

Engagement of stakeholders and follow-up (INLINE)

EDERA Final Workshop - ERCC 22 Jan 2025

Marc Berenguer

Engagement of stakeholders in EDERA

- Access to the developments of the project in real time.
- Identification and integration of the *local* products.
- Set up of notifications.
- Participation in the activities of the project.
- Provide feedback on the developments of the project.

 Agencia Estatal de Meteorología	ES	 Joint Research Centre	INT	 Kymenlaakso Rescue Services	FI
 Agência Portuguesa do Ambiente	PT	 EUMETNET OPERA	INT	 North Karelia Rescue Department	FI
 Agencia de Seguridad y Emergencias (Generalitat Valenciana)	ES	 Finnish Environment Institute (SYKE)	FI	 Junta de Andalucía Consejería de la Presidencia, Interior, Diálogo Social y Simplificación Administrativa	ES
 ARISTOTLE-eNHSP	INT	 Helsinki Rescue Department	FI	 Protección Civil de Puente Genil	ES
 CIM Região Coimbra	PT	 Instituto Português do Mar e da Atmosfera	PT	 JUNTA DE EXTREMADURA	ES
 Dirección Xeral de Emerxencias e Interior (Xunta de Galicia)	ES			 Secretaría General de Interior, Emergencias y Protección Civil (Junta de Extremadura)	ES



INLINE project

Integrated pan-European rainfall and floods Impact forecasts for cooperation in emergency management

- **Duration:** 01 Mar 2025 - 28 Feb 2027 (24 months)

- **Partners:**

Universitat Politècnica de Catalunya (ES)

European Centre for Medium-range Weather Forecasts (INT)

Finnish Meteorological Institute (FI)

State Meteorological Agency (ES)

Portuguese Institute for Sea and Atmosphere (PT)

Environment and Water Agency of Andalusia (ES)

Directorate-General for Civil Protection and Emergencies (ES)

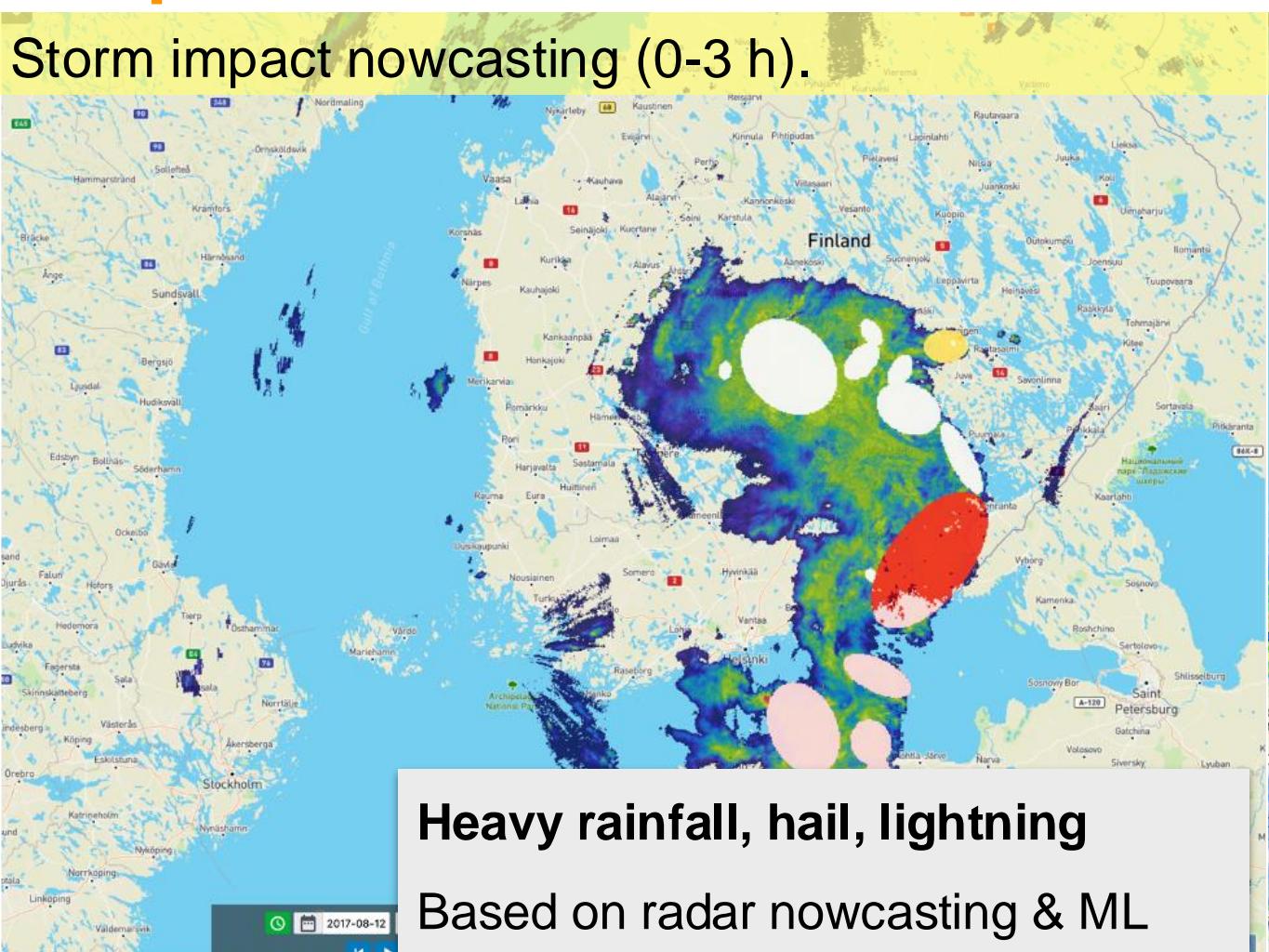
National Authority of Emergency and Civil Protection (PT)

