

EMERGE

A European Microwave Radiometer network
within Geo

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Presented by Fabio Madonna

EMERGE:

A European Microwave Radiometer network within Geo

Proposal:

Coordination action submitted to the EU FP7 (5 Jan 2010) for three year activity

Area 6.4.1.1:

Integration of European activities within GEO

Coordinator:

Domenico Cimini, CETEMPS, University of L'Aquila

Objective: To coordinate the integration of MWR observations into GEOSS and thereby making them accessible to a broad user community.

Key point: Facilitating the registration and the global access of well documented and quality controlled data in GEOSS, including research and operational data being developed and existing (long-term historical) data bases.

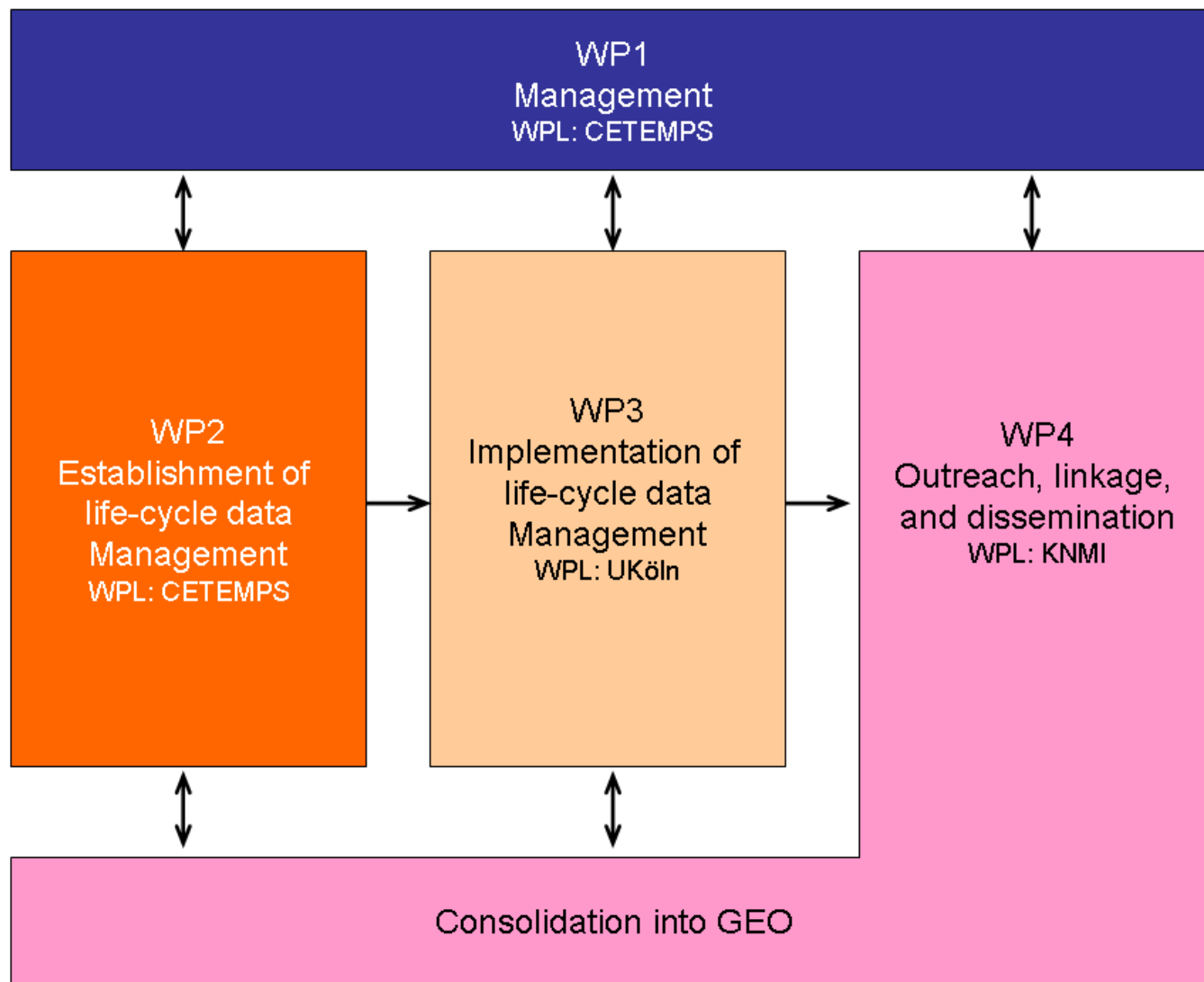
GRUAN plays a central role in the activities and start from the European GRUAN sites to be the core sites where the ideas of uniformity of calibration, data taking and quality control are to be established first.

Synergies and support:

- 1) ARM, other GRUAN partners
- 2) EARLiNET (Raman – lidar)
- 3) Cwinde
- 4) Cloudnet
- 5) COST Actions EG-CLIMET (meteo & climate) and IC0802
(telecommunication)

Participant #	Participant name	Country
1	Coordinator + WP leader (CETEMPS, U. of Aquila)	IT
2	WP leader (U. of Kohl)	D
3	KNMI (WP leader)	NL
4	IMAA	IT
5	FMI	FI
6	DWD	D
7	Meteoswiss	CH
8	MetOffice	GB

Work Packages (WP)



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WP1: Management [CETEMPS]

T1.1: Management and coordination of the consortium

T1.2: Reporting to EC and financial audit

T1.2: Management of Workshops

T1.3: Website development and maintenance

WP2: Establishment of life-cycle data management [CETEMPS]

T2.1: Review state-of-the-art

T2.2: Error analysis, optimum calibration, QC procedures and data handling for MWR ECVs

T2.3: Common retrieval algorithms for atmospheric parameters

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Work Packages (WP)

WP3: Implementation of life-cycle data management [UKöln]

T3.1: Establishing an inventory of past and currently operational MWR archives

T3.2: Data flow from GRUAN sites

T3.3: Near-Real-Time data processing and archiving into GEOSS

T3.4: Establishing record of QC ECVs and FCDRs and archiving into GEOSS

Work Packages (WP)

WP4: Outreach, linkage, and dissemination [KNMI]

T4.1: Website, meetings, and workshops

T4.2: Integration of MWR data with other GRUAN activities and in other climate domains

T4.3: Integration of MWR data into weather forecasting and NWP data assimilation

T4.4: Application of MWR for telecommunications

T4.5: Expanding the network beyond GRUAN

T4.6: Consolidation of outcomes and integration into GEO processes

Summary

Summary of GRUAN involvement in EMERGE:

- 1) Assisting and advising on the implementation of uniformly acceptable calibration procedures including the establishment of proper error determination, establishment of FCDR's and ECV's
- 2) The installation of these procedures at the European GRUAN sites (there is money for that available!)
- 3) Networking with the other GRUAN sites
- 4) Integration with other water vapour measurements within GRUAN (Reference sondes, Raman lidar and GPS)