented a fictional case study in order to stimulate discussion on the information requirements for export control risk analysis. Participants were invited to consider a case which highlighted the application of end-use controls, transit assessment and conflict analysis, including human rights risks and national security needs. The discussion also raised awareness of the obligations contained in the Arms Trade Treaty (ATT).

The Russian case study analysed real-life licence denials in the face of diversion risks. This provided an opportunity for the participants to understand, compare and contrast the rationale behind decisions to deny transfers.

The Chinese case study shared details of a real-life denial of a licence for a dual-use item where the final end-use was deemed to be sensitive, i.e. where there was a risk of contributing to potential uranium enrichment.

The US case study described a full criminal investigation for export control violation, from case inception through to final prosecution. It demonstrated how collaboration between governmental agencies and information sharing between countries are important when dealing with transnational crime.

Outcomes and recommendations

There were three broad outcomes from the workshop.

Firstly, links between China and both the WA and key WA participating states have been enhanced. The Vienna meeting has elevated the level of dialogue, interaction and cooperation between practitioners, academics and officials.

Secondly, China's export control lists in particular are now better understood. A presentation by a Chinese technical expert who compared the Chinese list of dual-use goods and technologies to the list of key

international regimes provided the participants with a new perspective on understanding China's approach.

Thirdly, the value of sharing international experience in this field, exploring both challenges and best practice, was recognised by all countries participating. The meeting helped to identify gaps in the implementation and enforcement of different countries' dual-use and arms trade controls, and provided ideas for how countries can improve their capacity to implement and enforce controls in line with international standards and best practice. The focus on practical examples was particularly valued by participants. It was also evident from the workshop that there was widespread interest in sharing experience on these issues with China in particular.

In addition, three specific themes emerged during the discussions that are highlighted here given their potential to inform future work.

Firstly, Chinese participants in particular highlighted the value of being able to make connections between the policy and implementation levels, and found that the mix of participants in the workshop was particularly helpful in this respect.

Related to this, the second theme that participants often returned to was the variability in the capacity and professionalism of those charged with front line implementation, such as border enforcement agencies. This suggested that more needs to be done to both bring them into the discussion about policy while exploring ways to improve their capacity.

Finally, the practical question of how to reach out effectively to large numbers of SMEs from a compliance perspective was raised.

These three themes together suggest a situation where, for future work, Chinese interlocutors would be interested in learning from other countries about how they have created effective networks that work on these issues but span across different institutional boundaries, and also between the formal government and commercial realms.

The principal recommendation from the workshop is that there would be enormous value in this dialogue with China being continued and deepened:

- picking up on the outcomes and themes highlighted during this particular event
- continuing with the practical, case study driven approach to reveal the real implementation challenges
- sustaining the momentum achieved with the TEWG model of delivery, and finding opportunities to bring into the discussion and build the capacity of a wider range of relevant agencies.

About Saferworld

Saferworld is an independent international organisation working to prevent violent conflict and build safer lives. We work with local people affected by conflict to improve their safety and sense of security, and conduct wider research and analysis. We use this evidence and learning to improve local, national and international policies and practices that can help build lasting peace. Our priority is people – we believe in a world where everyone can lead peaceful, fulfilling lives, free from fear and insecurity.

We are a not-for-profit organisation with programmes in nearly 20 countries and territories across Africa, the Middle East, Asia and Europe.

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About Chinese Academy of International Trade and Economic Cooperation (CAITEC)

CAITEC is an interdisciplinary and multifunctional institution of social science research and a consultative body directly under the Ministry of Commerce (MOFCOM) of China, which undertakes research, information consultancy, publishing, education and training. CAITEC conducts research on the world economy and international trade, economic cooperation, regional economies, country-level economies, domestic trade and market development. It also conducts important research relating to export controls. It is one of the first national high-end think-tanks in China and in recent years has played an essential role in academic research, expert team building, personnel training and international communication.

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Annex 1 – Presentations and discussions

Acronyms

APC	Armoured Personnel Carrier
ATT	Arms Trade Treaty
BAFA	German Federal Office of Economics and Export Control
BIS (US)	Bureau of Industry and Security
BIS (UK)	Department of Business, Innovation and Skills
CAITEC	Chinese Academy of International Trade and Economic Cooperation
CCL	Commerce Control List
CGWIC	China Great Wall Industry Corporation
CICIR	China Institutes of Contemporary International Relations
CML	Common Military List
CPR	Center for Policy Research
CSTS	Centre for Strategic Trade and Security
CWC	Chemical Weapons Convention
DDTC	Directorate of Defense Trade Controls
EAR	Export Administration Regulations
ECCN	Export Control Classification Number
ECR	Export Controls Reform
EU	European Union
FCO	Foreign and Commonwealth Office
GAC	General Administration of Customs
GAD	General Armament Department
ICP	Internal Compliance Programme
ITAR	International Traffic in Arms Regulations
ITT	Intangible Transfers of Technology
KOSTI	Korea Strategic Trade Institute
MOFCOM	Ministry of Commerce
MTCR	Missile Technology Control Regime
NSG	Nuclear Suppliers' Group
OEE	Office of Export Enforcement
OIIP	Austrian Institute for International Affairs
PLA	People's Liberation Army
RF	Radio Frequency
RoK	Republic of Korea
SASTIND	State Administration of Science, Technology and Industry for National Defence
SME	Small and Medium-sized Enterprises
STA	Strategic Trade Authorization
SUNY	State University of New York
TBT	Tributyl Phosphate
TEWG	Technical Expert Working Group
UK	United Kingdom
US	United States
USML	US Munitions List
VFD	Variable-Frequency Drive
WA	Wassenaar Arrangement

Opening remarks

The opening session of the workshop was chaired by Bernardo Mariani, Head of Saferworld's China Programme. In his opening remarks, he introduced the project on 'Strengthening Technical and Operational Aspects of Dual-Use and Arms Trade Controls', which Saferworld and CAITEC are jointly implementing. He noted that under this project experts from China and other leading producers and exporters of arms and dual-use goods and technologies are exploring how implementation and enforcement of dual-use and conventional arms trade controls can be strengthened and mutually reinforced. He emphasised that the key objective under the project is to promote closer dialogue, understanding and cooperation between China and other countries in the non-proliferation field.

Prof Heinz Gaertner, Director of the Austrian Institute for International Affairs (OIIP) delivered the welcoming remarks on behalf of OIIP. He expressed his gratitude to Saferworld and CAITEC for helping to organise the event, and emphasised how strengthening the implementation of dual-use and arms trade control must be a multi-stakeholder initiative.

Ms Cheng Hui, Deputy Director and Research Associate at the Centre for Strategic Trade and Security (CSTS) spoke on behalf of CAITEC. She introduced CSTS, which has 25 research associates and focuses on four areas related to strategic trade and security: academic research, training, international cooperation and outreach. She emphasised the importance of debating solutions to the common challenges countries face in implementing and enforcing export controls.

Session one: Towards a shared understanding of what to control: developing and updating national control lists of arms and dual-use items and technologies that meet high common international standards

The first session of the workshop allowed participants to exchange views on developing and updating national control lists of arms and dual-use items and technologies that meet high common international standards as a prerequisite for a stringent export control system.