Main objective

Advance on the capabilities of EWS with tools to anticipate the impacts caused by storms, heavy rain and floods, to support the decision-making workflows of various levels of Civil Protection Agencies (CPAs), including their coordination and cooperation.

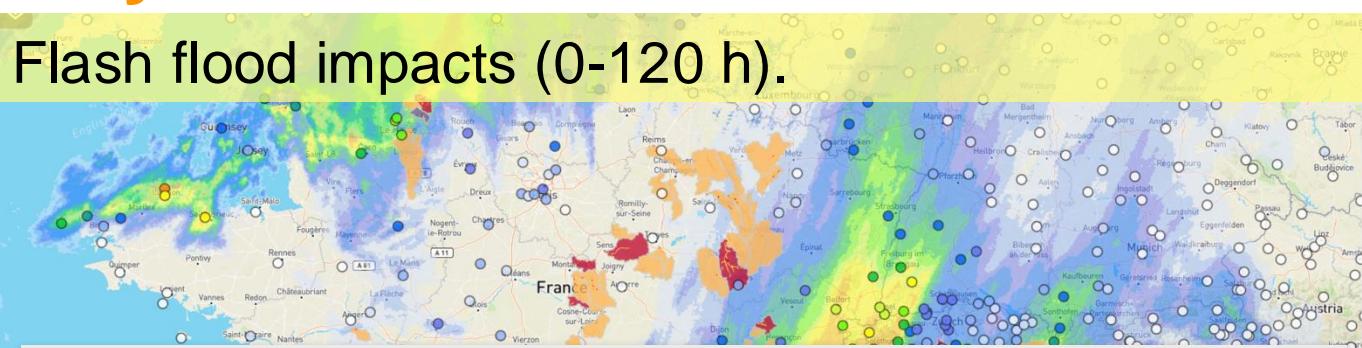
Impact forecasts for storms and heavy rainfall

Storm impact nowcasting (0-3 h).



Heavy rainfall, hail, lightning
Based on radar nowcasting & ML
Extended to European scale
European-wide exposure.

Flash flood impacts (0-120 h).



