International Workshop on Analysis of Chemical Warfare Agents to Mark the 20th Anniversary of the Chemical Weapons Convention

Remarks by Dr Christopher M. Timperley

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Dear Under-Secretary of State,

Director, and colleagues,

It is an honour as Chairperson of the Scientific Advisory Board of the Organisation for the Prohibition of Chemical Weapons (OPCW) to provide these opening remarks.

This year marks a milestone as we celebrate the twentieth anniversary of the entry into force of the Chemical Weapons Convention. The Convention is an international effort to address a mutual threat presented by weapons of mass destruction. It is evidence of what can be achieved when nations address challenges together and respect a system of jointly agreed rules and norms.

This year is also special for Finland whose citizens are celebrating a hundred years of independence. The theme of the centennial is "Together". It is fitting therefore that we have been brought together by our kind hosts this week. We are here among friends, and will continue in the spirit of friendship and optimism, to work towards a world free of chemical weapons, and to promote science in the service of peace.

VERIFIN continues to provide a significant contribution to the OPCW to realise its strategic goals. It acts as the Finnish National Authority to the Chemical Weapons Convention for the purposes of cooperation with the OPCW and the other States Parties to the Convention, under the able guidance of the Ministry of Foreign Affairs of Finland.

We appreciate deeply the efforts of VERIFIN and the Finnish Ministry of Foreign Affairs for supporting the Blue Book initiative, and for generously and graciously hosting this international workshop in the beautiful city of Helsinki.

VERIFIN is a designated laboratory of the OPCW with an impressive track record. Its designation was obtained in November 1998 among the first laboratories. VERIFIN has a strong focus on analytical chemistry and it helped develop Recommended Operating Procedures (ROPs) for analysis in the verification of chemical disarmament, which appear in the Blue Book. VERIFIN continues to refine methods for screening and identification of chemical warfare agents, their degradation products and starting materials, and for biomedical sample and toxin analysis.

Finland continues its rigorous efforts towards chemical safety and security globally. VERIFIN, supported by the Finnish Ministry of Foreign Affairs, has been offering training to experts and chemists from countries of the Global South for 27 years. More than 1400 trainees from 138 countries have participated in various training courses. This training programme is run with a strong commitment to including women scientists, encouraging their further career growth within the field, and developing the participants to be role models that bring more women into scientific pursuits that benefit disarmament.

The prominence of VERIFIN in analytical chemistry in verification, its successes in analysing samples containing chemicals related to the Convention, and the provision of training to so many scientists from other countries, was honoured by the receipt by VERIFIN of the OPCW-The Hague Award in 2014.

(This award recognizes individuals and institutions that have made an outstanding contribution towards the goal of a world permanently free of chemical weapons. It is a tribute reflecting the honour bestowed upon the OPCW for winning the Nobel Peace Prize in 2013.)

Since the last edition of the Blue Book, improved procedures have emerged for sampling and analysis, which are captured within the revised edition. There are chapters on new areas such as ricin analysis and biomedical analysis. Under VERIFIN's accomplished editorship, twenty-two distinguished laboratories including the OPCW Laboratory have collaborated in updating the ROPs. The ROPs will continue to form a basis for accreditation of the designated laboratories and assist those laboratories aiming for designation.

Ladies and gentlemen,

As long as there is a possibility of the use or threat of use of chemical weapons, there will be a need to maintain and improve the excellent analytical capabilities of the OPCW. The Scientific Advisory Board of the OPCW supports the upgrade of the OPCW Chemical

Laboratory to a 'Centre for Chemistry and Technology' which will assist greatly all its activities, and with capacity building. Such enhanced capability will benefit all States Parties to the Convention. It will help prevent the re-emergence of chemical weapons after completion of the destruction of the declared stockpiles.

Such re-emergence could manifest itself through the acquisition and/or use of chemical weapons, including by non-State actors. An important decision addressing the threat of the use of chemical weapons by non-State actors was adopted by the OPCW Executive Council in October. This decision guides the OPCW and the States Parties in their approach towards non-State actors.

It is essential that the OPCW has available state-of-the-art methods and technologies for sampling and analysis at its disposal, ensures that staff are kept abreast of and trained in these, and actively develops capabilities in chemical forensics, incorporating advice from the OPCW Scientific Advisory Board (SAB) and in consultation with the network of designated laboratories, including for the analysis of toxins as well as biomedical and other samples.

To assist with this, VERIFIN hosted a SAB Workshop on Chemical Forensics in June 2016, whose recommendations resulted in the OPCW Director-General, His Excellency Ahmet Üzümzü, requesting the SAB to form a Temporary Working Group (TWG) on Investigative Science and Technology which will hold its first meeting in February 2018.

The TWG will 'review the science and technology relevant to investigative work, especially for the validation and provenancing (determining the chronology of ownership, custody and/or location) of evidence, and the integration of multiple and diverse inputs to reconstruct a past event'. This TWG will draw on expertise and experience from all regions of the world for technical injects and make recommendations to the Scientific Advisory Board.

The 2017 Blue Book, the TWG, and the Chemical Forensics International Technical Working Group coordinated skilfully by Dr. Carlos Fraga (who is present here), are important contributors to the evolution of the analytical and investigative capability of the OPCW for meeting future verification challenges.

A captivating programme has been assembled for this workshop. Its themes include the Blue Book 2017, developments in the analysis of environmental and material samples, biomedical sample analysis, toxin analysis, the analysis of Central Nervous System-acting chemicals,

chemical attribution analysis, on-site detection: sampling and analysis including forensics-mobile labs; and the previous and potential future profiles of OPCW Proficiency Tests.

The programme also includes poster sessions and an instrument exhibition. We express our gratitude to the lecturers, authors of the posters, and the companies Agilent, Airsense Analytics, Bruker, Environics, Thermo-Fischer Scientific and Waters, and to all contributors. We also thank the Under Secretary of State for kindly hosting the reception tonight.

To close, I draw inspiration from the Finnish proverb “the winter does not leave without a backward glance” and request that “this workshop does not conclude without a forward look”. It is our obligation and responsibility to continue to impact positively science and society worldwide. We must support the goals of the Convention and help improve methods of verification for future generations.

I wish you all an enjoyable workshop. I am certain we will reflect on it in years to come with affection and admiration, acknowledging the generous hospitality and friendship of our Finnish colleagues, and the benefits of working together, as one.

Thank you for your attention.