Mr Joachim Wahren, Expert in Export Controls, Retired Head of Directorate at the German Federal Office of Economics and Export Control (BAFA), Germany

Mr Wahren started by describing the process of updating national control lists in line with key international standards. He elaborated on the structure and content of the EU Common Military List (CML) and Dual-Use List and described the updating

procedures for the Dual-Use List. He concluded by reviewing the positive implications of adopting the EU Lists structure, including the need to harmonise goods classification due to the globalisation of trade, the consolidation in the EU Dual-Use list of dual-use controls of the international export control regimes; the regular updating of the EU lists; and the fact that many non-EU countries (e.g. Australia, Georgia, Kazakhstan, Malaysia, Norway, Singapore, Switzerland, Thailand, US) are already using the EU list structure.

Mr Mark Jaso, Senior Engineer, Office of National Security and Technology Transfer Controls, Bureau of Industry and Security, US Department of Commerce, USA

Mr Jaso shared the experience of the United States in classifying new products and technologies and implementing 'catch all' controls. He started his presentation by providing a background to the Export Controls Reform (ECR) initiative. He noted that the initiative started in August 2009, when President Obama directed a broad-based interagency review of the US export control system, with the aims of strengthening national security, increasing interoperability with NATO and other allies and allowing the Administration to focus its resources on transactions of greater concern. Under the ECR, there are effectively three control lists: the US Munitions List, the '600 series' Export Control Classification Numbers (ECCNs) within the Commerce Control List (CCL) covering most items that have moved from the State Department to the Department of Commerce, and the traditional dual-use ECCNs within the CCL. In order to determine commodity jurisdiction and classification for an item it is necessary to review each list and ask two questions: is the item specifically enumerated in this list?; and even if the item is not specifically enumerated, is it nevertheless caught as an item 'specially designed' for something that is specifically enumerated in the list? A new definition of 'specially designed' is based on a catch-and-release construct, which requires answering a series of yes/no questions that lead to an objective determination whether an item is 'specially designed'. To date, eighteen of the twenty-one categories of the US Munitions List have been revised and published for public comment, fifteen of which have been published as final rules.

Dr Cai Guanliang, Expert of dual-use export control, Chinese Ministry of Commerce, China

Going into detail of how the Chinese list of dual-use goods and technologies compares to the list of international regimes (including the Wassenaar Arrangement, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers' Group (NSG), the Australia Group and the Chemical Weapons Convention (CWC), Dr Cai focused on China's

approach to determining the scope of dual-use controls and how this differs from the practice of the Wassenaar Arrangement (WA). He emphasised that the comparison only focused in on numbers and names. He referred to the nine categories of the Wassenaar Arrangement's 'List of Dual-Use Goods and Technologies' noting that while there are overarching similarities, there are also differences. A very large part of the items included in the WA's List are captured in a number of Chinese regulations and their relevant control lists (including: Regulations on Nuclear Dual-Use item and Related Equipment and Technologies; Regulations on Export Control of Missiles and Missile-related Items and Technologies; Regulations on Export Control of Dual-Use Biological Agents and Related Equipment and Technologies; Regulations on Certain Chemical and related Equipment and Technologies; and the Control list of Computers of China). However, there are discrepancies, particularly with regard to the items in Category 5 (Part 1 - Telecommunications) of the WA's List; Category 5 (Part 2 - Information Security); and Category 8 (Marine). There are also discrepancies with the number of items covered in the WA's Categories 3 (Electronics), 6 (Sensors and Lasers) and 9 (Aerospace and Propulsing). Moreover, while the WA's List of Dual-Use Goods and Technologies has two nested subsections - 'sensitive' and 'very sensitive' goods – there is no such distinction within the Chinese List. However, Dr Cai concluded by expressing hope that his analysis could be used as a basis for future studies and could benefit future dialogue between China and the WA. He hoped that concrete and practical steps could be made for true cooperation.

Ms Lee Kyung-Lyung, Senior Researcher, the Korea Strategic Trade Institute (KOSTI), Republic of Korea

Ms Lee introduced identification and catch-all implementation in the Republic of Korea. After elaborating on the purpose and legal basis of strategic trade controls in RoK, with the Foreign Trade Act serving as the main legal pillar of South Korean export controls, Ms Lee described the control lists for military and dual-use items that are used in the RoK. These are published as 'Public Notices on Trade of Strategic Items' by the Ministry of Trade, Industry and Energy. She noted that the RoK regulates three types of controlled items:

1. dual-use items (the control list for these items is provided in Annex 2 of the Ministry of Trade's Public Notices; the list is regularly updated to reflect changes to the lists of multilateral export control regimes - WA, NSG, AG, MTCR and CWC)
2. designated items for catch-all licensing
3. military items (Annex 3 of the Ministry of Trade Public Notice lists conventional munitions – the list is identical to the WA's Munitions List).

Ms Lee stressed that there are two types of identification systems in the RoK: identification by the

industry through self-classification and, when companies do not have sufficient in-house capacity to conduct their own identification process, official identification by KOSTI. Within 15 business days, KOSTI provides classification services upon request. All steps from licence application to issuance are processed online via the 'Yestrade' system, which facilitates industry compliance and improves the effectiveness of export control administration. When items are not on the control lists, but a Korean exporter is aware – from the government or directly – that the importer of the goods intends to use them in the manufacturing, developing, using or storing of weapons of mass destruction (WMD) or their delivery system, the exporter is required to obtain a catch-all licence. Failure to do so would result in criminal and administrative penalties. Catch-all clauses in the South Korean legislation include suspicious occasions, or 'red flag conditions', that need to be taken into account. Ms Lee concluded by pointing to some of the challenges of implementing catch-all controls (these are exemplified in the Public Notice, e.g. 'The importer is reluctant to provide information on the end-use of the exports), especially with regard to exports to unknown end-users and items that are not designated for catch-all licensing.

Dr Guo Xiaobing, Deputy Director, Institute of Arms Control and Security Studies, China Institutes of Contemporary International Relations (CICIR), China

Dr Guo presented China's experience of controlling arms and dual-use items and innovations of concern that are not included on control lists. He highlighted that China applies a 'catch-all' principle on exports that are directly or indirectly related to the manufacture of nuclear weapons and their means of delivery. The legal basis of catch-all control in China is provided by: the Regulations of the PRC on the Control of Nuclear Dual-Use Items and Related Technologies Export; The Regulations of the PRC on the Export Control of Dual-Use Biological Agents and Related Equipment and Technologies and its control list; and the Measures on the Export Control of Certain Chemicals and Related Equipment and Technologies'. When the exporter knows, or should know, about the risk of the exported items being used for WMD related activities, export licensing requirements are compulsory, even if the intended items are not included in the Administrative List of Export of Military Products, the List of Export Control of Missiles and the Related Items and Technologies, or any other Control List. Once such a risk is identified, the licensing agency has the authority to immediately refuse the export licence, and terminate the export. Looking into industry efforts to comply with catch-all control, in August 2007, the Ministry of Commerce (MOFCOM) issued a circular with instructions to exporters of dual-use items and related technologies to establish ICP. Similarly, arms trading companies and military research and production enterprises are required to establish internal

compliance mechanisms. By way of example, Dr Guo pointed to the positive experience of China Great Wall Industry Corporation (CGWIC) in setting up an internal compliance programme. The company's statement on non-proliferation compliance emphasises that "CGWIC adheres to the principle of full examination and control on goods to be exported, and clearly sets the target of non-proliferation of WMD and their means of delivery above its commercial interests". Amongst the NGO efforts to control the export of non-listed items, Dr Guo pointed to export control and outreach training activities by CAITEC and the China Arms Control and Disarmament Association (CACDA). As an additional precautionary measure for the control of non-listed items, the Chinese Government may exercise provisional export control on specific items not contained on the relevant control list. For example, MOFCOM and the General Administration of Customs (GAC) implement temporary export control on tributyl phosphate (TBT), while MOFCOM, the State Administration of Science, Technology and Industry for National Defence (SASTIND) and the GAC implement temporary export control measures on related graphite products. Since 2015, MOFCOM, GAC and the Peoples Liberation Army's (PLA) General Armament Department (GAD) have been implementing temporary export controls on dual-use drones. Dr Guo concluded by examining difficulties with the enforcement of catch-all export control, in particular the capability to track and identify the potential proliferation risks of all emerging technologies in time. In this regard, China attaches great importance to international cooperation and would like to explore with other countries more effective ways of controlling exports of non-listed items.

