



METEOALARM
EUMETNET

TISA Workshop 2024
MeteoAlarm: Today and Tomorrow

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14:40-15:00 (CEST)

Content

My Presentation

- MeteoAlarm: Current Status and Future Prospects

Objective

- Dissemination of Warnings to In-Vehicle Navigation Systems

Discussion

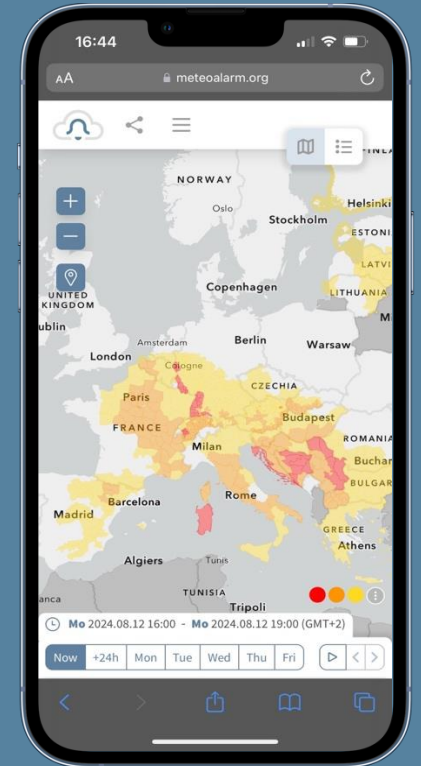
- Challenges and Opportunities (*Breakout Session*)

TODAY

What is MeteoAlarm?

