

OPCW

Advisory Board on Education and Outreach

First Session 28 – 29 April 2016 ABEO-1/1 29 April 2016 Original: ENGLISH

REPORT OF THE FIRST SESSION OF THE ADVISORY BOARD ON EDUCATION AND OUTREACH

1. AGENDA ITEM ONE – Opening of the session

- 1.1 The Advisory Board on Education and Outreach (ABEO) met for its First Session on 28 and 29 April 2016 at the OPCW Headquarters in The Hague, the Netherlands.
- 1.2 A list of participants is contained in the Annex to this report.

2. AGENDA ITEM TWO – Adoption of the agenda and designation of a Chairperson and Rapporteur for the First Session

- 2.1 At the beginning of its meeting, the Board designated Dr Jean-Pascal Zanders, of Belgium, as the facilitator of its first session, pending the election of a Chairperson. The Secretary of the ABEO, Mr Joseph Ballard, was designated Rapporteur.
- 2.2 The ABEO adopted the following agenda for its First Session:
 - 1. Opening of the session
 - 2. Adoption of the agenda and designation of a Chairperson and Rapporteur for the First Session
 - 3. *Tour de table* to introduce Advisory Board on Education and Outreach members
 - 4. Welcome address by the Director-General
 - 5. Briefing on the OPCW's work, including background to the establishment of the Advisory Board
 - 6. OPCW education and outreach activities:
 - (a) Regional education and outreach meetings
 - (b) Science outreach
 - (c) The OPCW's online presence
 - (d) Relationship with international organisations

- (e) Relationship with the chemical industry
- (f) Relationships with academia and civil society
- (g) Youth outreach
- 7. Case studies of education and outreach activities in support of the Chemical Weapons Convention
- 8. Global developments in education and outreach relevant to the Chemical Weapons Convention
- 9. OPCW education and outreach strategy: Presentation and discussion of a draft conceptual framework
- 10. Election of the Chairperson and Vice-Chairperson for 2016
- 11. Future work of the Advisory Board on Education and Outreach
- 12. Any other business
- 13. Adoption of the report
- 14. Closure of the session

3. AGENDA ITEM THREE – *Tour de table* to introduce Advisory Board on Education and Outreach members

Members of the Board introduced themselves, describing their expertise and interest in the field of education and outreach.

4. AGENDA ITEM FOUR – Welcome address by the Director-General

- 4.1 The Director-General of the OPCW welcomed the ABEO members to the First Session of the Board.
- 4.2 The Director-General noted that the Chemical Weapons Convention (hereinafter "the Convention") was one of the most successful disarmament treaties in the world, but that it was facing new and in many cases unforeseen challenges. The Director-General stressed that the creation of a new advisory board signifies not only the growing importance of education and outreach to the life of the OPCW, but it also speaks to the changing nature of the Organisation.
- 4.3 The Director-General recognised that preventing the re-emergence of chemical weapons will require deeper engagement with the OPCW's community of stakeholders, as well as the broadening of the Organisation's networks beyond this community. It would be important to generate a sense of ownership in the next generation of scientists, lawyers, and decision makers.
- 4.4 The Director-General set out his expectations for the Board's work. He noted that it would involve contributing to the strategic underpinnings of the OPCW's education and outreach work, and working on several concrete projects.

5. AGENDA ITEM FIVE – Briefing on the OPCW's work, including background to the establishment of the Advisory Board

- 5.1 The Secretary of the ABEO briefed the Board on the work of the OPCW and the background to the establishment of the Board. The OPCW's work had garnered a significant international profile following its engagement in the mission in the Syrian Arab Republic, but its achievements stretched back to its establishment in 1997. There were a number of challenges and opportunities for education and outreach in the future work of the OPCW.
- 5.2 In the subsequent discussion, the following points were raised:
 - (a) the importance of funding for education and outreach; and
 - (b) the key education and outreach opportunity presented by the Organisation's 20th anniversary in 2017.