Session two: Strengthening the efficacy of end-use verification and risk assessment

Session two provided an overview of perspectives on how to strengthen the efficacy of end-use verification and risk assessment and the implications of the Arms Trade Treaty (ATT).

Mr Mark Jaso, Senior Engineer, Office of National Security and Technology Transfer Controls, Bureau of Industry and Security, US Department of Commerce

Mr Jaso described the systems of analysis and control undertaken by the Bureau of Industry and Security (BIS) of the US Department of Commerce. He focused on four key analysis and control activities in the US: jurisdiction determination, the implications of the ECR initiative, catch all controls and the determination of licence exceptions. The U.S. exporter is responsible for determining the jurisdictional and classification status of the items it is exporting. The first step is to determine the jurisdictional and classification status of a commodity,

under the International Traffic in Arms Regulations (ITAR), or the Export Administration Regulations (EAR). The Department of Commerce, through BIS, has jurisdiction over all items falling under the CCL, while the Department of State, through the Directorate of Defense Trade Controls (DDTC), is charged with controlling the export and temporary import of defence articles and defence services covered by the US Munitions List (USML). A key in determining whether an export licence is needed from the Department of Commerce is knowing whether the item which is intended for export has a specific ECCN. All ECCNs are listed in the CCL. Exporters may classify the item on their own (a CCL Order of Review Decision Tool assists users in understanding the steps to follow in reviewing the CCL when determining the classification of their item), or submit a classification request to BIS. When reviewing the CCL to determine if an item is specified by an ECCN, the exporter will first need to determine in which of the ten broad categories of the Commerce Control List the item is included and then consider the applicable product group. In order to impede proliferation and prevent contributing to WMD/Missile programmes in countries of concern, the US has been applying 'catch-all' controls since the 1990s, which require government permission to export unlisted items when there is reason to believe such items are intended for a WMD/Missile end-use or end-user. As a consequence of the ECR, with a number of items moving to the CCL from the USML, it became necessary to better define what would be caught by new 'catch-all' controls and also to harmonise definition throughout the CCL and the USML. As Mr Jaso explained in his presentation in session one, the new definition of 'specially designed' established broad 'catches' and specific, objective 'releases', which allow for an objective determination of whether an item is 'specially designed'³. Both the US Commerce and State Departments use online application systems that are used by the public for submitting licence applications under the EAR and ITAR. The Commerce Department's online application system is called SNAP-R. It is free to create a SNAP-R account and submit a licence application. No purchase orders are required, but it is necessary to know the details of the transaction (items, end-users, end-uses, etc.). The exporter is allowed to export or re-export to and among end-users listed on the licence. Mr Jaso concluded by examining Licence Exception Strategic Trade Authorisation (STA) for items subject to the EAR. As an example, for 600 series items license exception STA may be available to authorise exports and re-exports to 36 NATO and/or multilateral regime allied countries if the following conditions are met: (a) for ultimate end-use by a government of such countries, (b) return to the US, or (c) in connection with an existing authorisation. The STA tool will help

³The definition is described in an online decision tree tool published by BIS - see <http://www.bis.doc.gov/index.php/decision-tree-tools>

exporters determine if their items are eligible for Licence Exception STA and if they are prepared to meet the compliance requirements of Licence Exception STA.

Dr An Xuejun, Senior Engineer, Institute of Computing Technology, Chinese Academy of Science, China

Dr An gave an overview of end-user and end-use control mechanisms for dual-use items and technologies in China. He emphasised that China has elaborated a set of norms, standards and measures aimed at ensuring responsible transfers of dual-use goods and technologies. Two laws (Foreign Trade Law and Customs Law), seven regulations (covering nuclear-, biological-, chemical- and missile-relevant items and technologies) and three ministerial measures form a comprehensive export control system regulating import and export licences for 764 dual-use items and technologies. The end-user and end-use analysis is one of the key factors to measure the proliferation risk. Technology assessment is also an important element in the process of the end-user and end-use analysis. End-user and end-use analysis combined with the technology assessment, contribute to an evaluation of the overall proliferation risk of an export. Following this, Dr An went on to describe how China's end-use control is in line with international practice. In the pre-licensing phase, the Ministry of Commerce promotes and implements relevant laws, regulations and procedures; it provides information on export controls through websites and training activities; it strengthens international cooperation and information exchanges. During the licence application process, while the exporter is required to submit a complete licence application form, including all necessary supporting documentation, including end-use certificates, the Ministry of Commerce authorities assess the reliability of the persons involved in the transaction, the information provided by the exporter, including the technical aspects of the goods to be exported and the end-use documentation submitted in support of the licence application. In the post-licensing phase the exporter must keep all records associated with the licence application for at least five years, submit a verification certificate of delivery or reception of the goods and has a duty to report to the authorities any suspicious activity or evidence of diversion or mis-use of the items. At the same time, MOFCOM and GAC undertake regular compliance checks on the exporters, monitor re-export conditions and co-operate and exchange information with relevant authorities and with other countries. China has established an electronic control platform for the import and export of dual-use items and technologies, which is used to handle applications, licences and information requests. Dr An also mentioned the role of expert consultants in the assessment of the end-user and end-use of dual-use goods and technologies. On a case-by-case basis, the Ministry of Commerce can convene a meeting of external

expert consultants who can review the supporting documents, and, if necessary, investigate further. The expert can submit written opinions on the end use/end user risks associated with a specific transfer, which will inform the licensing decision of the relevant authorities. Dr An concluded his presentation by mentioning three priority areas for further strengthening end-user and end-use control mechanisms in China: improving the post-licence management system; strengthening enforcement; and deepening international cooperation and information exchange

Mr Roy Isbister, Team Leader, Arms Transfer Controls, Saferworld

Mr Isbister assessed the utility of the Arms Trade Treaty (ATT) in enhancing national end-use and risk assessment across countries by obliging States Parties to align their national assessment criteria with the Treaty's provisions, dissuading signatories from undermining the purpose of the Treaty, and establishing norms that have implications even for non-signatories. He noted that EU Member States have agreed new guidance to take account of the requirements contained in the ATT, for example with regards to gender-based violence (though some states had maintained that this was already assessed through the human rights criterion). Mr Isbister observed that most of the concepts in the ATT are not new to the world of export controls, but that the ATT should serve to strengthen currently undeveloped norms on when it is and when it is not acceptable to transfer arms. Mr Isbister identified that the terms 'end-use' or 'end-user' only appear in the ATT a total of three times. This is due to tensions regarding the language, and whether identifying the end-use or the end-user was most important. He valued the ATT as a new global instrument which should serve to enhance cooperation, which is, at present, largely ad-hoc. If, over time, this is effective, then it may encourage non-signatories or non-States Parties to subscribe to the ATT to make arms control efforts truly global.

In the Q&A session participants acknowledged the success of the ATT. Chinese delegates were also asked for further information about how they enforce controls outside of their territory, and for tips on how companies manage the administrative burden of keeping all records associated with their licence applications for at least five years.

Session three: Controlling brokering services and intangible transfers of technology (ITT)

Session three of the workshop addressed the control of brokering services and ITT.

