# **Developments within Eumetnet**

WGCEF meeting 27-28<sup>th</sup> of September 2023, Tallinn, Estonia

# Aline Kraai, EUMETNET FCAM



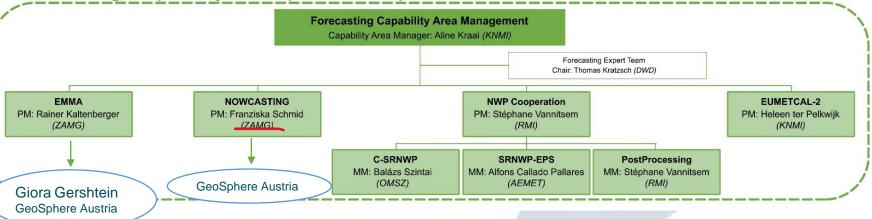
# **Forecasting Capability Area – next phase and furthermore**

- ➢ New Programme Phase (2024-2028)
  - → Current Programme phase ends 31/12/2023, new phase will start 01/01/2024.
- From Forecasting to Capacity Capability Area Programme



# Forecasting Capability Area 2019-2023

#### Forecasting Capability Area (2019-2023)



In addition, two STAC Working Groups:

- Working Group on Cooperation between European Forecasters, including the Task Team on Storm Naming.
- Working Group on Education and Training.

FCA MP consists of 4 Programmes, with 3 Modules:

- ➤ EMMA
- ► E-NWC
- ► NWP-C:
- C-SRNWP Module
- SRNWP-EPS Module
- Post Processing Module
- ► EUMETCAL-2

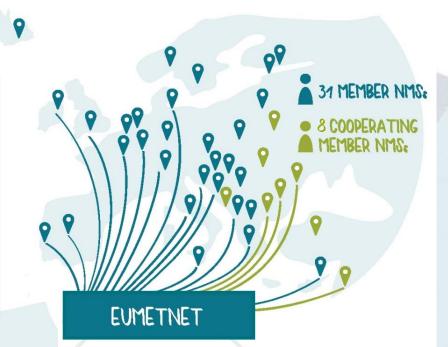


# **New EUMETNET Structure**

Strategic goals

- A. Collective observations, development of innovative observing methods and enabling access to third party observations to improve observations coverage
- B. Federated community approach to efficiently deliver high-quality and userfriendly weather- and climate-related information - data, products, and services
- C. Coordinated development and knowledge exchange to enhance Members' capacity for weather and climate-related services and advice for policymakers
- D. Effective policy support and collective representation of Members to promote and enable their missions and protect their collective interests

PROGRAMMES



# 2022 - 2028 EUMETNET STRATEGIC GUIDELINS Part of the preparation for the new Programme phase OBSERVATIONS FORECASTING OTHERS OBSERVATIONS INFORMATION CAPACITY SUPPORT OBSERVATIONS INFORMATION CAPACITY SUPPORT

# New EUMETNET Programme phase (2024 – 2028)

# > The launch of the new Programme phase coincides with a number of challenges

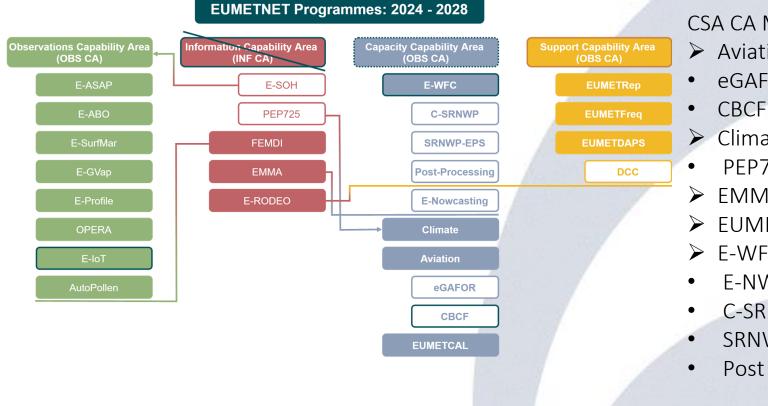
- Efficient provision of access to High-Value Datasets
- Exploitation of novel data sources (e.g. IoT)
- □ Transition towards impact-based forecasting and warnings
- Use of artificial intelligence in weather and climate services

# •...

- ➤ ... but it also coincides with HUGE inflation
- Inability to compensate for inflation requires careful prioritisation making savings whilst minimising the impact on Members' benefits.



