



Expert Workshop on International Chemical Security Coordination

Informal Summary

On 28 and 29 September 2017, the OPCW convened an Expert Workshop on International Chemical Security Coordination at OPCW Headquarters in The Hague, the Netherlands, to discuss the state of international coordination on chemical security matters and to consider possible means of strengthening that cooperation. Twenty-four experts attended the workshop (see Annex 1), representing the chemical industry, international organisations, academia, donor interests, and non-governmental organisations active in supporting chemical-security capacity building.

Sponsored by the New Zealand government, the workshop was held against the backdrop of growing concerns about the threat to the international norm against chemical weapons posed by non-State actors, particularly armed terrorist groups, and the growing risk to the Convention, and to international security, posed by the use by such groups of toxic industrial chemicals as weapons. While controlling such chemicals is the primary responsibility of States, the OPCW is seeking to support CWC States Parties, in line with its mandate, by fostering greater international cooperation and coordination on chemical security matters.

The workshop's aim was to promote discussion among key non-State stakeholders on these issues and to consider future approaches to building cooperation. The workshop objectives were:

- a. Gather together key international stakeholders on chemical security matters to facilitate a comprehensive discussion;
- b. Highlight the key areas of concern in the chemical life-cycle with respect to the prevention of access to toxic chemicals by non-State actors; and
- c. Conduct an overview exercise aiming to take stock of existing international cooperation and coordination on chemical security, to identify gaps and to deliberate on future activities, including future coordination mechanisms.

Carried out under Chatham House rules, the workshop was structured primarily around breakout sessions designed to allow experts to propose and discuss ideas and opinions, with a view, where possible, to reaching broad consensus on the issues being discussed, including recommendations for future work. On the first day, experts received overview presentations from OPCW Technical Secretariat staff on the background and aims of the workshop, and on existing OPCW capacity-building activities in the area of chemical security. A breakout session followed, which focused on mapping existing chemical-



security actors and tools/frameworks at the national, regional and international levels. A panel discussion on vulnerabilities in the chemical life-cycle was held, followed by discussion.

On the second day, experts presented on recent initiatives in chemical security assistance and coordination, and a second break-out group was held, which focused on ways to improve international coordination on chemical security assistance.

Key points of discussion

a. Definition of chemical security

In 2013, an OPCW paper entitled "The Contribution of the OPCW to Chemical Safety and Chemical Security" (S/1129/2013, dated 30 September 2013) defined chemical security as follows:

'Chemical security' refers to measures to prevent deliberate releases of toxic chemicals and to mitigate the impact if such events occur. In a wider context, it also includes policies to prevent attempts to acquire toxic chemicals or chemical weapons precursors. Chemical security is an issue of concern throughout the life cycle of chemicals, from research and development, to manufacture, storage, transportation, distribution, end-use, and recycling.

This definition was used as the basis for the workshop's proceedings. The discussions among the experts indicated, however, that while most approached chemical security from a counter-proliferation perspective, others focused on the avoidance of economic loss. The discussions showed that while each focus could lead to similar interventions and outcomes, that is not always the case. These differences in perspective would need to be dealt with as part of any future coordination effort.

b. Existing stakeholders and frameworks

Experts discussed the range of actors and tools or frameworks which have an effect on chemical security at the national and regional/international levels. A summary of their findings can be found at Annex 2. Experts explored the efficacy of mandatory as compared to voluntary chemical-security tools and frameworks (for instance government regulations as compared to industry-led initiatives such as Responsible Care), the effect they have on improving the physical security of vulnerable chemicals, and existing coordination mechanisms. Experts found that there was a very broad range of tools and frameworks, ranging from mandatory laws, regulations and international treaties, to voluntary practitioner and industry codes, government-issued security guidelines and know-your-customer schemes. Similarly, a wide range of actors – including regulators, industry associations and individual employees, law enforcement, border security agencies, public health agencies, and universities – played an important role in chemical security.

Experts pointed out that individuals dealing with potentially weaponisable toxic chemicals, including within industry, were often not aware of the full range of nationallevel commitments related to chemical security, though this was not necessarily a barrier to effective implementation as long as those commitments were effectively translated to the operational level.

c. Existing cooperation among international stakeholders supporting chemical security

Experts found that coordination at the international level between the range of actors engaged in supporting chemical security was generally low, often resulting in haphazard interventions, the duplication of work, and low national buy-in, leading to poor or unsustainable outcomes. Some important coordination initiatives were highlighted, such as the G7 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction and the Committee established pursuant to UN Security Council Resolution 1540 (2004), but experts agreed on the need for more work to be done in this area, with many noting that OPCW would seem well placed to take on a coordinating role.

d. Areas of concern within the chemical life cycle

Experts discussed regional variations regarding the security vulnerabilities of the chemical life-cycle, with some emphasis on the complex nature of chemical distribution chains. While large, multinational chemical producers and distributors were considered largely to have good security and threat awareness and practices, it was noted that small and medium enterprises in particular could be a key point of security weakness. Participants also discussed the security challenges faced by many smaller laboratories around the world, particularly those in university or other academic settings, which were often ill-equipped to deal with unauthorised access attempts.