Mr Ian J. Stewart, Senior Research Fellow, Centre for Science and Strategic Studies, King's College

London/ Training Adviser, EU Outreach Programme on Dual Use Goods, UK

Mr Stewart presented the contribution of export controls on intangible technology transfers in limiting the spread of the manufacturing base of strategic dual-use technologies, particularly in the context of globalisation. Mr Stewart introduced a new capability acquisition model that has origins in the knowledge management discipline and makes a distinction between the concepts of 'explicit knowledge' (diagrams, writings, etc.) that is easy to transmit vs 'tacit knowledge' (skills that are personal and difficult to communicate). He used this model to explore a case study related to Chinese efforts to indigenise production of carbon fibre, a strategic dual-use commodity with uses in civil, military and WMD programmes. The analysis revealed a complex picture. Capability indigenisation in a globalising world is not inevitable if there are effective strategic trade controls. But existing controls are poorly suited to the task of preventing the spread of intangible technology, which is a prerequisite to capability indigenisation. He concluded by outlining the importance of academic outreach, especially to those academic disciplines, such as engineering and science affected by non-proliferation-related controls, for example through the activities that are being conducted under 'Project Alpha' of King's College London. In particular, the Association of University Legal Practitioners and Project Alpha are working jointly on a 'Higher Education Guide and Toolkit on Export Controls' in cooperation with the UK Export Control Organisation (ECO) and FCO. Further case studies by Project Alpha will focus on UK/India civil nuclear cooperation and additives manufacture.

Mr Nigel Gibbons, Head of Technical Assessment Unit, Export Control Organisation, Department for Business, Innovation and Skills (BIS), UK

Mr Gibbons presented the experience of the UK in controlling brokering activities. In 2004 the UK Government introduced new controls on the 'trafficking and brokering', of certain goods between overseas countries. These controls were introduced by the Export Control Act 2002 and were reviewed in 2007 when the UK government, through a public consultation process, sought views on the impact and effectiveness of the existing controls and possible options for change. Among the themes that emerged from the public consultation was support for the controls to be better aligned with risk, together with a desire for the controls on small arms and some other weapons to be tightened. As a result of the public consultation, the UK Government decided to implement a number of changes, which came into effect in April 2009. These included extending trade controls to transport-related activities undertaken within the UK or by UK persons overseas, and creating a three-tier structure as follows:

- Category A includes highly sensitive goods, such as torture goods and cluster munitions, which are inherently undesirable – for such goods the strictest level of controls apply; these apply when the activity is carried out from within the UK or by UK persons overseas; the controls extend to any act calculated to promote supply or delivery.
- Category B relates to goods where there is legitimate trade, but on which there is international consensus that they pose heightened concern (for example, small arms and light weapons, man-portable air-defence systems MANPADs, and long range missiles – the controls apply when the activity is carried out from within the UK or by UK persons overseas; controls do not apply for the sole provision of financing or financial services; insurance or reinsurance services; and general advertising or promotion services; targeted advertising/promotion and transport is controlled as they are more closely connected to trading than other ancillary activities).
- Category C is for all other goods on the UK Military List (controls only apply to activities carried out in the UK; they do not apply for sole provision of: transportation services; financing or financial services; insurance or reinsurance services; general advertising or promotion services).

Mr Gibbons also described EU controls on brokering services for dual-use items. He explained that these are governed by EU Regulation No 428/2009 which provides the EU control rules, a common EU list of dual-use items, as well as coordination and cooperation mechanisms for implementation and enforcement throughout the EU. The specific brokering controls, which are binding on Member States, derive from international obligations (in particular UN Security Council Resolution 1540 in respect of WMD) and are in line with commitments agreed upon in multilateral export control regimes. They apply to items listed in the EU Regulation where the broker has been informed that the listed items are or may be intended for a WMD end-use. There is also an obligation on the broker to advise the authorities if he/she is aware items are intended for a WMD end-use. The UK has other end-use controls for WMD purposes, which supplement the EU Regulations. Mr Gibbons gave the example of software and technology, where UK regulations make specific provision for 'any means' of transfer, including face-to-face conversations, lectures, seminars and the passing over of documents as well as electronic transfers (e-mail, fax, telephone). These apply to transfers within the UK and by UK persons outside the EU. He explained that UK export controls also extend to the provision of technical assistance relating to WMD. The provision of technical assistance broadly means any technical support related to repairs, development, manufacture, assembly, testing, use, maintenance or any other related technical service. Again the controls apply to the activities of persons within the UK and UK

persons outside the EU.

In the Q&A session, participants contributed valuable points and suggestions. This included the need to make a clear distinction between industry and academia. Priority concerns also included the status of intangible transfers of technology in China.

Session four: Working to embed commercial export controls compliance

Session four addressed how to embed commercial export-controls compliance as one component of an effective national system of arms and dual-use transfer controls.

Mr Jay Nash, Research Fellow, Center for Policy Research (CPR), University of Albany, State University of New York (SUNY), USA

Introducing the establishment and enhancement of strong export controls compliance programmes, Mr Nash focused his intervention on three key areas: the establishment of a 'strong'/'successful' ICP and the importance of having one; what governments and regulators can do to help, make and enhance strong ICPs; and what companies can do to make and enhance strong ICPs. Mr Nash first highlighted how effective export control compliance programmes can help companies to prevent unauthorised/undesired weapons proliferation. He also outlined how they can help a company to comply with its legal obligations; operationalise/internalise export control rules and procedures; allow for more targeted and efficient resource allocation and processes; and ensure a strong risk management system within the company. In addition to this, they can serve to promote a positive image and strengthen business reputation and expand business opportunities.

Mr Nash proceeded to present a comparative analysis of the experiences of China, Japan, Germany and the U.S. in implementing the following elements that are commonly found in effective export control compliance programmes:

- Management commitment/corporate policy
- Compliance organisation/personnel
- Documented procedures/compliance programme
- Transaction/shipment screening
- Record keeping
- Reporting and responding to compliance failures
- Auditing/internal review
- Training and awareness
- Physical and technical security
- Guidance to subsidiaries

There are a range of challenges that both companies and regulators face, including bridging the gap between interests and organisational and operational realities; the pace of international commerce and shipments; compliance among small and medium enterprises; the role of trade intermediaries and facilitators; item classification and identification and

end-use and end-user verification. Mr Nash gave details of what regulators can do to promote and implement export compliance, including:

- Bringing the national/domestic export control as much into line with international standards and control lists as possible
- Being attentive to both domestic and foreign industry
- Targeting industry outreach and resources to specific industries and types of commercial actors (e.g. SMEs, aerospace industry, freight forwarders)
- Having a robust set of licence exceptions, general licences, trusted (strategic) trader programmes
- Providing free, online item and restricted party screening tools
- Offering formalised voluntary self-disclosure programmes
- Ensuring as much internal consistency in written laws and regulations and interpretations/applications as possible

Finally, Mr Nash also gave some tips to companies willing to establish and implement export control compliance policies and procedures. These included:

- Having management awareness, buy-in, and tangible support
- Understanding that in today's world, export controls can be relevant to almost any industry or commercial activity
- Trying not to 'offload' too many export control compliance responsibilities to trade service providers
- Having dedicated, well-trained export control compliance personnel; recognising and rewarding 'compliance champions'
- Using (but without over-relying on) compliance automation
- Looking at export control requirements (and proliferation risks) beyond 'home-base' supply chains and shipping routes
- Pushing both corporate and localized compliance 'down' and 'out' to overseas subsidiaries
- Trying to help educate and assist business partners, whether suppliers or customers or service providers
- Trying to establish communication channels with foreign/local export control regulatory agencies

Dr Cheng Hui, Deputy Director and Research Associate, Centre for Strategic Trade and Security, CAITEC, China

Dr Cheng presented the challenges in China of reaching out to SMEs to help them to understand licence obligations. Recognising the role of industry and academia in export controls, and that the development and implementation of ICPs by companies will help them to comply with national export controls, the Chinese Government encourages and supports Chinese companies to establish ICPs. In its 2007 announcement regarding guidance on the establishment of ICPs within companies trading in dual-use items and technologies (No.69/2007), MOFCOM encourages, supports and guides

companies to establish ICPs that include the following elements: formulation of policy statements; establishment of institutional frameworks; establishment of export review procedures; compilation of export control handbooks; launch of training programmes; and record keeping.

