### Developments in the EUMETNET Forecasting Capability Area

43nd EWGALM / 28th SRNWP Meeting, Video Conference 27 Sep – 1 Oct 2021 Dick Blaauboer, EUMETNET FCAM



#### **26th Assembly Headlines – Programmes**

Continuation of the **PostProcessing** Module for rest of programme phase approved

Federated Data Coordination Mechanism (FDCM) principles approved

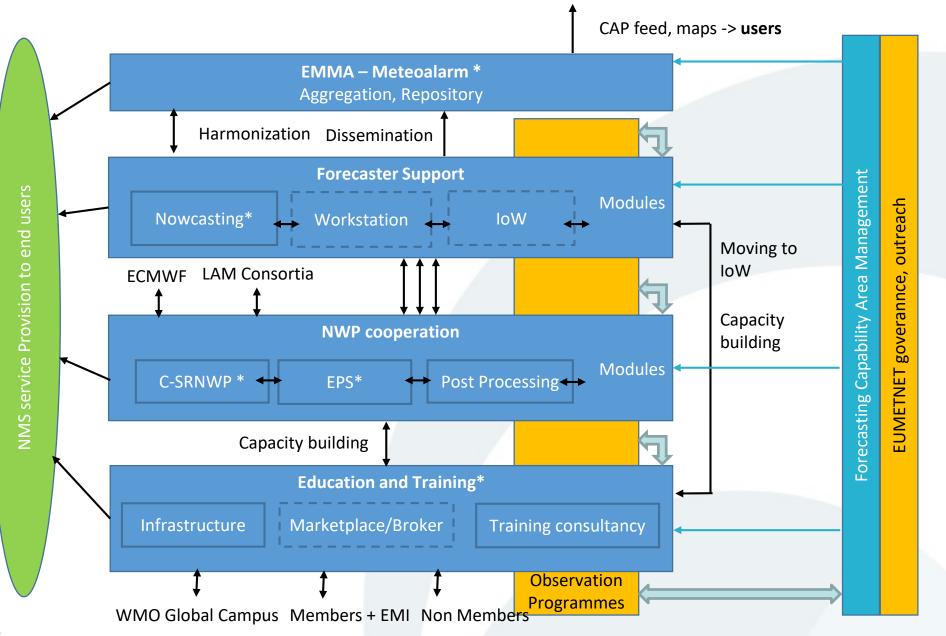
High-value dataset (HVD) high-level principles endorsed; duration of Task Team extended

EUMETNET Supplementary dataHub (E-SOH) – full business case to be developed by March 2022

Shared Data Infrastructure Steering Group (SDISG) established for FDCM, HVD & E-SOH

Aviation – MET Service provision to EUROCONTROL's Network Manager to be further explored and discussed at extraordinary Assembly meeting on 25 June