The relationship between chemical safety and chemical security was also discussed. It was agreed that good security practices should be built on safety practices (which in most cases were well embedded), but experts differed on whether safety and security should be promoted together or separately. The importance of examining all phases of the chemical life-cycle when considering security interventions was emphasised.

e. Chemical security capability development

Experts agreed that capability development, at the national level, must be based on risk/threat analysis, needs assessment, and a coherent national plan. The importance of political buy-in was also discussed, as was the need for close coordination at the national level between all concerned stakeholders, including security agencies and industry. Participants noted that the drivers for acting on chemical-security issues would differ between different countries – compliance with international commitments, economic and trade development, and security concerns would all likely play a role, but the emphasis would differ from country to country. For this reason, one-size-fits-all approaches were not seen as effective in creating sustainable security outcomes – capacity-building efforts should be linked to the needs, the wishes, and the aspirations of the recipient country, and not just to donor priorities. Experts pointed out that solutions suitable for advanced economies might not be suitable for developing economies or those in transition. In the same context, experts again discussed the need for improve coordination among donors and assistance providers, as this would reduce duplication and improve the experience and outcomes for recipient States.

Recommendations

<u>Recommendation 1:</u> Building on the results of the workshop, a more intensive mapping exercise should be undertaken to understand the range of donors, programmes and services available to assist building chemical-security capacity around the world. This exercise should include mapping of any gaps across these areas. A publicly available database should be created and maintained to contain this information. The contributions to good chemical security of the full range of relevant international frameworks (including legally-binding ones such as the CWC, UNSCR 1540, and relevant counter-terrorism conventions) should be detailed.

<u>Recommendation 2:</u> The OPCW should strengthen its efforts to collate and make available chemical-security best practices to CWC States Parties and other stakeholders. As part of this effort, the OPCW should seek to ensure a common understanding amongst States Parties and key stakeholders of the scope of chemical security as it relates to preventing the reemergence of chemical weapons.

<u>Recommendation 3:</u> A coordination mechanism should be established, led by an international organisation (possibly the OPCW), to enable the key international actors supporting global chemical-security capability development – including donors, international organisations, specialist assistance providers, industry, and representatives of recipient countries – to avoid duplication, discuss priorities and methodologies, leverage each other's resources, collaborate where needed on meeting individual State needs, and raise the international profile of chemical security needs and assistance.

<u>Recommendation 4</u>: The coordination mechanism should consider the development of a model chemical security delivery methodology, which would help to align assistance efforts and clarify for recipients the stages and outcomes of such assistance. Donors, assistance providers and recipients could subscribe to the same methodology, while the lead organisation could act as a focal point and clearing house for assistance requests. One possible proposal is set out in Figure 1.



Figure 1

<u>Recommendation 5:</u> All efforts to strengthen chemical security at the national or regional level should be founded upon a thorough understanding of threats, vulnerabilities and needs. To support global chemical-security capability development, national threat assessment, industrial hazard assessment, and current capability audit tools should be developed and made available to States. Key donors and assistance providers should consider the content of these tools, through the coordination mechanism described in Recommendation 3. Assistance should be made available to carry out the assessments where requested.

Annex A: Delegate List Annex B: Programme Annex C: Summary of chemical security actors and frameworks

Annex A: Delegate List

Expert	Title	Institutional Affiliation
Audette, Robert	President & CEO, Audette Consulting	IUPAC
Bakleh, Khaled	Director, Chemical Security	CRDF Global
Beridze, Irakli	Senior Strategy and Policy Advisor	UNICRI, CBRN Risk Mitigating and Security Governance Programme
Carpenter, Marguerite	Project Officer, Chemical & Explosive Terrorism Prevention, CBRNE Sub-Directorate	Interpol
Caskey, Susan	Principal Member of the Technical Staff - International Biological and Chemical Threat Reduction Program	Sandia National Laboratory
Cesa, Mark	Past President, IUPAC	IUPAC
Choudhary, Muhammad Iqbal	Director	International Center for Chemical and Biological Sciences, University of Karachi
Creutz, Uwe	Director Regional Security EMEA	Basf (ICCA representative)
Klessman, Todd	Senior Policy Adviser, Infrastructure Security Compliance Division	US Dept of Homeland Security (Global Partnership Chemical Security Sub-Working Group representative)
Lim, Patrick	Editor, The Philippine Scientist	University of San Carlos Press
Lutay, Gennady	Expert	UNSCR 1540 Committee Group of Experts
McColm, Jim	Head, WCO Security Programme	World Customs Organisation
Moss, Barry	Consultant	BWM Consulting Limited
Newport, Peter	Chief Executive Officer	Chemical Business Association. International Chemical Trade Association
Pang Guanglian	Vice Secretary General and Director of International Affairs(CPCIF)	China Petroleum and Chemical Industry Federation (CPCIF)
Paturej, Krzysztof	President of the Board	International Centre for Chemical Safety and Security (ICCSS)
Richards, Justin	Project Manager, Chemical Weapons Destruction, Cooperative Threat Reduction Program	Defense Threat Reduction Agency (US)