# Capacity Capability Area 2024-2028



#### CSA CA MP will consist of 5 Programmes with 7 Modules:

- Aviation Support Programme
- egafor
- CBCF
- > Climate
- **PEP725**
- ➢ EMMA
- ► EUMETCAL-2
- ► E-WFC
- E-NWC Module
- C-SRNWP Module
- SRNWP-EPS Module
- Post Processing Module



# Capacity Capability Area Management Programme (CSA CA MP)

#### **Short Description of the Programme**

The focus of the Capacity Capability Area Management Programme (CSA CA MP) will be on:

- capacity building (exchange of knowledge, coordination of R&D)
- the coordination of the programmes and other activities within the CSA CA
- recognising emerging issues, new initiatives
- representing EUMETNET at forecasting related events
- ensuring that fellow Capability Area Manager are well-informed about the Programmes

EUMETNET

# **Changes to the NWP Cooperation Programmes**

NWP Cooperation C-SRNWP SRNWP-EPS Post-Processing

#### EUMETNET needs to:

- tackle forecasting activities in more seamlessly
- better address users'/forecasters' needs
- exploit synergies between related activities

E-WFC Weather Forecasting Cooperation *C-SRNWP (OMSZ→DWD) SRNWP-EPS (AEMET→ITAF-MET) Post-Processing (RMI) Nowcasting (GeoSphere Austria)* 

#### E-Nowcasting

# **AI/ML and EUMETNET**

#### **HoF - Heads of Forecasting**

→Different approaches regarding AI exist within NMHSs, but is was clear that further EUMETNET collaboration on AI is needed.

#### **JOINT meeting October**

→Discussion on new Programme or Working Group on collaboration on AI/ML

What about AI and Future of Forecasters? How do you see this?



# HoF (Heads of Forecasting) 22-23 May at DMI

#### **Topics**



- $\rightarrow$  An overview of important topics for the next Programme phase
- ightarrow The main focus on connection and communication,
- topics as Storm Naming, Cross Border Convection Forecast Collaboration, MeteoAlarm and the EUMETCAL
- hackathon were used as examples of good collaboration.
- The Hackathon as example: <u>https://youtu.be/9-3PzqQG254</u>.
- → Meteorological Work Stations (MWS): 7 different MWS
- advantages and disadvantages of commercial systems versus in-house made systems.
- → The new Weather Forecasting Cooperation Programme (E-WFC)
- discussion on timescale of seamless forecasting from nowcasting to short-range or from mid-range to seasonal



# **Storm Naming from HoF (Heads of Forecasting)**

#### **Topics**

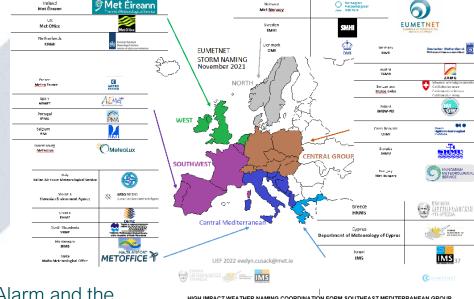
 $\rightarrow$  The main focus on connection and communication.

topics as Storm Naming, Cross Border Convection Forecast Collaboration, MeteoAlarm and the EUMETCAL hackathon were used as examples of good collaboration.

#### $\rightarrow$ Storm Naming:

- Platform like CrossBorderConvectionForecast (EUFOCS) (in English)
- One list for names: already years we talk about this. Difficult.
- Learn from the NHC on procedures
- Chat/whatsapp is needed to quick communication instead of this email list.
- Whatsapp group only for neighbouring countries.
- Sharepoint- channels, use for storm naming. But phone before.
- Lack of graphic interface with movement? Only coordination is given in email.
- Issue it on weather charts on analysis and prognoses?
- Storm Naming on Heat Waves and dust events?(discussion by email..?)

 $\rightarrow$  How to move on with the Task Team on Storm Naming? New chair?



IAMING COORDINATION FORM SOUTHEAST MEDITERRANEAN GROU

PHENOMENA ORIGIN	IONIAN SEA AND MAINLAND		NAMING NMHS/GROUP	HNMS /SEG		PROPOSED NAME	ELIAS					
EXTREME WEATHER	STRONG WINDS / HEAVY PRECIPITATION / SNOW / COLD SPELL / HEAT WAVE / HEAVY DUST / OTHER											
MAXIMUM WIND WARNING LEVEL	Orange		EXTREME MAXIMUM TEMPERATURE	Orange		DUST WARNING	Orange					
	Red		WARNING LEVEL	Red		LEVEL	Red					
HEAVY PRECIPITATION WARNING LEVEL	Orange		EXTREME MINIMUM TEMPERATURE	Orange		OTHER:	Orange					
	Red		WARNING LEVEL	Red			Red					
DESCRIPTION / REMARKS / GEOGRAPHICAL EXTENTION	MAINLY O	ER CENTR	RIC LOW OVER GREECE IN AL AND SOUTH PARTS OF N AND THUNDERSTORMS									
WARNINGS WEBSITES	Hellenic National Meteorological Service (HNMS): <u>http://www.hnms.griemv/en/waming/</u> Department of Meteorology of Cyprus (DOM):					DATEOF ISSUE (YYYY/MM/DD)	202	2023 /09/24				
	http://www Israel Meteo		moa/dm/dm.nsf/home/home rice (IMS):	TIME OF ISSUE (HOUR:MINUTES)	22:	22:00 UTC						