Small and medium-sized companies are not willing to establish ICP for an number of reasons, including: 1) exports may only account for a small percentage of the total business volume; 2) ICP is often understood as not contributing to profit-making, but that it may have an impact on business; 3) lack of awareness, and not knowing the range of potential uses of their products with regards to proliferation; 4) insufficient financial and human resources

The Chinese government's role is as a policy maker, advocator, and service provider. The Ministry of Commerce's role is as a policy maker, and as an organiser for seminars and discussion, outreach and training.

There are six basic elements of ICP: 1) formulating policy statements; 2) establishing organisational structures; 3) developing review processes; 4) preparing management manuals; 5) carrying out education and training; and 6) preserving data files.

Dr Cheng provided her own personal advice, suggesting that the Chinese government need to demonstrate the importance of ICP to small and medium-sized companies. ICP is important in helping such companies to reduce risk of violations and penalties; reduce risks of reputational damage; it can be viewed as a mitigating factor; and it can be used as a competitive business advantage and to provide internal accountability.

Authorities can also provide more help. They can: 1) develop free online resources (for example, outlining the elements that government recommends for an ICP, guidelines on how to develop an export compliance manual, self-audit modules, providing the public with a free tool to assist in applying regulatory requirements to specific transactions); 2) conduct seminars, webinars and teleconferences (especially participating in conferences organised by small business organisations, partnering with other government agencies or NGOs that focus on providing services to small and medium-sized businesses, working with large companies to assist companies in supply chain); 3) Strengthening exporter counselling services (for example providing updates on regulatory changes, providing information on seminars and other training activities, responding to telephone calls and e-mails in a timely fashion).

Mr Spencer Chilvers, Head of Export Control Policy, Rolls-Royce plc, UK

Mr Chilvers talked about how to conduct an effective export controls compliance programme self-assessment. After introducing the existing guidance

on compliance programmes (including: the EU guidance in relation to intra-community transfers of defence products and the certified company scheme, Commission Recommendation 2011/24/EU; the UK Export Control Organisation's Compliance Code of Practice; the Nunn-Wolfowitz Task Force Report: Industry 'Best Practices' Regarding Export Compliance Programs; the Coalition for Excellence in Export Control Compliance website; and SEESAC and UNDP Internal Compliance Programmes), Mr Chilvers elaborated on the essential elements of a compliance programme and what needs to be in place in terms of policies, procedures and other aids for an ICP to be effective:

- **Management Commitment**
 - Is there a top level statement of commitment to compliance?
 - Has a senior official overall responsibility for compliance?
 - Does the board of directors discuss export control compliance issues?
- **Compliance Personnel**
 - Organisational chart – responsibilities and contact details. Is information available to all?
 - Any conflicts of interest in reporting lines? Are their sufficient export control personnel and are they in the right places?
- **Policies, Procedures, Work Instructions, Guidance Material**
 - Has any of this material been produced and if so is it readily accessible to those that need to see it?
 - Are there any gaps that need filling?
 - Is it readily understandable and up to date?
- **Training and Education**
 - Do all staff receive basic export control training and if so is this a one off or on a regular basis?
 - Is there any training for specific functions e.g. engineers, sales force?
 - Is their development training for export control staff?
- **Licence Application Process**
 - Is information available on the applicable licensing processes?
 - Have all goods (including parts and components), technology and software been rated against applicable control lists?
 - Is up to date information on applicable sanctions and embargoes available?
 - Is a 'denied parties screening' tool in use?
- **Implementing Licences**
 - Are licence conditions understood and communicated to those who need to know inside and outside the company?
- **Record Keeping**
 - Are details of the control list classification of all goods (including parts and components), technology and software kept? Is this information reviewed regularly – e.g. when a revised control list is published?

Are records of extant export licences kept, including details of exports made, in line with government record keeping requirements?

- **Audit**
Are internal audits carried out? If so, how are any shortcomings identified during an audit acted upon?
- **Breaches of Controls**
How are suspected breaches of export controls handled within the company?
Is there a culture of voluntary disclosure or cover-up?
How are lessons learnt and flowed down to ensure that the same mistakes are not made over and over again?

Mr Chilvers concluded by emphasising that in order for an effective self-assessment to take place, the assessor must have a clear idea of what a compliance programme requires so that they can measure whether their current systems are fit for purpose or require more work. If it is work in progress, they then need to determine how they are going to achieve fit for purpose and set themselves clearly measurable targets to achieve that. Once the ICP self-assessment results are clear, Mr Chilvers advised the following next steps:

- **Compilation of an Action Plan**
(including listing and prioritising what needs to be done in terms of overall compliance, e.g. if classification of goods, software and technology is incomplete this must be fixed as a matter of priority).
- Determine what resources are required to achieve full compliance in each area.
- Set measurable targets against which progress can be measured.
- Ensure that senior management are aware of and endorse findings of the audit and the Action Plan.

In the Q&A session, the need for incentives was noted. Countries such as Japan have now migrated the ICP concept over to academia. This can be helpful. While it was acknowledged that those without ICP are ousted from the supply chain, participants also questioned what should be done if regulators do not demand high standards, and, for example, if there will come a point when there are repercussions for those who do not join the ATT. Participants also discussed how language barriers can be used as an excuse for poor performance and it was suggested that this can be overcome by pairing people with compliance experience with colleagues with language skills.

Session five: Case studies

The second part of the workshop had case studies from the UK, Sweden, Russia, China and the USA, which illustrated export control policy and practice in action, including the challenges faced in the daily implementation of export controls and how countries respond to the challenges posed by end-use and end-

user controls and the risk of diversion to sensitive destinations.

5.1 Case study one

Mr Nigel Gibbons, Head of Technical Assessment Unit, Export Control Organisation, Department for Business, Innovation and Skills (BIS), United Kingdom

Mr Gibbons explained that in the EU there are two broad categories of 'Catch-All' or 'End-Use' Controls – The Military End-Use Control and The Weapons of Mass Destruction (WMD) End-Use Control. These 'Catch-All' controls can be applied to transactions relating to any items that are not listed in the control lists and for which an export licence is not normally required.

The Military End-Use Control in the EU covers potential exports of non-listed 'dual-use' items where the exporter is 'informed' by the authorities that items may be intended, in their entirety or in part, for a military end-use. However, this can only be invoked if the export is intended for a country subject to an EU/OSCE arms embargo or UN Sanctions, and only when the export is for incorporation into military items, or for the development, production or maintenance of military items. In addition, any parts or components for military items which were themselves not legitimately exported can be made subject to this 'catch-all' irrespective of the export destination. Mr Gibbons then went through a number of examples of exports where the Military End Use Controls could be applied.