Stewart, Constantine	Manager, International Biological & Chemical Threat Reduction	Sandia National Laboratory
Terrill, Peter	Advisory Contractor, Chemical Weapons Destruction, Cooperative Threat Reduction Program	Defense Threat Reduction Agency (US)
Turner, Brandon	Adviser, Chemicals and Waste Management Programme	UNITAR
Umayam, Lovely	Research Analyst/Program Manager	Stimson Centre
Volenikova, Adriana	Associate Project Officer, responsible for supporting OSCE participating States in implementation of UNSCR 1540	Organization for Security and Co-operation in Europe (OSCE)
Werner, Dominique	ICCA representative	scienceindustries, the association of the Swiss chemical, pharmaceutical and biotech industry
Younes, Ali	Programme Officer, Regional Office for North Africa and Middle East	United Nations Office on Drugs and Crime, Terrorism and Prevention Branch
Yurtsaba, Yaroslav	National Programme Officer, OSCE Project Coordinator in Ukraine	Organization for Security and Co-operation in Europe (OSCE)

Annex B: Programme

Expert Workshop on International Chemical Security Coordination 28-29 September 2017

Thursday 28 September		
0830-0900	Registration	
0900-0915	Opening presentation by Veronika Stromsikova, Director, Office of Strategy and Policy, OPCW	
0915-0945	Scene-setting keynote – Barry Moss: Chemical security and emerging threats to the CWC: the imperative to act.	
0945-1030	Plenary presentation: The OPCW's Chemical Security Assistance	
	Presentation by International Cooperation and Assistance Division, OPCW	
1030-1045	Coffee break	
1045-1100	Introduction to breakout session 1	
1100-1300	Break-out session 1: <i>Global chemical security – the current landscape – key trends and international assistance measures</i>	
1300-1400	Lunch	
1400-1500	Plenary: break-out reports back – discussion	
1500-1615	Panel discussion – The chemical life-cycle and chemical security	
	Panellists:	
	- Uwe Creutz, Director Regional Security EMEA, BASF	
	 Iqbal Choudhary Director, International Center for Chemical and Biological Sciences, University of Karachi 	
	- Khaled Bakleh, Director, Chemical Security, CRDF Global	
	Moderator: Wu Xiaohui, Head, International Cooperation Branch, International Cooepration and Assistance Division, OPCW	
1615-1630	Coffee break	
1630-1730	Plenary: discussion and wrap up of day 1. Capture of key points and issues to take forward to Day 2.	
1730	Reception – remarks by OPCW Director-General and NZ Ambassador	

Friday 29 September		
0900-1030	Plenary Presentations: Lessons from elsewhere	
	Outcomes of the Security and Trade Efficiency Platform (STEP) project on CW precursor chemicals in Jamaica - presentation by Lovely Umayam,	
	Research Analyst and Program Manager, Stimson Centre	
	Global Chemical Safety and Security Summit, Shanghai, 19-20 September - Presentation by Krzysztof Paturej, President of the Board ICCSS; Pang Guanglian, Director of International Affairs, China Petroleum and Chemical Industry Federation	
	Discussion	
1030-1045	Coffee break	
1045-1100	Introduction of breakout session 2	
1100-1300	Breakout session 2: Global chemical security: what would a best-case international system look like?	
1300-1400	Lunch	
1400-1500	Plenary – break-out reports back, discussion	
1500-1530	Recommendations, conclusions, future work	
1530	Workshop closure	