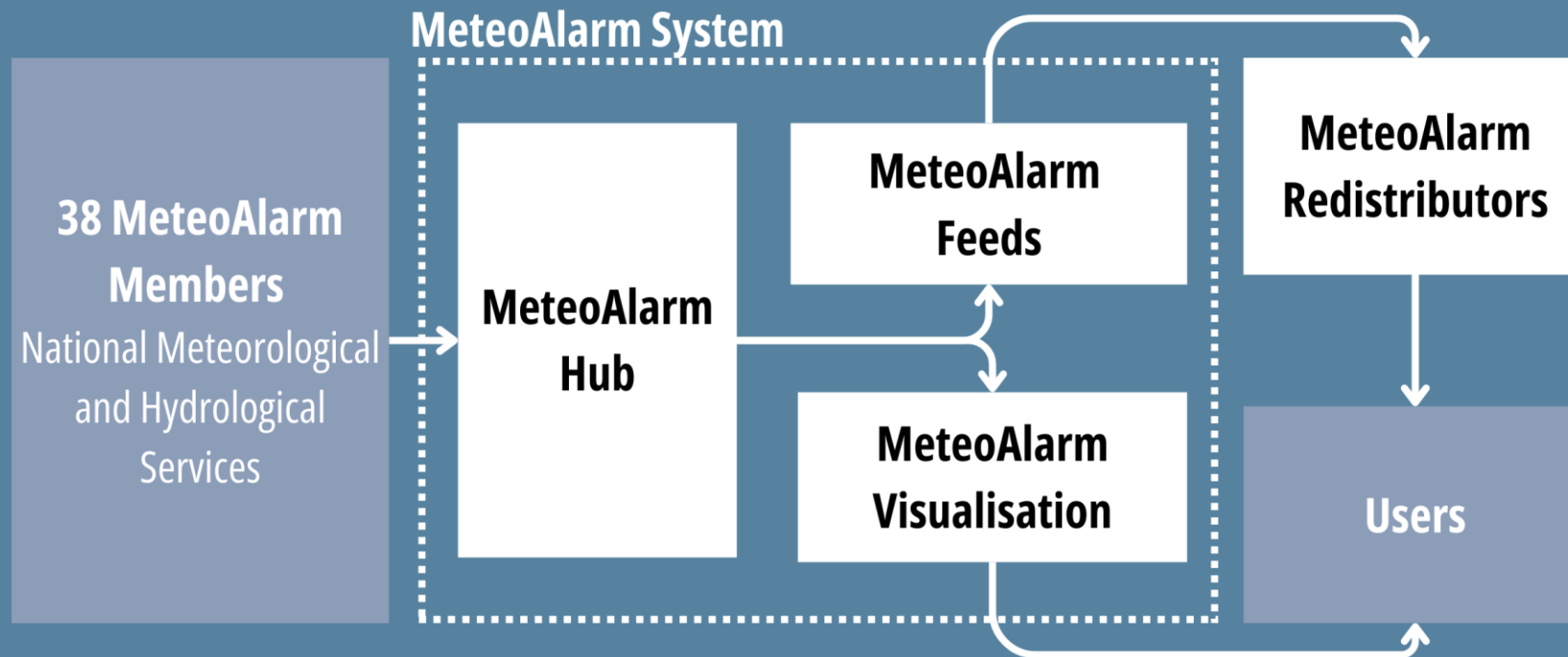
MeteoAlarm is

- ▶ a **EUMETNET Programme** that has been operational since 2007.
- ▶ an impact-oriented, common framework to aggregate, display, and make accessible warnings from **38 National Meteorological and Hydrological Services**.
- ▶ using a **three-colour code** to warn the general public easily and understandably.
- ▶ **cooperating closely with international organisations**, such as AccuWeather, Apple, Google, and The Weather Company, which disseminate warnings from MeteoAlarm directly to people facing hazardous weather.
- ▶ managed by **GeoSphere Austria** (NMS of Austria).



