European Commission

The Seveso Capacity Building Project

Current results and future plans

Joint Research Centre
the European Commission's
in-house science service

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Overview of presentation

1. Accomplishments 2014-2016
   -Development of an implementation strategy
   -Tools for analysis and information exchange
   -Survey of EU Neighbour Countries
   -Other activities

2. 2017 and beyond

Main focus areas of project strategy (1)

- Strategy development
  - 2015 Project strategy paper and brainstorming workshop
  - 2015 Survey and capacity building measures
- General exchange and training events
  - 2016 Rapid-N (Natech)* Risk Assessment workshop
  - 2017 Chemical Accident Risks Seminar for Seveso competent authorities (all EU & affiliates)
- Bilateral exchange and training events
  - 2016 Moldova Israel Georgia
  - 2017 Follow-up in Moldova, Israel, Georgia on agreed topics
- Web data analysis and management tools
  - 2015 – 2017 ADAM (Accident Damage Assessment Model) Tool
  - 2015 AIDA Accident Data Collection System
  - 2016-2017 Rapid N Natech Risk Assessment Model for Floods
  - 2016 Minerva Communities for targeted Neighbourhood Countries
  - 2017-2018 GIS-ARA (Area Risk Assessment) Tool

*Natural hazard event causing technological accident

Country Engagement 2015-2016

Country	Project Involvement	Survey Response?	Natech workshop?	Bilateral meeting?	Outlook
ALGERIA	Medium	✓	✓	Invited No reply	Technical interest, but political barriers
ARMENIA	Medium	✓	✓		JRC experts may offer training within UNEP project
AZERBAIJAN	Low		✓		Low interest. Not a priority.
BELARUS	Low	✓		Invited No reply	Some progress already in major chemical hazard controls. Possible priority for 2018/19.
EGYPT	Low		✓		Involvement has not yet been very serious.
GEORGIA	High	✓	✓	✓	2016-2017 Follow up. Project with Czechs (TAEIX) on Seveso implementation. Keen on risk assessment.
ISRAEL	High	✓	✓	✓	2016-2017 Follow up. Strong preparedness/ emergency response (link with JRC model). Aligning with Seveso prevention elements(2016 TAIEX project)
JORDAN	Low	✓		Invited No reply	PPRD 2 feedback indicated interest, but since then no response. Possible priority for 2018/2019
LEBANON	Low	✓	✓		Interest unknown. Possible priority 2019.
MOLDOVA	High	✓	✓	✓	2016-2017 Follow up. In the process of implementing Seveso. JRC follow-up on inspections and Seveso site inventory.
MOROCCO	Low				Low priority due to lack of interest.
PALESTINE	Medium	✓	✓		Some interest. Possible priority 2019
TUNISIA	Low	✓			Interest not high. Possible priority 2019
UKRAINE	Medium	✓	✓	Would not commit	In principal, a high priority due to large industrial base, but political will is not strong.

2016 Learnings from Country Interactions

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- Maintain initial focus on a few priority countries who have political will to engage with the project
- Help establish a Seveso reference community for the ENPI countries, e.g., web platform, link with the EU Seveso network
- High appreciation in Neighbourhood Countries for risk assessment tools of ADAM, Rapid-N and GIS-ARA
  - Need to continue efforts to make them operational and freely available to competent authorities
- Aim to address language barriers by investing in translation of key products and tools over time.
- Actively use capacity building indexes to promote bilateral dialogue within countries on key implementation needs

Web-based tools

2016 progress

- **ADAM Consequence Assessment**
- **Rapid N Natech Risk Assessment** Model for Floods – *E. Krausmann*
- **Minerva Communities** for targeted Neighbourhood Countries

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Development of the ADAM* Web prototype

Accident Consequence Analysis tool

- **Scope:** Porting prototype of ADAM onto a web platform, for the analysis of consequence effects on human beings associated with possible accidents involving the unintended release of dangerous substances
- **Main benefits:** This tool will be very beneficial for the Competent Authorities responsible for the implementation of the Chemical Prevention and Preparedness Programme in their countries to assess the risks associated with certain industrial activities and to organize emergency plans.
- **Follow-up:** This work is the basis for preparing ADAM with a full consequence mapping capability