		National	International/Regional
Tools/	Voluntary Tools	- Airfreight security certification	- Customs-trade partnerships (e.g. Customs Trade
Frameworks		- Industry risk analysis	Partnership Against Terrorism)
		- Best practice guides for small and medium-sized	- Responsible Care
		enterprises	- Multinational company security policies
		- Authorized operators	- National Academies of Sciences/Engineering/Medicine
		- Threats analysis	Resources on Chemical Laboratory Safety and Security
		- Sanctions list/terrorism	for Developing Countries
		- Background checks	- SAICM
		- Critical infrastructure protection	- G7 Global Partnership
		- Chemical sector coordinating councils	- World Customs Organization SAFE Framework of
		- Chemical sector security plans	Standards
		- Information sharing mechanisms	- Global Chemists Code of Ethics
		- Information networks	- Hague Ethical Guidelines
		- Best practices and other guideline materials	- Australia Group
		- National implementation of Responsible Care®	- Security vulnerability assessment
		and other industry association programs	- Security Guidelines e.g. American Petroleum Institute,
		- Chemical prioritization	Sandia National Laboratories
		- Asset assistance	- International Council Chemistry Associations (ICCA)
		- Code of ethics/conduct	Guidance
		- Manuals of safety and security	- International Chemical Trade Association (ICTA)
		- Standard operating procedures	Guidance
		- Government security guidelines	- UN Recommendations on the Transport of Dangerous
		- Company culture	Goods - Model Regulations
		- Voluntary standards and assistance	
		- Competitiveness	
		- Custom- trade partnerships (e.g. Customs Trade	
		Partnership Against Terrorism)	
	Mandatory	- Background checks	- Transported Asset Protection Association (TAPA)

Annex C: Summary of chemical security actors and frameworks¹

¹ This table is included for illustrative purposes only, as a reflection of discussions during the workshop, and is not intended to be a comprehensive list.

	Measures	- Critical infrastructure protection	- Chemical Weapons Convention
		- Department of Homeland Security Chemical	- REACH Legislation
		Facility Anti-Terrorism Standards	- UNSCR 1540
		- Chemical sales/explosive precursor regulations	- Basel Treaty
		- Chemistry based prioritization	- Rotterdam Treaty
		- Counter-terrorism legislation	- Stockholm Treaty
		- Chemical Legislation	- World Customs Organization Strategic Trade Control
		- Department of Homeland Security Chemical	Enforcement (STCE) Program
		Facility Anti-Terrorism Standards (US)	- 1925 Geneva Protocol
			- United Nations Security Council Resolutions
			- EU Regulation on Explosive Precursors
			- The European Agreement concerning the International
			Carriage of Dangerous Goods by Road (ADR)
			- The European Agreement concerning the International
			Carriage of Dangerous Goods by Inland Waterways
			(ADN)
			- Regulations concerning the International Carriage of
			Dangerous Goods by Rail (RID)
			- International Maritime Dangerous Goods Code
			- International Air Transport Association Dangerous Goods
			Regulations (DGR)
Actors	Regulation	- Public Security Agencies (e.g. UK Home Office,	 United Nations Security Council
		US Department of Homeland Security)	- Harmonized System (CWC Scheduled Chemicals)
		- Department of Environment	 World Customs Organization
		- Department of Transport	- INTERPOL
		- Department of Business, Energy, Industrial	- UNSCR 1540
		Strategy	 United Nations Office on Drugs and Crime
		- National Authorities	- OPCW Policy-Making Organs
		- Licensing authorities	
		- Industry	
	Enforcement	- Law enforcement	- INTERPOL
		- Justice system	- World Customs Organization Strategic Trade Control
		- Department of Environment	Enforcement (STCE) Program
		- Department of Health	- Chemical Industry Associations
		- Department of Transport	- World Customs Organization Global Shield Program

	- Environmental Protection Agency	- OPCW
	- National Customs Authority	
	- Export Control	
	- Border Services	
	- Security services	
	- Defence Agencies (e.g. US Defense Threat	
	Reduction Agency)	
	- Government-Industry Partnerships (e.g "Know	
	Your Customer" campaigns)	
	- Chemical Facility Anti-Terrorism Standards	
	(CFATS), US	
Implementation	- Industry	- INTERPOL
*	- Laboratories	- EUROPOL
	- National Authorities	- World Customs Organization Global Shield Program
	- Emergency and Preparedness Agencies	- OPCW
	- National Oversight Bodies	
	- Licensing Authorities	
	- State-Owned Enterprises	
	- Academic Institutions	
	- Customs	
	- Chemical Business Associations	
	- Chemical Industry Associations	
Assistance	- Industry Forums	- European Union Chemical Riological Radiological and
1 issistance	- Public Security Agencies	Nuclear Risk Mitigation Centres of Excellence
	- Professional Organizations (e.g. American	- United Nations Institute for Disarmament Research
	Chemical Society Royal Society of Chemistry	- Capacity building (e.g. CRDE US Department of State)
	International Union of Pure and Applied	- G7 Global Partnership
	Chemistry)	
	- Industry Organizations	
	- Montorships	- LUNOI OL International Council Chamistry Associations (ICCA)
	- memorships Chamical Councils	- International Council Chemisely Associations (ICCA)
	- Chemical Councils	- International Chemical Trade Association (ICTA)
	- Chemical Business Associations	- Cnemical Councils
	- Chemical Industry Associations	- OPCW