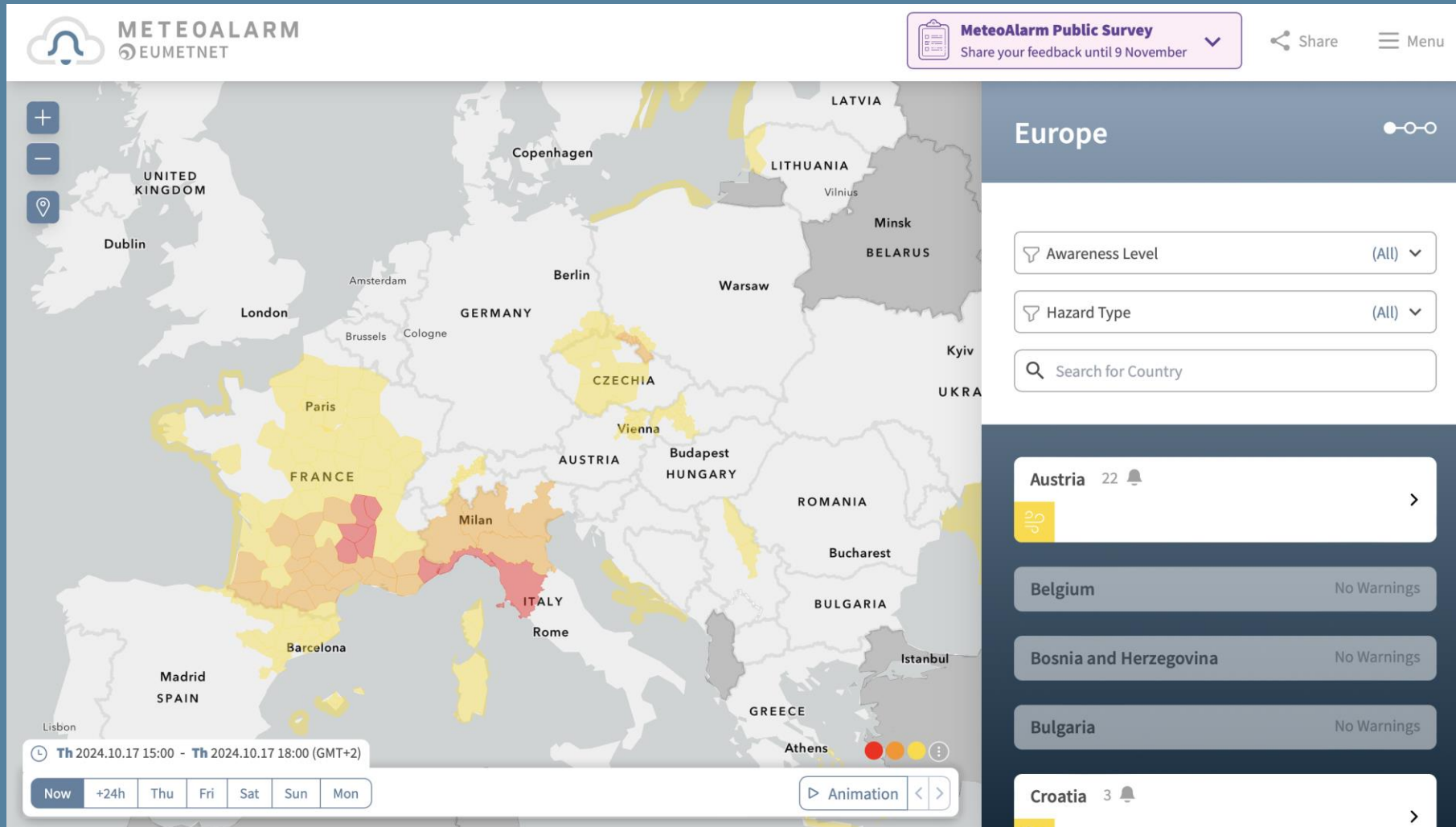
TODAY

What is MeteoAlarm?



TODAY

MeteoAlarm Visualisation

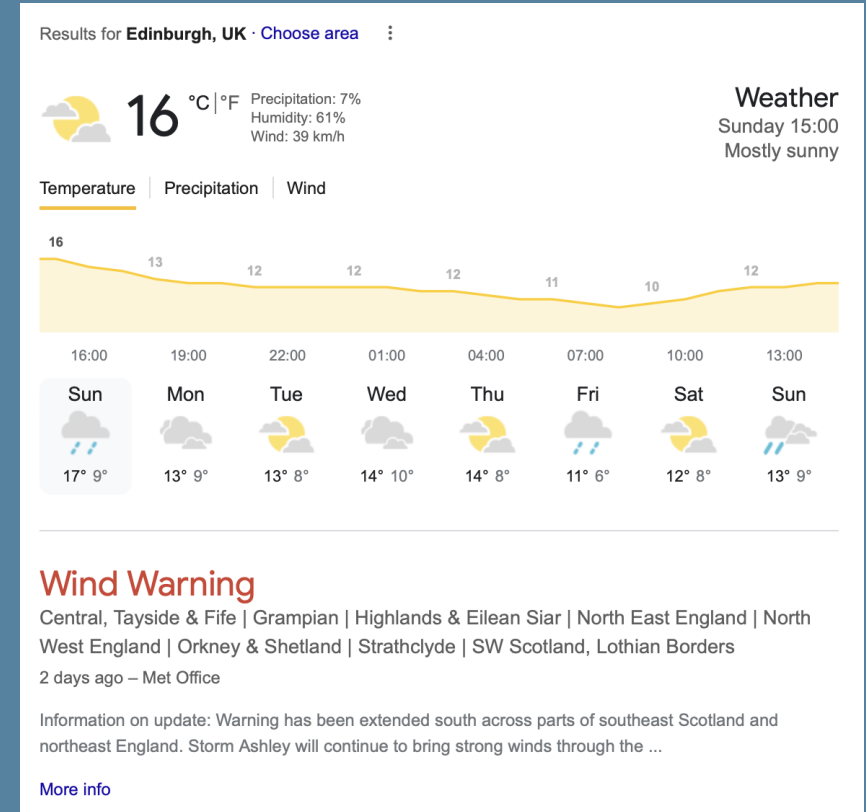


TODAY

MeteoAlarm Feeds

MeteoAlarm Feeds

- ▶ provide real-time, **aggregated warnings** from every MeteoAlarm Member.
- ▶ are accessible as **ATOM** and **RSS Feeds**, as well as in **JSON** format.
- ▶ enable **outreach to millions** of people through the MeteoAlarm Redistributors.
- ▶ generate **half a billion accesses** per year.