Ariel Barbara Cleon Daniel Elias Fedra Guy Helena Ionas Jasmin Kyros Lahesis. Moses Naias Orpheas Pnina Rigen



PROPOSED NAME	AGN	IE\$	FORECASTED LOW CENTRE LOCATION		Latitude (in decimals)		51.3 N	
NAMING NMHS/GROUP	Met Office (UK) / W Group		(at first orange/red wind warning onset time)		Longitude (in decimals)		11.6 W	
FIRST WIND WARNING ISSUING	DATE (YYYYMMDD)	20230924	FIRST WIND WARNING ONSET		DATE (YYYYMMDD)		20230927	
	TIME (HH:MM UTC)	09:00 UTC			TIME (HH:MM UTC)		11:00 UTC	
MAXIMUM WIND WARNING LEVEL	Orange		OTHER ORANGE/RED WARNINGS ISSUED		Rain		Coastal event	
	Red				Snow		Others	
REMARKS	Large scale low pres nature coupled with ( Only yellow warnings orangelamber) if nec MEDIA USE EMBAR	early season occurre s currently in force bo sessary. Naming con	ince (trees still hold ut these in the medi sidered useful to as	ing leaves etc um impact co	enhancing wi	nd loadir g the pot	ng) means imp iential for esca	acts are likely
WARNINGS WEBSITES	waarschuwingen/ /wwathes/warnings	Makio-reace: http://iglance.msteal/ance.com/ ABMET: http://www.ammet.sc/w//kitamoo/prediccion/arisos 9444. http://www.ipma.pt/orbitomoo/pre-coam/ Mateoux: http://www.imteolon.los/http://glances/ Ammetianes/areauseteolon.los/http://glances/ Ammetianes/areauseteolon/architecianes/article/architecianes/argium						

# **Furthermore**

#### **New Portal**

New portal and communication platform since March 2023 → Sharepoint and Microsoft Teams (instead of confluence)

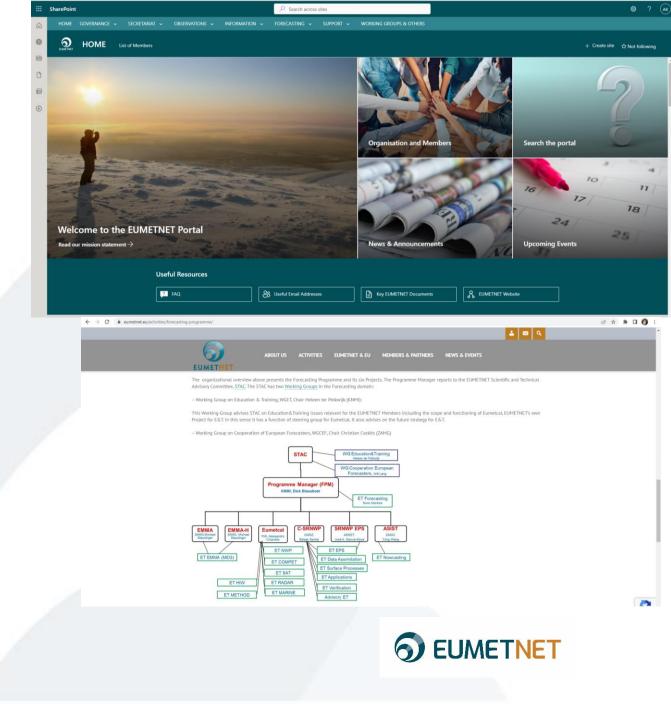
#### Website

Outdated  $\rightarrow$  will be updated

#### **European Meteorological Society (EMS)**

This years conference (online and in Bratislava): 4-8 September 2023 was on Europe and droughts: Hydrometeorological processes, forecasting and preparedness Next years conference: in Barcelona 2-6 September 2024

 $\rightarrow$  More on Forecasting issues?



# **Future of EUMETNET**

JOINT and Assembly meetings in Autumn: decisions on prioritization for next phase and decisions on Working Groups and Task Teams discussion on AI/ML collaboration



# **CONTACT DETAILS**

Forecasting Capability Area Manager: Aline Kraai <u>Aline.kraai@knmi.nl</u> +31 (0)655 495 011

EIG EUMETNET European Meteorological Services' Network www.eumetnet.eu

EIG EUMETNET Secretariat c/o L'Institut Royal Météorologique de Belgique Avenue Circulaire 3 B-1180 Brussels, Belgium

Registered Number 0818.801.249 - RPM Bruxelles

# Thanks for your attention !



# **Questions ?**