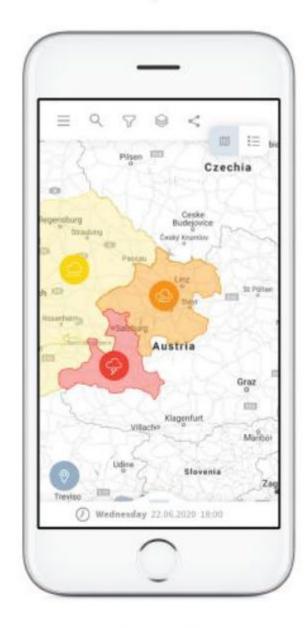


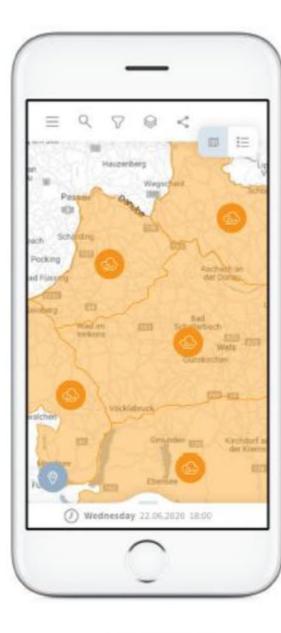












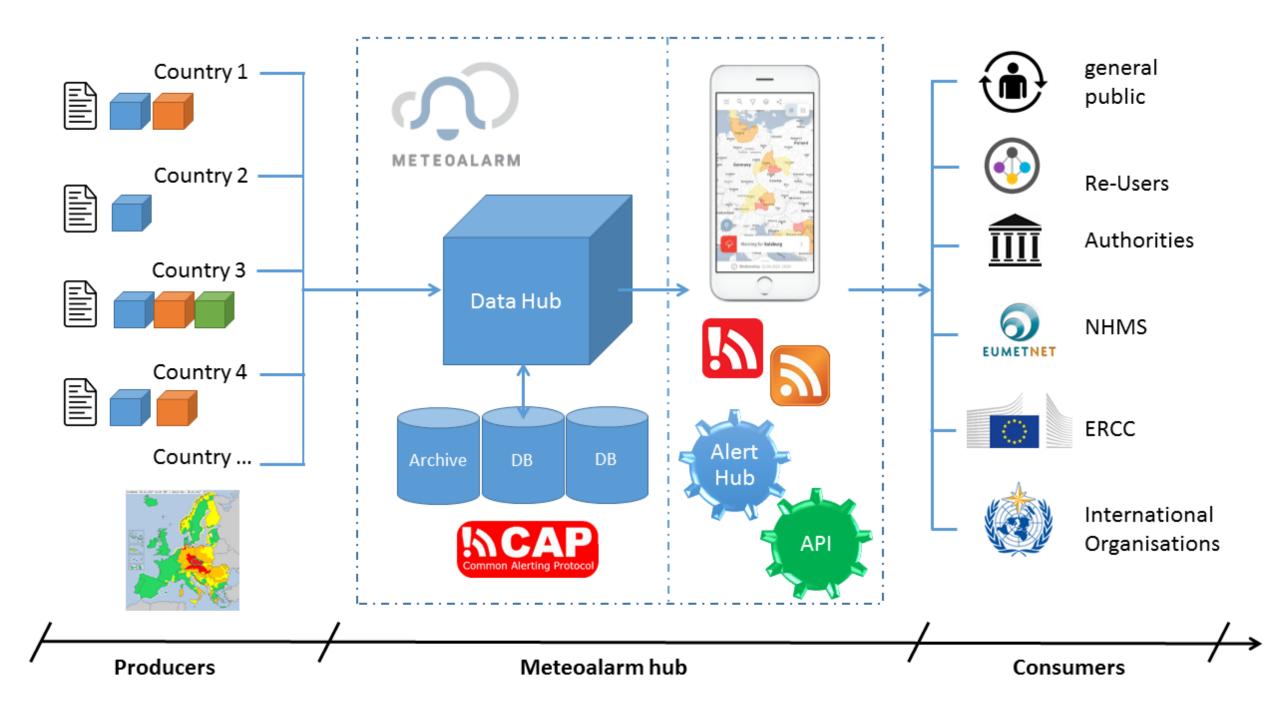
EMMA Andreas Schaffhauser, ZAMG



Level: Europe

Level: Country

Level: Local area



## EMMA, facts

- Commissioning of the Meteoalarm 2.0 system on May 20
- Old system switched off end of May, 5 Members not yet operational
- Change from XML to CAP (Common Alert Protocol) has almost been completed: 34 Partners deliver the warnings in CAP
- CAP Working Group actively working on new version CAP Profile 2.1, to be established this autumn
- Chair Andreas taking position as deputy Director at ZAMG, new Programme Manager Rainer Kaltenberger
- Chair Meteoalarm Expert Group (MEG), Paul Davies, MetOffice, stepping down from his position, new chair tbd



## **Update Eumetcal**

Heleen ter Pelkwijk, KNMI

- The eumetcal.eu portal has been functionally updated, currently (Sep 2021) 836 users and 260 active courses
- New webtools added: Moodle, TurningPoint, Webex, Learning Management System (LMS)
- The Eumetcal-2 Plan for 2021 -2023 was approved by the 25<sup>th</sup> Assembly of Members. As part of this, Members agreed to fund a total of 1 FTE of an Instructional Designer (0.5 FTE hired from COMET and 0.5 FTE hired from Members)
  - Tsvet Ross-Lazarov, UCAR/COMET (US)
  - Fabienne Werder, MeteoSwiss
- Expertise center/forum: exchange of knowledge, available E&T material, courses etc.
- Eumetcal Webinars: 7 during last year



## **E-Nowcasting**

Francesca Schmid, ZAMG

- During the ongoing project phase focus is on **seamless prediction systems and new observations** suitable for nowcasting;
- An Excel sheet is available with characteristics of seamless prediction systems (most of the systems are under development); it's a living document; it will be updated as soon as new information becomes available;
- **Special issue initiated in Meteorologische Zeitschrift** with 11 articles (10 are published already, 1 is in the review process);
- Surveys for NMHSs and their users have been finalized. The full survey reports are available on the EMN portal (https://portal.eumetnet.eu/display/DOCASIST). The main outcomes of the reports will also be published in an international journal, and also in the White Paper on Nowcasting initiated by EUMETSAT. The surveys carried out by E-NWC might be used as reference for surveys that are now in preparation in other parts of the world (in cooperation with WMO);
- Cooperation with the Obs CA Programme, Eumetcal, cooperation with WMO verification group;
- next European Nowcasting Conference planned for spring 2022 preferably in person, Members are invited to host this conference