6. AGENDA ITEM SIX – OPCW education and outreach activities

Subitem 6(a): Regional education and outreach activities

- 6.1 The Head of the Implementation Support Branch of the International Cooperation and Assistance Division gave a presentation to the Board on the work of the Division and on its series of regional meetings on education and outreach. The structure of the Division and mandates of its three Branches were outlined, along with the Division's approach to education and outreach.
- 6.2 It was noted that every Branch of the Division had different target audiences: National Authorities and relevant stakeholders (Implementation Support Branch IPB); first responders (Assistance and Protection Branch APB); and academia, government agencies, and industry (International Cooperation Branch ICB).
- 6.3 The work of the IPB was outlined, including the establishment of the National Authorities and activities to support them and their stakeholders (approximately 30 events per year). The IPB's goal for education and outreach is to enhance awareness and understanding of the Convention in order to support effective implementation through supporting and empowering National Authorities to conduct education and outreach at the national level, in cooperation with relevant stakeholders. It was noted that National Authorities were expected to play a key role, but resources devoted to National Authorities vary between States Parties. To support this work, the IPB organised pilot education and outreach events back-to-back with regional National Authority meetings in 2015 and will continue the same arrangements, in which members of the Board have been invited to participate, in 2016. The events are aimed at stimulating engagement between National Authorities and their national stakeholders.
- 6.4 Brief information was provided regarding education and outreach activities implemented by the APB and ICB, and concluded that education and outreach is already incorporated as part of the ICA's core programmes. Key elements requiring advice and guidance were raised for the attention of the Board on the following topics:

- (a) strategic direction and mechanisms for effective planning and implementation by each Branch;
- (b) priorities, specific activities, and resources required; and
- (c) how to evaluate the results of those activities.
- 6.5 The following points were raised in the subsequent discussion:
 - (a) the need to establish ongoing communication between the ABEO and relevant parts of the Technical Secretariat (hereinafter "the Secretariat") in order to inform each other's work;
 - (b) the methods that the Secretariat uses to carry out its education and outreach events. The importance of good engagement strategies was emphasised;
 - (c) the possibility of grouping smaller groups of States Parties for the purpose of education and outreach, given the diversity in many established OPCW regional groups; and
 - (d) the challenges posed in stimulating education and outreach by National Authorities, given the very different national structures and resources.

Subitem 6(b) and 6(f): Science outreach; Relationships with academia and civil society

- 6.6 The OPCW's Science Policy Adviser briefed the Board on the Organisation's engagement with the scientific community. These efforts are part of the Secretariat's work in keeping abreast of developments in science and technology and providing scientific advice with the support of the OPCW Scientific Advisory Board. The communities with which the Secretariat engages include the experts of the future (youth and students), scientific organisations, and scientists involved in the fields of disarmament and security. The Organisation's current scientific engagement with those groups and universities was described, along with the materials and social media that are used in this work. It was emphasised that this engagement should go beyond the world of chemistry and into other branches of the sciences such as biology and engineering. Communication between organisations with scientific advisory functions was also noted as an important part of the Organisation's outreach, given the importance of scientific advice for the formulation of policy. The bottom line was that, in order to effectively keep current on scientific developments, the Organisation must engage with the scientific communities and raise awareness of the OPCW and its work. Remaining visible and engaged with the communities that affect how it works is critical.
- 6.7 Challenges in communicating effectively with scientific communities were raised.
- 6.8 The following points were discussed:
 - (a) the extent to which the OPCW's engagement with scientific communities was used to reflect on operational issues. It was noted that the OPCW had recently established a fellowship on green chemistry, although this was an avenue that

had not been widely explored;

- (b) whether it would be advisable for the OPCW to launch an electronic journal to support its scientific outreach or whether it was preferable to publish in other recognised journals; and
- (c) how to ensure the continuation of this work beyond the tenure of current staff of the Secretariat, including the importance of legacy planning.