He then introduced the WMD End-Use Control and the concept of 'WMD Purposes' in the context of the EU and UK legislation. He explained the meaning behind the key terminology used and gave some examples of where the control could be applied and some pointers regarding suspicious enquiries that could potentially signal concerns regarding the intended end-use.

Mr Gibbons then took the workshop through a case study where the 'catch-all' controls had been invoked. The example was a composite of a number of real cases that had been compiled to illustrate the challenges, information requirements and inter-agency cooperation needed to successfully implement a 'catch-all' control. The example concerned the proposed transfer of electronic equipment and related components that were not on any control list but were detained prior to export for customs checks. The initial documentation provided by the exporter to the authorities was displayed and this showed that the order included a separate invoice address and delivery address, in two different Middle-Eastern states. Further document checks revealed an email from a third entity connected with the transaction which was located in Southeast Asia, as well as a response to this email from yet another

entity in another Middle-Eastern state. Mr Gibbons explained that further checks and investigations were undertaken which revealed that the actual end-user was the Middle-Eastern entity in one of the emails and not that originally declared on the export documentation. Further emails revealed intent on certain parties to route the shipment via a number of states in the Middle East and Southeast Asia before reaching the actual end-user in the Middle East. As a result of the concerns raised by these circumstances the exporter was informed by the export control authorities that an export licence was required due to end-use concerns. The group raised a number of questions and discussed various aspects prompted by the case study.

Using the case study as a reference point Mr Gibbons talked further about the key aspects which underpin effective controls, including an effective 'catch-all' mechanism. These cornerstones were identified as: legislation, awareness, administration and enforcement. He went on to illustrate the interagency cooperation and information sharing approach operating in the UK and how this had developed over many years in response to emerging risks and identified shortcomings.

5.2 Case study two

Amb Paul Beijer, Department for Disarmament and Non-proliferation, Ministry for Foreign Affairs, Sweden

To exemplify export control challenges, including end-user controls and diversion risks, Amb Beijer discussed a case study of a land-locked state that wanted to buy 10 used armoured personnel carriers (APCs) from another country in the region. The APCs were originally produced and exported from a country with a well-developed defence industry and comprehensive export controls. The end-user requirements applied by the producing state to the APCs in question had the form of a non-re export clause with the possibility of obtaining re-export permission on a case-by-case basis. The participants were asked to specify the information needs for such a re-export assessment. Although the intended recipient country had recently upgraded its export control system with outside assistance, it was in a fragile and conflict-affected region, where there were several geographically separate ongoing low-level armed conflicts over ethnic divisions and territorial claims with spillover effects in the intended recipient country. Finally, an export of these APCs to the land-locked recipient state would involve overland transport of the APCs through another country with weak control structures. The exercise stimulated a lively discussion among participants on the risks associated with the transfer, the roles, responsibilities and tasks of each of the countries involved, including in terms of obligations contained in the ATT, and what further information might be needed for the authorities of the original exporting country to decide whether or

not they should authorise the re-transfer. Amb Beijer indicated how his own country, Sweden, might assess the risks associated with the transfer, as did officials from other countries that were present at the meeting.

5.3 Case study three

Mr Andrey Shevchenko, Deputy Head of Export Controls Department, Federal Service for Technical and Export Controls (FSTEC), Russia.

All foreign economic operations, including export and import of controlled goods and exchanges of intellectual property, between Russia and foreign actors are subject to strict licensing procedures. Russian legislation provides that export control lists should be drawn up by the President, in the form of Presidential Decrees, in consultation with the Parliament and industry representatives. Under catch-all export control regulations, Russian firms are forbidden to sell dual-use goods if they know they will be used for the development of WMD and their delivery systems, even if the items are not specifically mentioned on control lists. Since 2004, FSTEC, which operates under the Ministry of Defence, is responsible for issuing licences for the export of dual-use goods and technologies, while the Federal Service for Military-Technical Cooperation (FSMTC), also operating under the Ministry of Defence, is empowered with control and supervision functions in the military-technical cooperation area and is the body competent to deliver export licences for conventional arms. There are two types of licences: single and general. The latter can only be issued to legal entities with accredited ICPs. The documents that the exporter must submit in order to obtain a licence include:

- Various supporting documents about the applicant (official name of the company, address, licence or permission for working in a particular field, ownership documents and intellectual property documents, etc.)
- An official application form asking for an export licence;
- Technical documentation for controlled goods;
- Copy of the export contract;
- Copy of the contract between the applicant and the manufacturer;
- End-user guarantees specifying the end-user, the purpose of the export, or end-use and the country in which the end-use will take place;
- Confirmation of the end-user guarantees given by duly authorized end-use state representatives; and
- Transfer information (when, where, how the goods will be transferred)

After reviewing all the documents, FSTEC decides whether or not to issue a licence.

In the second part of his presentation, Mr Shevchenko introduced three real cases of licence denials (from case inception and development to the final licensing decision) for the transfer of dual-use

goods to the Republic of Korea, Kyrgyzstan and Ukraine. In all cases, the licence was denied in the face of a potential diversion risk.

5.4 Case study four

Dr Han Lu, Research Associate, Centre for Strategic Trade and Security, CAITEC, China

By way of introduction, Dr Han provided an overview of the Chinese export licensing system for dual-use goods and technologies, with details of its legal basis, competent agencies, procedures and support systems. The legal basis for export control procedures rests with the Foreign Trade Law and the Customs Law of the People's Republic of China, together with a number of export control regulations (including on: nuclear items, nuclear dual-use goods; biological agents and related equipment and technologies; and missiles and missile-related items and technologies) and various ministerial decrees (including: Measures on the Administration of Export Registration for Sensitive Items and Technologies; Measures for the Administration on Import and Export Licence for Dual-use Items and Technologies; and Measures on General Permit for Export of Dual-Use Items and Technologies). MOFCOM, with its newly established Bureau of Industry Security, Import and Export Control, is the leading agency in export control decisions of dual-use items and technologies. It exercises export control together with other competent authorities including the Ministry of Foreign Affairs, SASTIND, the Ministry of Industry and Information Technology, the Ministry of Health and the Ministry of Environmental Protection. MOFCOM issues export licences; it investigates illicit exports of sensitive goods and technologies, it formulates and makes adjustments to the Control List for the Import and Export of Dual-use Items and Technologies. Together with the GAC, it formulates the Catalogue of Dual-use Items and Technologies that are subject to import and export licences. The import or export of any item or technology that falls into the control scope of the catalogue (currently, 764 items) requires a licence. After obtaining a registration certificate, an exporter may apply for an export licence using an E-Licensing platform, which is linked with the Customs Network. Export licence procedures require a two-tier process whereby provincial Departments of Commerce are responsible for receiving licence applications and conducting an initial review. They then transfer the application to MOFCOM for further examination. MOFCOM re-examines the documentation, when necessary as part of an interagency review with other competent government agencies. The licence, together with other documents required by the regulations, will enable exporters to obtain customs clearance.

In the second part of her presentation, Dr Han introduced a case that the final end-user was deemed to be sensitive. The item in question was a variable-frequency drive (VFD), a type of motor controller that

drives an electric motor by varying the frequency and voltage supplied to the electric motor. VFDs are widely used for civilian purposes, for example in air-conditioners, fans and pumps. They can also be used for military purposes such as for high-speed centrifuges that can be used for Uranium Enrichment. The authorities became suspicious when a foreign company ordered VFDs from a Chinese company because 1) the importer was from a UN embargo country and there were reasons to suspect that the country was in the process of nuclear testing; 2) the information of the import company could not be found; 3) the frequency of the VFDs the importer ordered was suspicious; and 4) the quantity of VFDs ordered was high. Licencing officials were highly concerned about this transaction and therefore they conducted an investigation. The licencing officials found that a number of similar transactions had been made in several different Chinese provinces by the same import company. The authorities eventually decided to reject the licence application because of the high risk that the goods could be used to conduct uranium enrichment in a country under a UN embargo.