Flash floods (basins 10 - 2000 km²)
Resolution: 1 h, 1 km - Update: 1 h

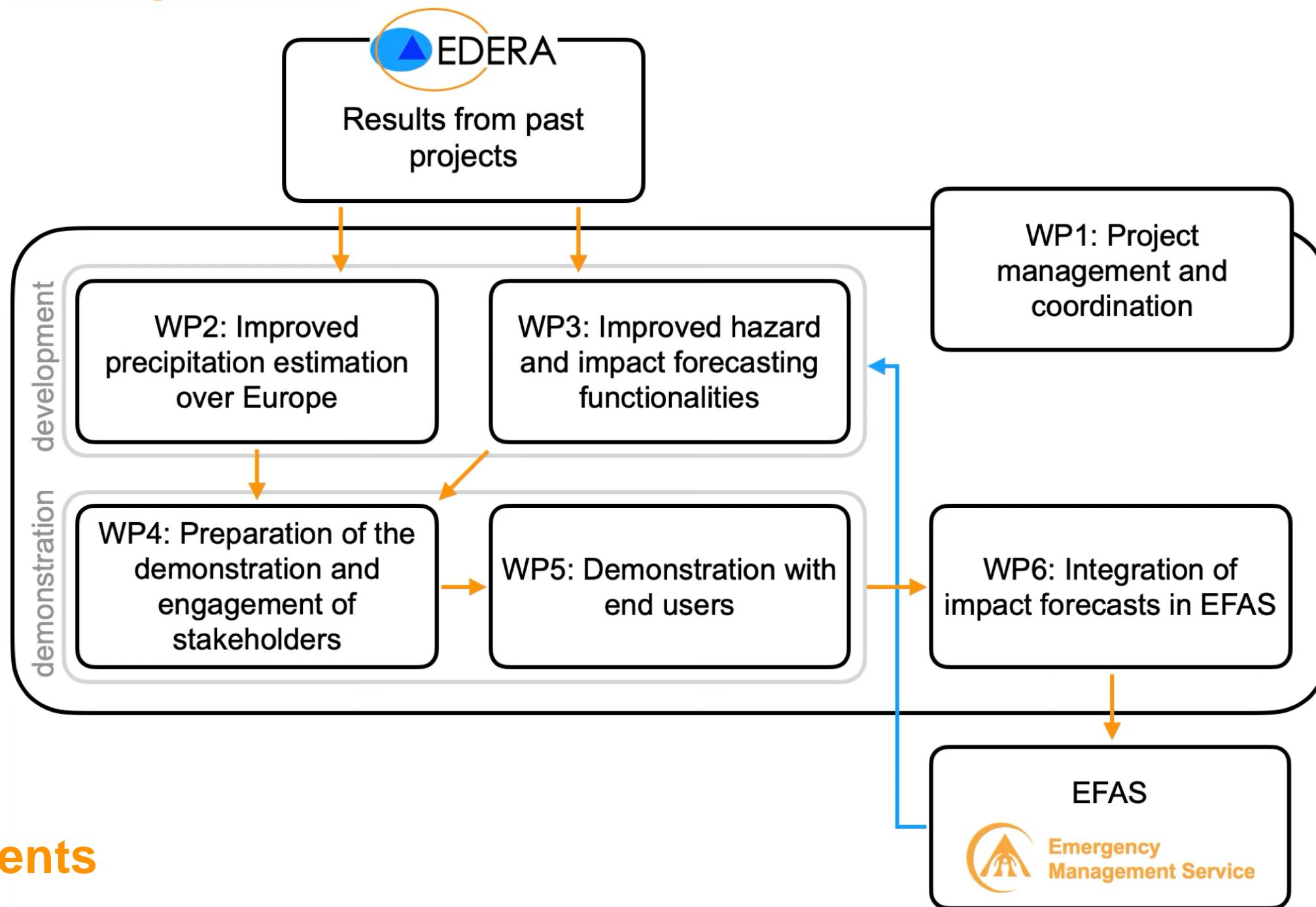
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graph LR; A[Blended precipitation forecasts] --> B[Flash flood hazard]; B --> C[Flash flood impacts]
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- Using probabilistic nowcasting & NWP.
- Seamless blending in the first 6 hours
- Basin-aggregated precipitation on the drainage network (1 km).
- Hazard assessment by comparison with climatological thresholds.
- By combining hazard with exposure.

Specific objectives and expected outputs

- Improved precipitation estimation for hydrological forecasting.
- Enhanced pan-European impact forecasting products with the use of AI, applying a strategy to provide compound impact forecasts, and implement configurable user-defined notifications.
 - *more reliable and longer storm probabilistic hazard nowcasts*
 - *improved impact forecasts by combining the hazard with multiple exposure datasets*
- Local adaptability of multi-hazard storms and compound floods forecasting for improved preparedness and response management during flood events.
 - *New/more flexible notification functionalities*
- Demonstration of the impact forecasts with end users at European scale and in the pilot sites.
 - *Assessment of the added value of the integration for CPAs*
- Creation of an **INLINE Community of Interest** to promote the adoption of the developed impact forecasting products and functionalities.
 - *Uptake of developed functionalities for storms and floods forecasting*
 - *Sustainability of the products*

Project organisation



Main events

Mar 2025: 1st project meeting (Brussels, BE)

May 2026: International demonstration Workshop (Lisbon, PT)

Feb 2027: Final workshop (Brussels, BE)

Conclusion

→ Engagement of stakeholders through the INLINE Community of Practice.

Who / when / how?

- End users: institutions *involved* in emergency management.
- Final EDERA newsletter announcement of INLINE + option to become a stakeholder.
- Access to the products in real time.

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