Subitem 6(c): The OPCW's online presence

- 6.9 The OPCW Spokesperson and Head of the Public Affairs Branch in the External Relations Division briefed the Board on the goals and activities of the Organisation's public affairs programme. One of the main challenges in this area is the need for the Organisation to be more proactive in its engagement in the public domain. Strategic and operational planning is necessary for the Branch, along with the evaluation of results, the updating of relevant policies to enable the desired results, and the provision of adequate resources. The constraints in carrying out public engagement activities were outlined, as was the importance of aligning expectations in this area of work.
- 6.10 Areas in which the Board could help were the creation of common understandings of what the goals of education and outreach are online and how that influences alignment with expectations, content, resources, policies, and tools; the creation of awareness about the importance of internal policies for the OPCW's education and outreach; and any ideas on how to better promote and distribute the FIRES series of films as a way to connect the public and the next generation with the importance of chemical weapons issues.
- 6.11 The following points were raised in the subsequent discussion:
 - (a) the use of the 20th anniversary of the Organisation to update and expand the public affairs programme; and
 - (b) the importance of having appropriate policies and tools to carry out an effective public affairs programme.

Subitem 6(d): Relationship with international organisations

6.12 The Head of the Political Affairs and Protocol Branch of the External Relations Division described the work of the Branch, its role in crafting strategic messages for the Organisation, and the OPCW's efforts to enhance links with relevant international organisations, such as the CTBTO,¹ IAEA,² WHO,³ and Interpol. The focus of these efforts is to compare and share information on best practices, and identify opportunities for cross-participation in training and cooperation on technical aspects.

¹ CTBTO = Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization.

² IAEA = International Atomic Energy Agency.

 $^{^{3}}$ WHO = World Health Organization.

ABEO-1/1 page 6

- 6.13 In contacts with international organisations on education and outreach, it would be beneficial to benchmark how each organisation uses different media and platforms for outreach, and to learn from each other. Can we do similar things, or adapt what others do for our own needs? There is some scope for developing common messaging: including on how improvements in science and technology help with verification and contribute to its successes. But there are also limits, given differing mandates. Are there other international organisations—with less obvious overlaps with the OPCW's work—that we could be dealing with in this area?
- 6.14 Points raised in the discussion were:
 - (a) how to use contacts with other international organisations to advance the OPCW's objectives. The possibility of identifying common themes, for education and outreach purposes, that might be promoted in concert with other international organisations;
 - (b) it is important to bear in mind that the approach to chemical-weapons verification differs from other verification approaches. In contacts with other international organisations it would be useful to identify early on how the OPCW could benefit; and
 - (c) the need to treat the media both as a conduit for the OPCW's education and outreach efforts and as an audience that requires its own form of education and outreach in order to report accurately.

Subitem 6(e): Relationship with the chemical industry

- 6.15 A Senior Policy Officer from the Secretariat's Office of Strategy and Policy briefed the Board on the OPCW's relationship with the global chemical industry. The chemical industry has always been a key stakeholder with regard to the full and effective implementation of the Convention, from the negotiations, to its implementation, including its verification regime and the operation of the international cooperation programmes.
- 6.16 The Secretariat was encouraged by the Third Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention to strengthen its relationship with the chemical industry. As a result, cooperation was formalised with the International Council of Chemical Associations (ICCA) and a number of cooperation projects were initiated. The structure of the cooperation framework between the OPCW and ICCA was described, as well as the potential for this cooperation to advance the OPCW's education and outreach efforts. The OPCW's programmes to assist the chemical industry—such as e-learning modules—were also described.
- 6.17 The following points were raised by the Board:
 - (a) the importance of monitoring and evaluating the use of the OPCW's e-learning tools;

- (b) the importance of reaching those parts of the chemical industry that are not subject to verification under the Convention but are concerned by the possible misuse of toxic chemicals; and
- (c) e-learning is a potentially very powerful outreach tool, for a wide variety of stakeholders.

Subitem 6(g): Youth outreach

6.18 The Board was briefed on a European Union (EU)-funded project on youth outreach aimed at creating outreach tools for people aged 15 to 25. The Board's feedback was sought on the implementation of this project. In the discussion that followed, it was emphasised that opportunities could be found to collaborate with other initiatives, including youth outreach programmes organised by chemical associations and educational activities which bring young participants to The Hague. The focus of the project was also discussed, including the possibility of targeting young teachers.