5.5 Case study five

Mr Donald Pearce, Senior Special Agent – Operations, Office of Export Enforcement (OEE) - National Security Programs Division Desk, U.S. Department of Commerce, USA

By way of introduction, Mr Pearce described the priorities and functions of the OEE, which are to: deter and prevent exports of sensitive goods supporting illicit activities; assist legitimate exporters and freight forwarders with compliance; and liaison and joint operations. OEE pursues this mission through its Headquarters in Washington D.C., nine domestic field offices and OEE personnel dedicated to export control assignments in Singapore, India, China, Germany, Hong Kong, and UAE. Violations of export control and public safety statutes are subject to severe criminal (up to 20 years imprisonment and a \$1 million fine) and administrative (up to \$250,000 per violation or twice the amount of the transactions) penalties.

In the second part of his presentation, Mr Pearce presented a full criminal investigation for export controls violations in the US, all the way through from case inception and development to final prosecution. In October 2011, The U.S. Government indicted five individuals and four companies for illegally supplying radio frequency (RF) modules, items that are subject to the EAR and classified under ECCN 5A002, to Iran. Three of those individuals were also indicted for conspiring to illegally export antennas for military aircraft, items that are subject to the ITAR and classified under U.S. Munitions List Category XI(c), to Singapore and Hong Kong for ultimate end-use in Iran. The U.S. Government alleged that the defendants fraudulently purchased and caused to be exported from the U.S. approximately 6,000 RFMs, at

least 16 of which were later found in unexploded IEDs in Iraq. The investigators traced those 16 RFMs back to a U.S. manufacturer. The defendants purchased RF modules from a U.S. company, claiming they were intended for use in a telecommunications project in Singapore. The defendants then diverted the modules through Singapore, Hong Kong, and Malaysia to Iran. Three defendants also conspired with a U.S. person to illegally export antennas made for military aircraft, items that are subject to the ITAR, from the U.S. to Singapore and Hong Kong. On the same day the criminal indictment was made public, BIS added 15 parties, including the indicted individuals and companies, as well as other related parties, to its Entity List. By this action, BIS imposed a new licence requirement, with a presumption that the licence would be denied, for any item subject to control under the EAR that is to be exported, re-exported, or transferred (in-country) – by anyone – to any of those 15 parties. Under EAR Section 744.11, BIS may impose additional licence requirements on parties BIS determines are involved in activities that are contrary to the national security or foreign policy interests of the U.S. These parties are published on the Entity List to alert the public. A multi-year investigation by OEE, Homeland Security, FBI, and the Department of Justice, with assistance by several other US agencies, led to the successful extradition and prison sentences for two of the defendants, who are citizens of Singapore, who plead guilty in a US court. A third individual, also from Singapore, who was later arrested in connection with an INTERPOL 'Red Notice', currently remains in custody pending extradition.

2.7 Closing session

In the closing session of the workshop, which was chaired by Mr Bernardo Mariani from Saferworld, participants discussed some of the cooperative actions for strengthening and mutually reinforcing the implementation and enforcement of dual-use and arms trade controls and how best to take this dialogue process forward in a mutually beneficial way. Mr Mariani stressed that at a time when conflicts are becoming more complex and intractable, violent extremism is spreading and terrorist organisations are increasing their lethality and capability, it is crucial to bridge the gaps between different export controls system and ensure full alignment with international standards. The implementation and enforcement of efficient controls should help to prevent the spread or diversion of arms and dual-use items to conflict zones and unintended or proscribed end-users. If existing gaps are not closed, proliferators will take advantage of them.

He emphasised that the event provided a useful space for different states to come together to explain their distinct approaches to dual-use control and represented an important platform on which to build future dialogue. He concluded by expressing his hope that the workshop will be an inspiration for future debates that will bring about more effective, transparent, and joined-up efforts on dual-use and arms trade controls. There is a common interest in enhancing China's constructive engagement with multilateral export-control regimes and of strengthening and mutually reinforcing export controls. Mr Mariani concluded by reiterating Saferworld's commitment to continuing this dialogue effort in the future in order to enhance the prospect of developing more transparent and effective regulation of the international trade in arms and dual-use goods.

Annex 2 – Agenda

Strengthening Technical and Operational Capacity to Implement and Enforce Dual-Use and Arms Trade Controls

A training workshop under the aegis of the Technical Expert Working Group (TEWG) on Dual-Use and Arms Trade Controls, Berggasse 7, 1090 Vienna, Austria

Wednesday, 20 January 2016

All Day Arrival of participants and bilateral meetings

18:30-20:00 Welcome dinner ('I vecchi amici' restaurant, Liechtensteinstraße 24, 1090, Vienna)

Thursday, 21 January 2016

09:00-09:15 Opening remarks

- **Bernardo Mariani**, Head of China Programme, Saferworld
- **Prof Heinz Gärtner**, Director, Austrian Institute for International Affairs (OIIP)
- **Cheng Hui**, Deputy Director and Research Associate, Centre for Strategic Trade and Security, Chinese Academy of International Trade and Economic Cooperation (CAITEC), China

09:15-10:30 **Towards a shared understanding of what to control: developing and updating national control lists of arms and dual-use items and technologies that meet high common international standards**

Moderator: **Martin Krüger**, Head of Unit, Arms Exports, Military Transit and Overflight Control, Federal Ministry of European and International Affairs, Austria

- Updating national control lists in line with key international standards - The EU Lists Model, **Joachim Wahren**, Retired Head of Directorate, Federal Office for Economic Affairs and Export Control (BAFA), Germany
- The experience of the United States in classifying new products and technologies and implementing 'catch all' controls: changes under the Export Controls Reform initiative, **Mark Jaso**, Senior Engineer, Office of National Security & Technology Transfer Controls, Bureau of Industry & Security, U.S. Department of Commerce, USA
- The Chinese list of Dual-Use Goods and Technologies and how it compares to the list of international regimes (Wassenaar Arrangement, MTCR, NSG and Australia Group), **Dr Cai Guanliang**, Technical Director of the Ministry of Foreign Affairs Expert Advisory body, China
- Identification services and the implementation of 'catch all' controls in the Republic of Korea, **Lee Kyung-lyung**, Senior Researcher, Identification Team I, Korea Strategic Trade Institute (KOSTI), Republic of Korea
- The Chinese experience of controlling arms and dual-use items and innovations of concern, which are not included on control lists, **Prof Guo Xiaobing**, Deputy Director, Institute of Arms Control and Security Studies, China Institutes of Contemporary International Relations (CICIR), China

Discussion

10:30-10:45 **Coffee break**

10:45-12:30 **Strengthening the efficacy of end-use verification and risk assessment**

Moderator: **Amb Paul Beijer**, Department for Disarmament and Non-proliferation, Ministry for Foreign Affairs, Sweden

- Systems of analysis and control before, and after, the transfer of military and dual-use items – the experience of the United States of America, **Mark Jaso**, Senior Engineer, Office of National Security & Technology Transfer Controls, Bureau of Industry & Security, U.S. Department of Commerce, USA
- China's experience of end-use verification and risk assessment, **Dr An Xuejun**, Senior Engineer, Institute of Computing Technology, Chinese Academy of Science, China
- The implications of the Arms Trade Treaty (ATT) for national end-use and risk assessments, **Roy Isbister**, Team Leader, Arms Transfer Controls, Saferworld

