AI for Preparedness: Building capacity for AI-powered Disaster Risk Management

16 – 18 June 2025
Townhall Europe
Sq. de Meeûs 5, 1000 Bruxelles

Artificial Intelligence (AI) and Machine Learning (ML) have the potential to transform the way disaster risk managers and other civil protection (CP) professionals operate on a day-to-day basis. At the AI Action Summit in Paris, France on 6-11 February 2025, Commission President von der Leyen announced the EU's commitment to this changing landscape with the InvestAI initiative, mobilising EUR 200 billion for investments into AI and European AI gigafactories, furthering the goal of closing the innovation gap, as outlined in the Draghi report. Similarly, the Niinistö report pointed out the need for strengthening the connection between funding for civil security R&I and financial support for the further operationalisation and deployment of innovative solutions.

The Disaster Risk Management (DRM) Science and Planning working group validated artificial intelligence/machine learning as one of the cross-cutting priorities for DG ECHO's research & innovation activities in 2024-2025. The Preparedness Union Strategy provides more clear guidance on, for example, cooperation with the private sector.

An initial EU scoping workshop was held 22 October 2024 and marked a first stepping stone in the exploration of the potential of new technologies within DRM for the Commission as a whole. One of the main outcomes identified by participants was a need for capacity-building for the use of artificial intelligence for DRM. Following this, the Commission is organising a **two-day capacity-building workshop with the objective to focus on concrete EU-based AI and ML tools and applications with the potential to be integrated into CP and DRM systems across the Union**. The workshop will target practitioners in UCPM Member and Participating States as well as in the Commission.

It will, among others, demonstrate new Commission initiatives, such as integrating AI into the Global Wildfire Information System (GWIS) or AI studies at the European Crisis Management Laboratory (ECML), as well as different UCPM and Horizon Europe projects that have applications for multi-hazard risk use along with AI and ML applications. It will familiarize the users with Destination Earth's capabilities and give them hands on experience of the system.

At the same time the workshop will help to gather requirements for the DRM users and help to identify potential gaps in human/technological capacity in CP authorities to take advantage of AI-powered tools. The workshop will be supported by the implementing entities of the Destination Earth initiative and will aim at providing hands-on guidance on the currently available tools for DRM.

AGENDA

Monday, 16 June 2025 *Townhall Europe, Sq. de Meeûs 5, 1000 Bruxelles*	
13.30 – 14.00	Registration and welcome coffee
14.00 – 14.30	**Opening of the workshop** Hans Das, Deputy Director-General, DG ECHO

14.30 – 15.30	**Panel: EU Institutional Landscape of AI developments for DRM under the Preparedness Union Strategy**
	
	Moderator: Juha-Pekka Jäpölä, DG ECHO.B3
	
	    o DG CNECTC.1, Charalampos Tsitlakidis
	    o DG ECHO.B2, Alessandro Carrotta
	    o DG JRC.E1, Christina Corbane,
	    o Research Executive Agency, Rodrigo Gutierrez-Dominguez
	    o European Environment Agency, Eva Ivits

15.30 – 16.00	Coffee break

16.00 – 17.30	**Panel: From innovation to market: Integrating public and private initiatives into action**
	
	Moderator: Maria Martin de Almagro, DG ECHO.B3
	
	    o **European Commission DG GROW.H2** - Machinery, Equipment & AI, Cesare Dunker, Policy Officer
	    o **UN Global Initiative on Resilience to Natural Hazards through AI Solutions**, Elena Xoplaki, Vice Chair
	    o **TEMA** (Horizon Europe project), Alessandro Paciaroni, Public sector innovation expert
	    o **ICEYE**, Jussi Sainio, Senior Product Manager, Natural Catastrophe Solutions
	    o **OroraTech**, Julia Gottfriedsen, Head of Data Science & AI

18.30 – 20.30	**Welcoming reception** *W XYZ Bar, Aloft Brussels Schuman, Pl. Jean Rey, 1040 Bruxelles*

Tuesday, 17 June 2025	
Townhall Europe, Sq. de Meeûs 5, 1000 Bruxelles	
9:00 – 9:15	Introduction and logistics to sessions

9:15 – 12:15
 	
Incl. coffee break
	Technical session on AI tools – Session 1
	
	Two sessions will take place in parallel. Representatives from the same Member or Participating State are encouraged to cover both sessions between themselves.
	
	   1) <u>Destination Earth for Disaster Risk Management applications</u>
	   - Extreme weather and floods application examples
	   - Application examples: hydrology and urban
	
	   2) <u>DG JRC</u>
	   - Empowering Disaster Risk Management with Explainable AI
	   - Expert validation of AI-generated graphs on disaster events

12.15 – 13.15	Lunch

13.15 – 16.15
 	
Incl. coffee break
	Technical session on AI tools – Session 2
	
	Two sessions will take place in parallel. Representatives from the same Member or Participating State are encouraged to cover both sessions between themselves.
	
	   3) <u>Destination Earth data and platform services</u>
	   - Using the DestinE platform, DestinE Edge services
	   - On-going developments in the field of AI
	
	   4) <u>Innovative solutions for DRM developed by EU funded projects and Member States</u>
	   - **C2IMPRESS** Horizon Europe project, *Serhan Karahan*
	   - **SAFE-LAND**, Knowledge For Action in Prevention and Preparedness project, *Elisabetta Cattoni, Francesco Pistolesi*
	   - **French National Fire Officers Academy** (**ENSOSP),** *Quentin Brot* and **Entente VALABRE,** *Philippe Meresse*
	   - **CARMA,** Horizon Europe project, *Alexandre Ahmad, Nicholas Vretos*
	   - **SYNERGISE**, Horizon Europe project, *Sabina Ziemian*

16.15 – 16.45	Coffee break
16.45 – 17.30	Reporting from technical sessions
18.30 – 20.30	**Networking dinner** *W XYZ Bar, Aloft Brussels Schuman, Pl. Jean Rey, 1040 Bruxelles*

Wednesday, 18 June 2025 *Townhall Europe, Sq. de Meeûs 5, 1000 Bruxelles*	
9.00 – 9.45	**Next steps under the Preparedness Union Strategy for the DRM Science & Planning Working Group** Moderator: Gaetano Vivo, DG ECHO.B3 - **Global Wildfire Information System Decision Support**, Jaime Abad Perez, DG ECHO.A2 - **Innovation Uptake and Disaster Risk Management**, Giannis Skiadaresis, DG HOME.F2 - **Updates on deliverables under the DRM Science & Planning WG**, Juha-Pekka Jäpölä, DG ECHO.B3
9.45 – 10.45	**Future of AI Integration: Needs, Gaps and Next Steps I** Discussion in breakout groups
10.45 – 11.00	Break
11.00 – 12.00	**Future of AI Integration: Needs, Gaps and Next Steps II** Discussion in breakout groups + Reporting in plenary
12.00 – 12.15	**Closing of the workshop** Gaetano Vivo, Deputy Head of Unit, DG ECHO.B3
12.30 – 13.30	Lunch