Source: www.google.com

TODAY

Benefits

- ▶ **The MeteoAlarm CAP Profile** ensures the delivery of standardised warnings across the MeteoAlarm Members.
- ▶ **The MeteoAlarm Slack Channel** enables swift communication, enhances cooperation, and supports effective problem-solving.
- ▶ **High Service Level Agreements** enable the prompt resolution of issues and ensure continuous availability and contact.
- ▶ **MeteoAlarm Meetings** provide valuable opportunities to stay informed and actively contribute to ongoing developments.
- ▶ MeteoAlarm fosters extensive **cooperation across Europe**, enabling broad-reaching contact.

TOMORROW

MeteoAlarm SECURE

SECURE

- ▶ Status
- ▶ Exchange
- ▶ Change Management
- ▶ Update Management
- ▶ Repository
- ▶ Evaluation

Currently in the process of gathering requirements from the **MeteoAlarm Members and Redistributors.**

TODAY

What is RODEO?

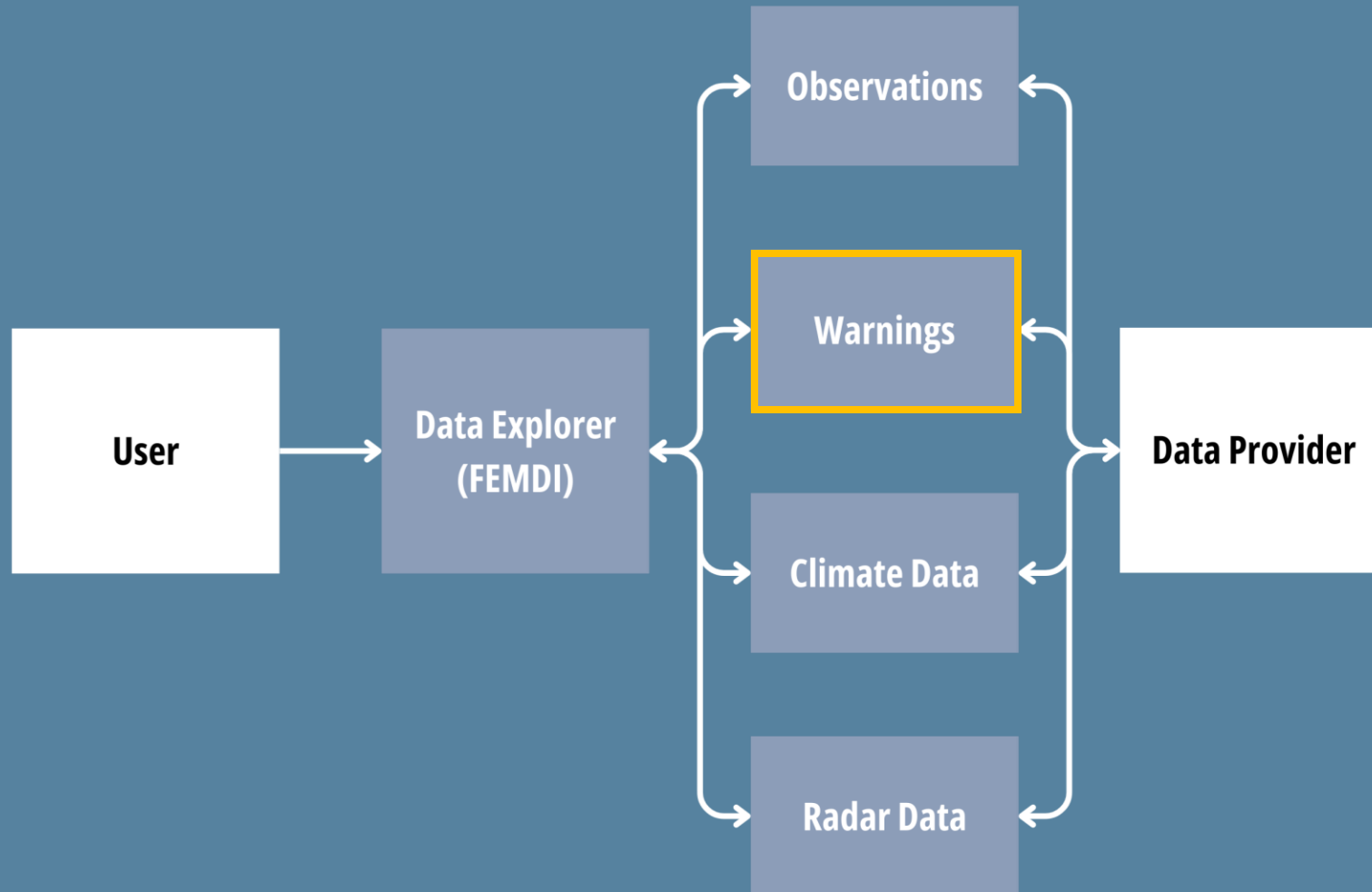
RODEO

- ▶ is a joint effort by **11 European NMHSs, EUMETNET, and ECMWF.**
- ▶ facilitates access to meteorological **High-Value Datasets** (HVDs) in machine-readable formats, free of charge, and accessible through APIs.
- ▶ implements a single-entry point for meteorological data (surface observations, warnings, climate data, and radar data) through the **Federated European Meteo-Hydrological Data Infrastructure (FEMDI).**



TODAY

What is RODEO?



TOMORROW

Outlook

Warning APIs

- ▶ **Near-Real-Time Warning, Archived Warning, and Storm Name APIs**
- ▶ API documentation in OpenAPI format
- ▶ Integration with the existing MeteoAlarm System through **RabbitMQ**
- ▶ Implementation of **metadata and location query API endpoints**
- ▶ Testing to be started in **December 2024**

CAP Read-In Routine

- ▶ **Retrieval of warnings** in compliance with the MeteoAlarm CAP Profile
- ▶ Scheduled to **pull warnings every minute**

TOMORROW

Outlook