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Postprocessing Stéphane Vannitsem, RMI

## Postprocessing update

Stéphane Vannitsem, RMI

- Postprocessing module extended until end of Phase, 2023
- Successful joint virtual workshop on postprocessing and ensemble forecasts in October 2020
- Active contribution of EUMETNET members in the different activities organized within the module
- A successful **session on postprocessing** was held during the General Assembly of the European Geophysical Union (**EGU**, **2020**)
- A **special issue in the Journal "Nonlinear Processes in Geophysics"** on postprocessing got finalized in December 2020 (https://npg.copernicus.org/articles/special\_issue1017.html)
- The review paper on postprocessing and blending has been accepted in 2020 in Bulletin of the American Meteorological Society. 10 EUMETNET countries were involved in this activity. (https://doi.org/10.1175/BAMS-D-19-0308.1)



# Postprocessing Stéphane Vannitsem, RMI

## Postprocessing update (2)

- First discussions and implementation steps concerning the benchmark of postprocessing techniques took place during 2020:
  - o Discussion ongoing on the design of the testbed
  - o ECMWF and NMS data
  - o First test for the dataset constitution and download started January 2021
  - o Details available on the portal :
  - https://portal.eumetnet.eu/display/PBM/Post-Processing+Benchmark
- Meeting with ECMWF on the Weather Cloud Services (September 2020), outcomes:
  - o Benchmark on the cloud: set-up matrix on the portal
  - O Options for NMS Operational Post-Processing at ECMWF
  - o Actual Status: Access to the Weather Cloud Services (in test) was granted to the project
  - o A first application is currently running to constitute the dataset
- Development plan:
- 0: Preliminary phase (2021)
- 1: The "hacky" phase (2022)
- 2: "Toward automation" phase (2023)



## Working Groups, Expert Teams

Working Group on Education&Training, WGET and Eumetcal Steering Group, ESG

• Chair: Steven Callaghan (MetOffice)

#### Working Group on Cooperation of European Forecasters, WGCEF

- Chair: Christian Csekits (ZAMG)
- Task Team on Storm Naming, chair: Evelyn Cusack (MetÉireann)

#### Working Group on Crowdsourcing

• Chair: Anne-Lise Beaulant (MF)

#### Expert Team Forecasting

• Chair: Thomas Kratzsch (DWD)

#### Expert Team Nowcasting

11 • Chair: Franziska Schmid (ZAMG)

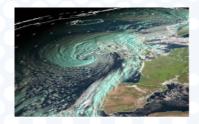




- Storm depression (large depression not a local wind)
- Based on Warnings in the Meteoalarm framework ORANGE or RED .....impact-based and/or thresholds
  Can be for wind, rain or snow
- NMS which a) first issues the warning or b) the NMS who expects high impacts names the Storm/low pressure system in consultation with other partners.
- It keeps its name given by a NMS & NHC Miami



Names picked by NMS's (public suggestions and/or communications division in NMS)



## Storm Naming (2)

- West group: UK/Ireland/Netherlands
- Southwest group: Spain/Portugal/France/Belgium
- Central Europe group: Germany/Austria/Switzerland/Poland/CzechRepublic/Slovakia/Hungary
- North group: Norway/Sweden/Denmark
- Central Mediterranean group: Italy/Malta/Croatia/Slovenia/Montenegro/North Macedonia/Bosnia and Herzegovina/Albania
- East Mediterranean group: Cyprus/Greece/Israel



## Developments outside EUMETNET







ILMATIETEEN LAITOS METEOROLOGISKA INSTITUTET FINNISH METEOROLOGICAL INSTITUTE



Republic of Estonia Environment Agency



Koninklijk Nederlands Meteorologisch Instituut Ministerie van Infrastructuur en Waterstaat



LATVIJAS VIDES, ĢEOLOĢIJAS UN METEOROLOĢIJAS CENTRS









UWC: Joining forces for the best short-range weather forecasts



## UWC

- MetCoOp: MET Norway, SMHI, FMI, ESTEA: operational
- UWC West: DMI, MetÉireann, IMO, KNMI: starting operation 2023
- UWC preparation: 10 parties + possibly AEMET: operational from 2027
- Strategy and governance structure: currently Council + Steering Committee
- PM + 6 Working Groups: NWP, HPC Inf, LGF/IPR, Obs Preprocessing, Postprocessing, Verification



#### **CONTACT DETAILS**

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## Thanks for your attention !