7. AGENDA ITEMS SEVEN AND EIGHT – Case studies of education and outreach activities in support of the Chemical Weapons Convention; Global developments in education and outreach relevant to the Chemical Weapons Convention

- 7.1 Dr Edith Valles made a presentation on the Argentine National Project on Education on the Responsible and Safe Use of Chemical Science and Technologies. The project, launched in 2010 by the Argentine National Authority, was intended to provide useful information to companies and industry, as well as to improve declaration forms. The project demonstrated that there was a low level of knowledge about the Convention and national-level implementation measures. It also demonstrated the need to promote a culture of responsible use of chemical materials and equipment. As a result of the project, the National Authority, with the Ministry of Education, created a working group on education and outreach, which recommended the incorporation of Convention-related concepts in relevant university curricula. The working group also facilitated several initiatives, such as creating horizontal professional networks, training programmes for university professors, workshops on related themes, and virtual and travelling classrooms. Challenges in executing these initiatives were outlined, including budget constraints, the stimulation of interest in the topic, and overloaded curricula.
- 7.2 Dr Mark Cesa of the International Union on Pure and Applied Chemistry (IUPAC) briefed the Board on IUPAC's work, particularly that which touches on the mandate of the Board. IUPAC organises a yearly conference on chemistry education, which has produced a number of materials in the past that the Board could draw on in developing its work. Several other programmes were described, including the Young Ambassadors Program and the Flying Chemists Program. It was noted that IUPAC's chemistry safety training programme is potentially of direct relevance to the Board's work because it is aimed at training professionals by exposing them to best industry practices, which they can then take back to their home countries. The programme is also designed to be evaluated, as it requires participants to report on their own follow-up actions in order to receive financial support. The process is also subject to continuous review and improvement. IUPAC's work in support of the OPCW was

outlined, including its recent decision to endorse The Hague Ethical Guidelines. It was noted that the guidelines were an important achievement and potentially valuable outreach tool.

- 7.3 Professor Mahdi Balali-Mood (observer) briefed the Board on the Iranian national toxicology education project. It was noted that a key challenge was introducing concepts of chemical safety and security to young people, particularly in developing countries. In carrying out its work, the Board should consider working with other organisations active in the field of chemical safety. The Iranian project had been successful because it used tools that were well adapted to its target audience.
- 7.4 Professor Alastair Hay recounted work on the multiple uses of chemicals project. A decision was taken at an early stage to move away from the concept of "dual-use" so as not to be limited by certain terminology. The initial approach was to use the example of illicit drugs, and initial testing of this approach went very well. The project was then picked up by the Scientific Advisory Board's temporary working group on education and outreach, and is now available on the internet, including from a link on the OPCW's website. Professor Hay also noted that much of his work is now devoted to creating innovative and engaging ways to teach young people about chemical safety and security. On introducing Convention-related concepts into educational curricula, it was emphasised that doing so was much more effective when it was done in small modules that were added to existing curricula, rather than creating whole courses on the subject.
- 7.5 Dr Thirumalachari Ramasami briefed the Board on India's approach to chemical safety and security, which was stimulated largely by the Bhopal disaster. At the higher-education level, there is a requirement to include the Convention in related curricula and some measures have already been taken. At the school level, relevant concepts have also been introduced. The National Authority enlists the scientific community, through a large network of national laboratories. India also runs an open classroom, which since beginning its operation has been visited by over 14 million young people. Funding agencies have been alerted to the need to be aware about the potential uses to which work they fund can be put. The National Authority also partly funds an industry helpdesk, which exists to provide advice to the chemical industry on Convention compliance. The Indian National Authority is in a position to disseminate information nationally and to coordinate the work of different government agencies by virtue of its domicile.
- 7.6 Professor Fatima Lamchouri outlined the work of the Moroccan Biosecurity Association and its educational activities. It was emphasised that the identification of local focal points was important for the establishment of the Association and the sustainability of its activities. Work was carried out through visits to 19 universities across Morocco, seminars, training opportunities, and surveys. The training and outreach organised under the programme was offered to all relevant professional groups. Modules had also been introduced into higher-education programmes on laboratory and research biosecurity and on dual-use in the life sciences. It was noted that embedding biosecurity at the national level involved several processes, including legislation, education, codes of conduct, export controls, and physical security measures. It was emphasised that in developing its work on the chemical side, the ABEO could look to develop surveys to establish the baseline of education, the

development and translation of educational materials, the sharing of best practices, and the presentation of results to the OPCW. Professor Lamchouri raised the possibility of involving the OPCW in Morocco's international days on therapeutic chemistry, and the organisation of joint activities with the OPCW in this field.