* Accident Damage Analysis Module

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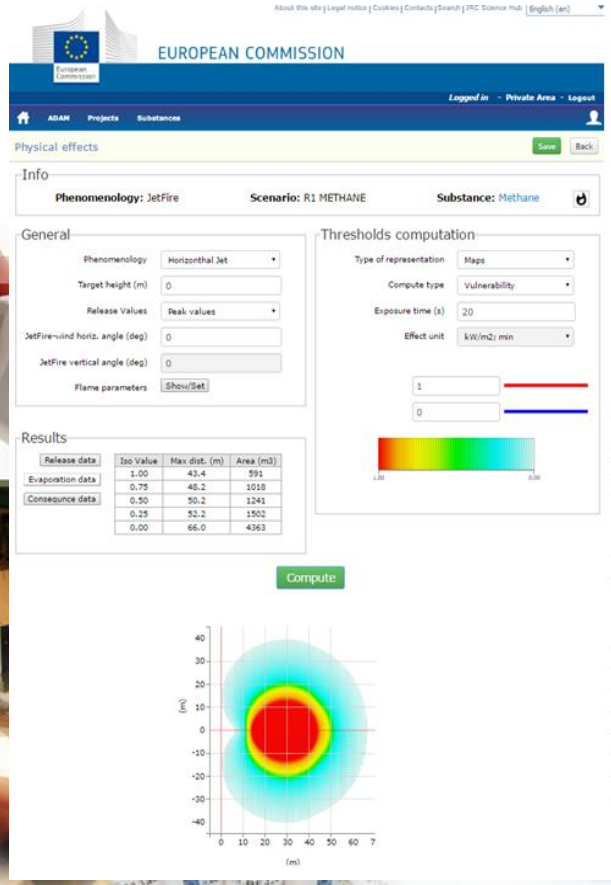
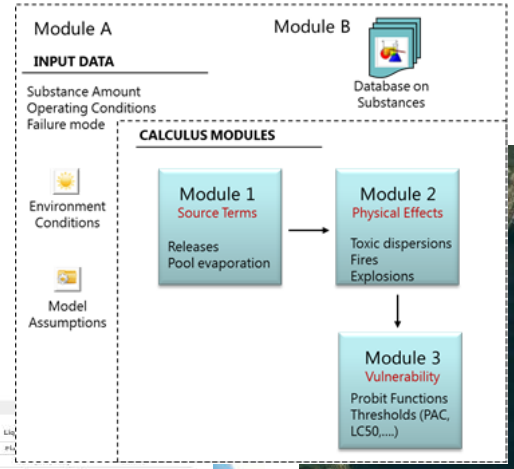
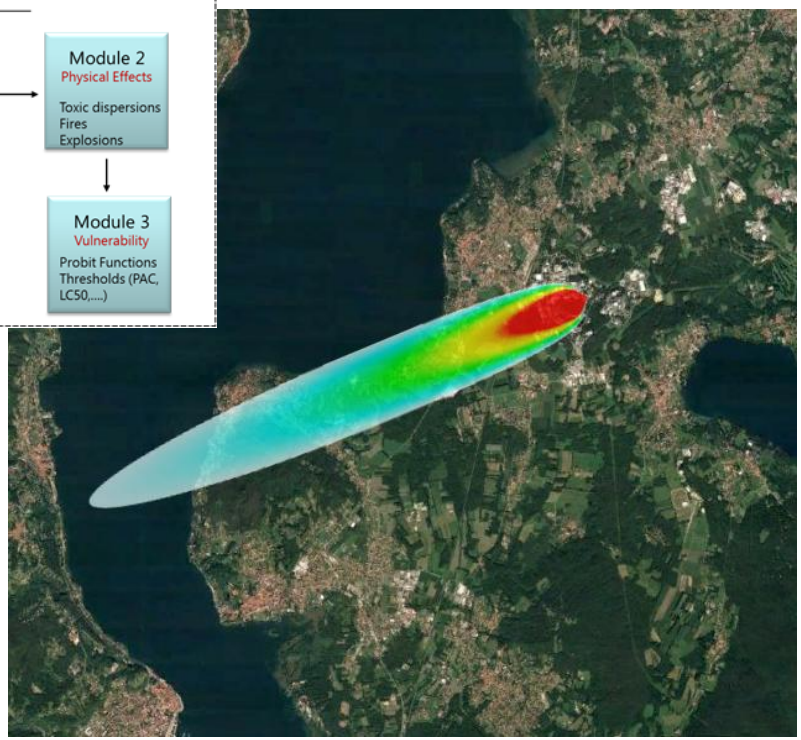
Development of the ADAM* Web prototype

