

Joint NGO Statement

The Implementation of a Digital Monitoring Platform for Chemical Safety and Security

Statement Prepared By: R.D.N.T Weerasinghe
Founder
HAZMAT Advisor

*29th Conference of States Parties of the Chemical Weapons Convention, The Hague,
The Netherlands, 25 November – 29 November 2024*

Dear Distinguished Delegates and Representatives,

Chemical safety and security are foundational pillars of the OPCW's mission and are essential to realizing the full objectives of the Chemical Weapons Convention (CWC). Despite the robust frameworks and resources provided by the OPCW, significant barriers remain in the path of effective chemical security management, particularly in resource-constrained nations. Financial limitations, technological gaps, and complex regulatory landscapes complicate cohesive management and oversight of chemicals throughout their lifecycle. Furthermore, inter-agency communication and data sharing are often insufficient, leading to regulatory fragmentation and reduced oversight efficacy.

In response to these challenges, we propose a digital monitoring platform designed to unify each stage of the chemical lifecycle—manufacturing, importation, distribution, usage, and disposal—into a single, integrated system. This platform offers a centralized solution that consolidates all regulatory processes and stakeholder involvement, with a streamlined approach that makes compliance easier for industries and oversight more effective for governments.

Key Functionalities of the Digital Monitoring Platform

- 1. Stakeholder Registration and Secure Documentation:** All entities handling regulated chemicals—manufacturers, importers, suppliers, and end-users—would be required to register on the platform, submitting essential documentation such as business credentials and safety protocols. This consolidated database allows for a real-time, comprehensive record of all stakeholders, enhancing security and simplifying compliance.
- 2. Lifecycle Tracking with QR Code Authorization:** To streamline chemical transactions, the platform uses QR code-based authorization. Users log into the platform to specify their chemical needs and generate a QR code that verifies their authorization to purchase specific substances. Upon presentation to registered suppliers, this QR code tracks the

transaction in real-time, ensuring accurate inventory management and lifecycle traceability.

3. **Integrated Hazard Communication:** With each chemical purchase, the system automatically provides Safety Data Sheets (SDS) and hazard information, directly transferring critical safety guidelines to end-users. For high-hazard chemicals, additional instructions on safe handling and disposal can be provided, supporting a proactive approach to hazard communication and accident prevention.
4. **Disposal and Waste Management Guidance:** The platform includes a registry of certified disposal facilities, which users can access to identify safe and compliant waste management options for hazardous chemicals. This feature supports responsible end-of-lifecycle management, reducing environmental risks and promoting compliance with international waste management standards.

Key Benefits of the Digital Monitoring Platform

1. **Enhanced Regulatory Oversight:** By consolidating all chemical lifecycle data into a single platform, government agencies can achieve full visibility over chemical activities, from production to disposal. This reduces the administrative burden of multi-agency oversight and simplifies compliance processes, improving regulatory efficiency.
2. **Streamlined Compliance:** The platform removes the need for repetitive licensing procedures by centralizing transaction and registration data, significantly reducing regulatory delays and enabling a faster, simpler process for industries and researchers.
3. **Improved Inter-Agency Collaboration:** The centralized nature of this platform promotes consistent information-sharing across regulatory bodies, fostering inter-agency coordination and strengthening the national framework for chemical safety and security.
4. **Emergency Response Preparedness:** The platform's real-time data tracking enables emergency responders to quickly locate hazardous chemicals, improving response times and ensuring targeted intervention during chemical incidents.

Addressing Resource and Technology Constraints

For countries with limited resources, this digital monitoring system presents a scalable, efficient solution that reduces dependency on extensive manpower and high operational costs. Once implemented, the platform requires minimal maintenance and can adapt to the specific needs of diverse regulatory environments, making it suitable for resource-constrained nations. Through the use of digital tools, countries can consolidate chemical safety and security efforts, addressing both safety and security goals outlined in the CWC.

This digital monitoring platform provides an innovative, practical approach to overcoming the

challenges faced by many OPCW member states in achieving chemical safety and security. By centralizing data, streamlining processes, and improving accessibility to safety information, the platform supports the OPCW's mission to protect people and the environment from chemical threats. We believe that this approach will foster a more cohesive, proactive framework for chemical management, directly supporting the CWC's objectives and enhancing global chemical security. Thank you.

I request this statement be a part of the record of the 29th Conference of States Parties of the Chemical Weapons Convention.