The screenshot shows a Node-RED interface with a map on the left and a JSON response on the right. The map displays a location in Austria with a red marker. The JSON response is a GeoJSON feature representing a wind warning area in Burgenland, Austria.

```
index_info: 0,
index_area: 0,
index_feature: 0,
feature_type: geocode,
capJson:
  identifier: 2.49.0.3.0.AT.2024050262;
  incidents: Alert,
  info: [
    area: [
      areaDesc: Wien,
      geocode: [
        value: AT010,
        valueName: EMMA_ID
      ]
    ],
    category: [
      Met
    ],
    certainty: Likely,
    description: Starker Wind mit Spit;
    effective: 2024-05-02T06:32:00+01:00;
    event: Windwarnung,
    expires: 2024-05-03T06:32:00+01:00;
    headline: Windwarnung,
    language: de-DE,
    onset: 2024-05-02T06:32:00+01:00;
    parameter: [
      value: 4; red; Extreme,
      valueName: awareness_level
    ]
  ]
}
```

```
{
  "type": "Feature",
  "geometry": {
    "type": "Polygon",
    "coordinates": [
      [
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          17.12029622837345,
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        ],
        [
          17.147728432855388,
          48.011985836633535
        ]
      ]
    ]
  },
  "properties": {
    "name": "EPSG:4326"
  },
  "type": "Polygon"
},
{
  "type": "Feature",
  "geometry": {
    "type": "Polygon",
    "coordinates": [
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          48.036213016524854
        ],
        [
          17.147728432855388,
          48.011985836633535
        ]
      ]
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    "index_area": 0,
    "index_feature": 0,
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              "areaDesc": "Burgenland",
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                {
                  "value": "AT008",
                  "valueName": "EMMA_ID"
                }
              ]
            }
          ]
        }
      ]
    },
    "category": [
      "Met"
    ]
  }
}
```



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