- 7.7 Professor Wang Wencai briefed the Board on a training programme for chemical engineering in Africa carried out by the Beijing University of Chemical Technology. The programme included modules on the Convention, on academic research, and on the Chinese language and culture. It was noted that awareness of the Convention was relatively low among many professionals in the chemical industry—ways to educate them further needed to be put in place.
- 7.8 Professor Robert Mathews (observer) underlined that engagement was a key concept. It is important not only to produce tools that could further common educational objectives, but also to ensure that those tools would be used and would lead to the desired results. This could be driven partly through high-level champions.
- 7.9 The Secretariat's Science Policy Adviser briefed the Board on the International Day for the Foundation of the OPCW, including activities for the 2016 event. Preliminary plans for the celebration of the Organisation's 20th anniversary in 2017 were outlined, and the ABEO's input was sought on the planning of the event. Board members discussed the messaging around the 20th anniversary event, and how it can help to reshape the OPCW's future priorities.
- 7.10 The Head of the Political Affairs and Protocol Branch outlined initial plans—which had been presented recently to States Parties for their input—for the development of an OPCW Visitor Centre. The idea is to develop an experience-based centre that tells the OPCW's story in a way that is interactive and resonates with different age groups. It would be important to link the centre with digital platforms that would allow the learning experience to continue. Board members supported the idea, offering various ideas as to how a new Visitor Centre might be effective in supporting the OPCW's education and outreach.

8. AGENDA ITEM NINE – OPCW education and outreach strategy: Presentation and discussion of a draft conceptual framework

- 8.1 The Secretary of the ABEO introduced an informal background document which set out a number of concepts in relation to the OPCW's education and outreach that the ABEO may wish to reflect upon in going about its work, including the growing importance of education and outreach for the achievement of the Organisation's strategic goals, the need to come to a clear understanding about the nature of education and outreach and its goals, and the importance of identifying target audiences and partners. A number of challenges and opportunities for the ABEO and the OPCW's education and outreach activities were highlighted, including the challenge of resourcing, and the opportunity provided by the 20th anniversary of the Organisation in 2017.
- 8.2 It was noted that the term "education and outreach" has not yet been defined in the context of the OPCW's programmes. Outside the OPCW, it is a term that is used primarily in the context of science outreach (in which the term "education and public outreach", or EPO, is also often used) to denote activities aimed at promoting public

4

awareness and understanding of science and contributing to science education. For the ABEO's purposes, it will be necessary to consider the meaning of the terms "education" and "outreach" within the context of the OPCW's work.

- 8.3 The facilitator of the first session presented a paper that he had prepared for the Board to help members to understand the thinking behind the establishment of the ABEO, as well as to understand where gaps may exist for the ABEO to carry out its work.
- 8.4 Professor Benjamin Ruiz Loyola gave a presentation setting out some ideas for the ABEO's future approach. He noted that it must be recognised that different audiences and geographical zones require different approaches. Goals for education and outreach should include universality of the Convention and increasing awareness among ordinary citizens and among young people; the objectives in achieving these goals needed to be adapted according to the audience. There would be different types of stakeholders. It was important to be able to improve what already exists, including e-learning, and to focus on specific topics. Learning from other organisations with strong education and outreach in this field (such as UNESCO⁴ and the IAEA) should also be a part of the ABEO's work.
- 8.5 Further points raised during the discussions were as follows:
 - (a) the importance for the Board to work with States Parties in carrying out its work;
 - (b) the use of guest presenters or other external experts (e.g. social media specialists) at future sessions of the Board;
 - (c) the need to consider resource mobilisation (financial, documentary, human, existing materials);
 - (d) the importance of setting measurable short-term and longer-term objectives to go with the OPCW's stated education and outreach goals;
 - (e) the need for the Board to consider how it can advise States Parties (e.g. via the National Authorities) in their own education and outreach on the Convention; and
 - (f) the possibility of developing a matrix of education and outreach strategies and tools matched to diverse contexts and target audiences.

