

Infrastructure security in Chemical & Petrochemical industries

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Managing Hazards

Managing all types of hazards is part of the fundamental philosophy of technology innovation. Many hazards require specialized treatment (radiation sensors, flood forecast models, chemical dispersion algorithms, fingerprint records, etc.), but the data acquired by such specialized technologies has a common requirement; it must be shared among appropriate organizations. There is a need for connecting specialized technologies with all organizations, a requirement made possible by the adoption of middleware architecture.

Throughout each phase in the public security lifecycle, a consistent set of major functions are performed by a combination of government, business, voluntary organizations and the public. These major functions enable a community to engage in each phase of the lifecycle to become more secure.

In the **prevention** phase, there is a need for innovation in intelligence and analytical technologies to assess risk; in research and development; in information sharing and decision-support; in standards setting and commercial technology development; and in scenario-based evaluation of the performance of technologies; and much more.

In the **protection** phase, we rely on innovation in readiness technologies and planning; in personnel training and management; in modelling and simulation; in real-time management of standard operating procedures; and in collecting and evaluating lessons learned from real and simulated events;

In the **response** phase, new means need to be sought in alerts and warnings; in collaboration and common operating picture; in action planning and resource management; in geospatial asset visibility and interoperable communication; and in information sharing with common data elements for post-response evaluations and assessments;

In the **recovery** phase, we look for means in damage assessment and hazard forecasting; in decision-support for reconstruction prioritization; in monitoring indicators of recovery; in financial tracking and management; and in evaluating how recovery operations can lead to greater prevention and mitigation to minimize future disasters.

As an independent and open platform for proven technologies in public security, The Public Security Innovation Center (PSIC) offers a vast network of integrated security solutions, linking vendors to government, business, volunteer organizations, and the public.

In conducting such an immense and weighty responsibility there is a need for close cooperation among the government and public sector with private entities. No one can alone this job. This is more vivid and clear when it comes to security of infrastructure particularly when it relates to chemical and petrochemical industries which are vital for the development of nations on the one hand and poses a major security risk if its requirements are not attended correctly.

The safety of chemical infrastructure and security of transportation of chemical and hazardous materials has become an important component of security structure for the Netherlands. Importance is attached to a collaborative work among the public and private sectors with the help of new technologies to address this issue. Public Security and Innovation Center (PSIC) PSIC is an initiative funded by the [Netherlands Ministry of Economic Affairs](#) and the [Municipality of The Hague, City of Peace, Security and Justice](#), for the purpose of supporting collaborative use of commercial technologies in public security. Being located adjacent to the OPCW Headquarters, we welcome cooperation with OPCW member states to get oriented with the technologies and innovation in the areas of infrastructure security in chemical and petrochemical areas. Such collaboration with OPCW can cover transportation security, education and e-learning for the benefit of Member States of the Organisation. The OPCW has a universal mandate of eliminating the threat of use of chemical weapons and to contribute to peaceful use of chemical industry. We will be delighted to be a part of this lofty mandate by contributing to safety and security of chemical infrastructure and to prevention of any misuse of abuse of chemicals for purposes prohibited by the Convention.