Discussion

12:30-13:30 Buffet lunch

13:30-14:30 Controlling brokering services and intangible transfers of technology

Moderator: **Jay Nash**, Research Fellow, Center for Policy Research (CPR), University of Albany, State University of New York (SUNY), USA

- The contribution of Intangible technology controls in controlling the spread of strategic technologies, **Ian J. Stewart**, Senior Research Fellow, Centre for Science and Strategic Studies, King's College London/ Training Adviser, EU Outreach Programme on Dual Use Goods, UK
- Controlling brokering and intangible transfers of technology - the experience of the UK, **Nigel Gibbons**, Head of Technical Assessment Unit, Export Control Organisation, Department for Business, Innovation and Skills (BIS), UK

Discussion

14:30-15:30 Working to embed commercial export-controls compliance as one component of an effective national system of arms and dual-use transfer controls

Moderator: **Robert Parker**, Director of Policy and Communications, Saferworld

- What makes a strong export controls compliance programme and how to upgrade the industry compliance programmes in order to minimise risks of export controls violations, **Jay Nash**, Research Fellow, Center for Policy Research (CPR), University of Albany, State University of New York (SUNY), USA
- Understanding licence obligations: the challenges of reaching out to small and medium enterprises, **Cheng Hui**, Deputy Director and Research Associate, Centre for Strategic Trade and Security, CAITEC, China
- How to conduct an effective export controls compliance programme self-assessment, **Spencer Chilvers**, Head of Export Control Policy, Rolls-Royce plc, UK

Discussion

15:30-15:45 Coffee break

The second part of the workshop will have case studies from the UK, Sweden, Russia, China and the USA, which will illustrate export control policy and practice in action, including the challenges faced in the daily implementation of export controls and how these are addressed.

15:45-17:00 Case study One (on different scenarios and issues to be taken into account when considering export of dual-use items and technologies that are not subject to export controls) - **Nigel Gibbons**, Head of Technical Assessment Unit, Export Control Organisation, Department for Business, Innovation and Skills (BIS), UK

Discussion

17:00-17:15 End of day one - Closing Remarks

Friday, 22 January 2016

09:00-10:30 Case study Two (An overall 'workout' of export control challenges, including end-user controls, diversion risks & positive factors) - **Amb Paul Beijer**, Department for Disarmament and Non-proliferation, Ministry for Foreign Affairs, Sweden

Discussion

10:30-10:45 Coffee break

10:45-12:15 Case study three (Anatomy of a licensing decision for the transfer of dual-use goods in the face of a potential diversion risk, all the way through from case inception and development to licensing decision and follow-on procedures) - **Andrey Shevchenko**, Deputy Head of Export Controls Department of Federal Service of Technical and Export Controls, Russia

Discussion

12:15-13:15 Buffet lunch

13:15-14:30 Case study four (on the administration of export controls in China; a case of Chinese licence approval or denial for the export of dual-use items where the final end-user was deemed to be sensitive) - **Han Lu**, Research Associate, Centre for Strategic Trade and Security, CAITEC, China

Discussion

14:30-15:45 Case study five (an investigation for export controls violations in the US; a full criminal investigation for export controls violations, all the way through from case inception and development to final prosecution) - **Donald Pearce**, Senior Special Agent – Operations, Office of Export Enforcement - National Security Programs Division Desk, U.S. Department of Commerce, USA

Discussion

15:45-16:00 Coffee break

16:00-17:00 Prospects for closer dialogue, understanding and cooperation between China and other leading manufacturers and exporters in implementing and enforcing dual-use and arms trade controls

Moderator: **Bernardo Mariani**, Head of China Programme, Saferworld

17:00-17:15 Co-Chairs' Closing Remarks

19:00-20:30 Dinner at Palmenhaus restaurant, Burggarten 1, 1010 Vienna

Annex 3 – Participant List

Strengthening Technical and Operational Capacity to Implement and Enforce Dual-Use and Arms Trade Controls

A training workshop under the aegis of the Technical Expert Working Group (TEWG) on Dual-Use and Arms Trade Controls, 21-22 January 2016, Berggasse 7, 1090 Vienna, Austria

Participants

Dr AN Xuejun, Senior Engineer, Institute of Computing Technology, Chinese Academy of Science, China

Amb Paul BEIJER, Department for Disarmament and Non-proliferation, Ministry for Foreign Affairs, Sweden

Juergen BOEHLER-ROYETT MARCANO, Head of Section, Federal Department of Economic Affairs, Education and Research EAER, State Secretariat for Economic Affairs, Switzerland

Dr CAI Guanliang, Consultant, Export Control of Chemical Dual-use Items, China's Ministry of Commerce (MOFCOM), Technical Director of the Ministry of Foreign Affairs Expert Advisory body, China

CHENG Hui, Research Associate, Centre for Strategic Trade and Security, Chinese Academy of International Trade and Economic Cooperation (CAITEC), China

Spencer CHILVERS, Head of Export Control Policy, Rolls-Royce plc

Prof Heinz GAERTNER, Director, Austrian Institute for International Affairs (OIIP)

Nigel GIBBONS, Head of Technical Assessment Unit, Export Control Organisation, Department for Business, Innovation and Skills (BIS), UK

Chloe GOTTERSON, Project Officer, China Programme, Saferworld

Amb Philip GRIFFITHS, Head of Secretariat, Wassenaar Arrangement

Prof GUO Xiaobing, Research Professor and Deputy Director, Institute of Arms Control and Security Studies, China Institutes of Contemporary International Relations (CICIR), China

Dr HAN Lu, Research Associate, Centre for Strategic Trade and Security of Chinese Academy of International Trade and Economic Cooperation (CAITEC), China

Lisa HILLIARD, Senior Officer, Secretariat, Wassenaar Arrangement

HUANG Zhong, Consultant, China Programme, Saferworld

Roy ISBISTER, Team Leader, Arms Transfer Controls, Saferworld

Mark JASO, Senior Engineer, Office of National Security & Technology Transfer Controls, Bureau of Industry & Security, U.S. Department of Commerce, USA

Leonid KOSLOV, Second Secretary, Permanent Mission of the Russian Federation to the International Organizations in Vienna

Martin KRUEGER, Head of Unit, Arms Exports, Military Transit and Overflight Control, Federal Ministry of European and International Affairs, Austria

LEE Kyung-Lyung, Senior Researcher, Identification Team I, Korea Strategic Trade Institute (KOSTI),

Republic of Korea

Bernardo MARIANI, Head of China Programme, Saferworld

Jay NASH, Research Fellow, Center for Policy Research (CPR), University of Albany, State University of New York (SUNY), USA

Thomas OSTROWSKI, Political Specialist, U.S. Mission to International Organizations in Vienna, USA

Robert PARKER, Director of Policy and Communications, Saferworld

Donald PEARCE, Senior Special Agent – Operations, Office of Export Enforcement - National Security Programs Division Desk, U.S. Department of Commerce, USA

Andrey SHEVCHENKO, Deputy Head of Export Controls Department of Federal Service of Technical and Export Controls, Russia

Ian STEWART, Head, Project Alpha, King's College London / Training Adviser, EU Outreach Programme on Dual Use Goods, UK

David SULLY, Political Attaché, UK Permanent Mission to the United Nations, UK

Joachim WAHREN, Retired Head of Directorate, Federal Office for Economic Affairs and Export Control (BAFA), Germany

Sergei ZAMYATIN, Senior Officer, Secretariat, Wassenaar Arrangement

ZHANG Hui, Project Coordinator, China Programme, Saferworld