Accident Consequence Analysis tool







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* Accident Damage Analysis Module

Minerva Communities Web Platform

Technical exchange for chemical accident expert communities

- **Scope:** Provides web space for technical exchange for competent authority and expert communities
- **Main benefits:** Opportunity for private, semi-private and public exchange areas managed by community members.
- **Most interesting features:** Allows JRC to establish country-specific areas in 2017 for Moldova, Georgia and Israel (and others as possible) containing their Seveso survey results and JRC technical briefs in own language (currently in Romanian, Georgian and Arabic).
- **Follow-up:** Adding more communities on special topics to establish Minerva Communities as an important access point for Seveso technical reference materials. A public area on industry sectors and private areas for specific projects have already been established.

IT Tools – Minerva communities

Interactive web platform

Country "communities" in development

To evolve according to users needs

2017 Objectives

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Web-based tools development

- **Finalisation of legal/practical details for launching ADAM**
- **Addition of GIS Model and Area Risk Assessment tool** - for area aggregation of risk and visualisation
- **Completion of Natech flood risk module for Rapid-N**

Capacity building and network/exchange activities

- **Continuation of bilateral collaborations with Moldova, Israel, Georgia**
- **Elaboration of (Neighbourhood)** country-specific areas within **Minerva Communities**
  - e.g. , survey responses, translations of technical briefs
  - Open for direct uploading and exchange of each country
  - Also, could be special topics or forums, but these functions will evolve with time
- **Chemical Accident Risks Seminar – Networking event**

Follow-up to bilateral visits

- **Training and collaboration on ADAM consequence assessment** model (Moldova, Israel, Georgia)
- **Training on Rapid-N for Natech risk assessment**
- **Training on Seveso inspections** (Moldova, Israel)
- **Risk assessment** advice/support for **emergency response** (Israel, Georgia)
- Assistance with establishment of **Seveso site inventory** (Moldova)
- Advice/ support for **Seveso prevention elements**, e.g., safety management systems, safety reports (Moldova, Israel)
- **Key topics of interest** are
  - -risk assessment
  - -coordination between government authorities
  - -role of the authorities
  - -new EU country experiences implementing Seveso

Translations of Lessons Learned Bulletins

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https://minerva.jrc.ec.europa.eu/en/shorturl/minerva/publications

Romanian

Georgian

Arabic

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Chemical Accident Risks Seminar, 14-15 June 2017 JRC- Ispra, Italy

Topics selected by Steering Committee of 10 countries (mix of EU-15, new EU, Neighbourhood, EEA)

1. Challenges in substance classification of non-harmonised substances for Seveso Directive implementation
2. Security challenges associated with IT technology and automation in major hazard industries
3. Safety challenges with IT technology and automation in major hazard industries
4. How do we know if we are reducing chemical accident risks? Do we have the right tools to measure this?
5. Integrity of installations and equipment (maintenance, aging, etc.)
6. Organisational change and influence of enforcement

Speakers sought from all EU/EU-affiliate countries, with opportunities for also industry and research institutes.

14 and 16 June - Introductory training on ADAM/Rapid-N offered

Thank you for your kind attention!

Please come visit the Minerva web platform for resources on chemical accident risk reduction

https://minerva.jrc.ec.europa.eu/en/minerva