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RODEO Project – bringing more European meteorological data open for all users

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The RODEO project responds to the requirements of the EU Directive (2019/1024) on Open Data and the Reuse of Public-sector Information and its Implementing Regulation in order to boost the re-use and combination of open public data across the EU. The Implementing Regulation defines High Value Datasets (HVD) for six thematic categories of public data of which weather observation data, climate data, warnings, weather radar data and Numerical Weather Prediction (NWP) data are defined as meteorological High Value Datasets. These HVDs shall be shared free of charge, under the conditions of the Creative Commons BY 4.0 licence or a less restrictive open licence, and will be openly accessible via Application Programming Interfaces (APIs), machine-readable and bulk downloadable.

The three-year RODEO project is a joint effort by 11 European meteorological institutions, the European Centre for Medium-Range Weather Forecasts (ECMWF) and the network of 31 European National Meteorological and Hydrological Services, EUMETNET. The project strengthens the capacity of the European meteorological data providers by

- Developing a user interface and a data catalogue for making data discoverable;
- Developing APIs, by using open licences, for accessing weather observation data, climate data, weather radar data, warnings, and AI datasets;
- Engaging with the data owners and user communities; and
- Supporting the deployment of national data portals and APIs.
- Implementing a comprehensive user engagement strategy involving
 - A Project External Advisory Board, composed of public and private sector partners
 - Frequent communications updates through several channels

The project contributes not only to the overall EU and Digital Europe Programme (DEP) objectives but also to objectives of the global meteorological community. The World Meteorological Organization (WMO) Unified Data Policy commits WMO Member Nations to supporting free and open exchange of meteorological data. The RODEO project builds upon the WMO and EUMETNET long-term plans for exchange of meteorological data under the WMO Information System 2.0 (WIS 2.0) and an existing EUMETNET design for a shared federated data infrastructure.

Vastly increasing the European-wide real-time meteorological data available for the public, business, and other governmental institutions opens business opportunities for several sectors and application areas. Small and medium-sized enterprises (SMEs) will benefit from the greater data availability by creating new digital products and services and eventually attract new investors. Data will also support research and better-informed policymaking, especially in actions mitigating climate change. Overall, better data availability leads to better warnings, forecasts, and services to the public and weather-critical industries which contributes to the safe and efficient functioning of society with multiple benefits across the European economy, industry, and society.