9. AGENDA ITEM TEN – Election of the Chairperson and Vice-Chairperson for 2016

Dr Jean-Pascal Zanders was elected as Chairperson of the ABEO and Dr Edith Valles as Vice-Chairperson.

UNESCO = United Nations Educational, Scientific and Cultural Organization.

10. AGENDA ITEM ELEVEN – Future work of the Advisory Board on Education and Outreach

- 10.1 The ABEO discussed its future work, with the intention of formulating recommendations in the following short-term action areas at its Second Session:
 - (a) establishing common definitions, objectives, and operational strategies to guide the work of the Board (to be coordinated by Dr Jean-Pascal Zanders);
 - (b) the 20th anniversary (to be coordinated by Professor Alastair Hay);
 - (c) the proposed OPCW Visitor Centre (to be coordinated by Professor Philip Coleman);
 - (d) outreach at the regional, national, or local level, including exhibitions and lectures (to be coordinated by Dr Anna Zalewska);
 - (e) the OPCW website evaluation (to be coordinated by Professor Alastair Hay); and
 - (f) EU-funded project on youth outreach (to be coordinated by Professor Benjamin Ruiz Loyola).
- 10.2 The Board also decided to consider its longer-term priorities (to be coordinated by Dr Sa'ad Ibrahim Al-Ali).
- 10.3 The ABEO tentatively scheduled its next sessions as follows:
 - (a) 5 and 6 October 2016;
 - (b) April 2017; and
 - (c) October 2017.
- 10.4 The Board made the following recommendations:
 - (a) that the Secretariat develops tools for evaluating its e-learning modules, to collect basic statistics on the number of users, but more importantly, to obtain feedback on how well the modules satisfy the needs of users. This information may be used to improve and modify the modules. In the longer term, the Board considers it useful to reflect on elaborating common approaches to e-learning (establishing the goal(s), setting clear, measurable objectives, and developing a strategy to meet the objectives);
 - (b) that the Secretariat develops strategies to increase the reach of its e-learning modules, including through translation into other languages; and
 - (c) that the Secretariat prepares a pro-forma presentation for ABEO members to use during their presentations on the ABEO at the OPCW's regional meetings on education and outreach.

11. AGENDA ITEM TWELVE – Any other business

The process concerning the participation of observers and experts in future sessions of the Board was discussed and it was established that clarification is required.

12. AGENDA ITEM THIRTEEN – Adoption of the report

The ABEO considered and adopted the report of its First Session.

13. AGENDA ITEM FOURTEEN – Closure of the session

The Chairperson closed the session at 17:33 on 29 April 2016.

Annex: List of participants in the First Session of the Advisory Board on Education and Outreach

Annex

LIST OF PARTICIPANTS IN THE FIRST SESSION OF THE ADVISORY BOARD ON EDUCATION AND OUTREACH⁵

- 1. Dr Sa'ad Ibrahim AL-ALI
- 2. Dr Austin ALUOCH
- 3. Prof Masahiko ASADA
- 4. Prof Philip COLEMAN
- 5. Prof Alastair HAY
- 6. Prof Fatima LAMCHOURI
- 7. Dr Thirumalachari RAMASAMI
- 8. Dr Valentin RUBAYLO
- 9. Prof Benjamin RUIZ LOYOLA
- 10. Dr Edith VALLES⁶
- 11. Prof WANG Wencai
- 12. Dr Johannes Georg WEINIG
- 13. Dr Anna ZALEWSKA
- 14. Dr Jean-Pascal ZANDERS⁷
- 15. Prof Mahdi BALALI-MOOD (observer)
- 16 Dr Mark CESA (observer)
- 17. Mr Francis LEVEQUE (observer)
- 18. Prof Robert MATHEWS (observer)

---0---

⁵ Dr Jo Husbands was not able to attend.

⁶ Vice-Chairperson of the ABEO.

⁷ Chairperson of the ABEO.