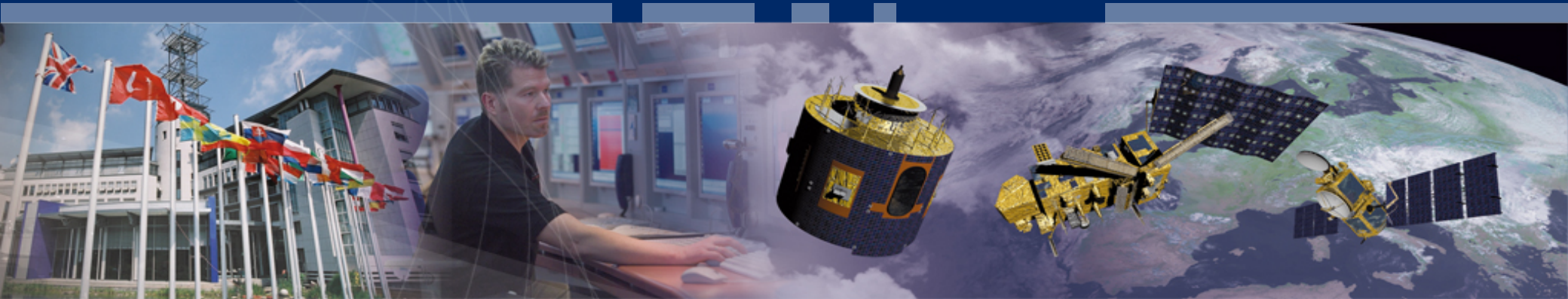




EARS-ATMS, EARS-CrIS and EARS-VIIRS: Three New Regional Services

Anders Meier Soerensen
Christelle Ponsard





EUMETSAT Advanced Retransmission Service (EARS)

Objective and Principle

Objective

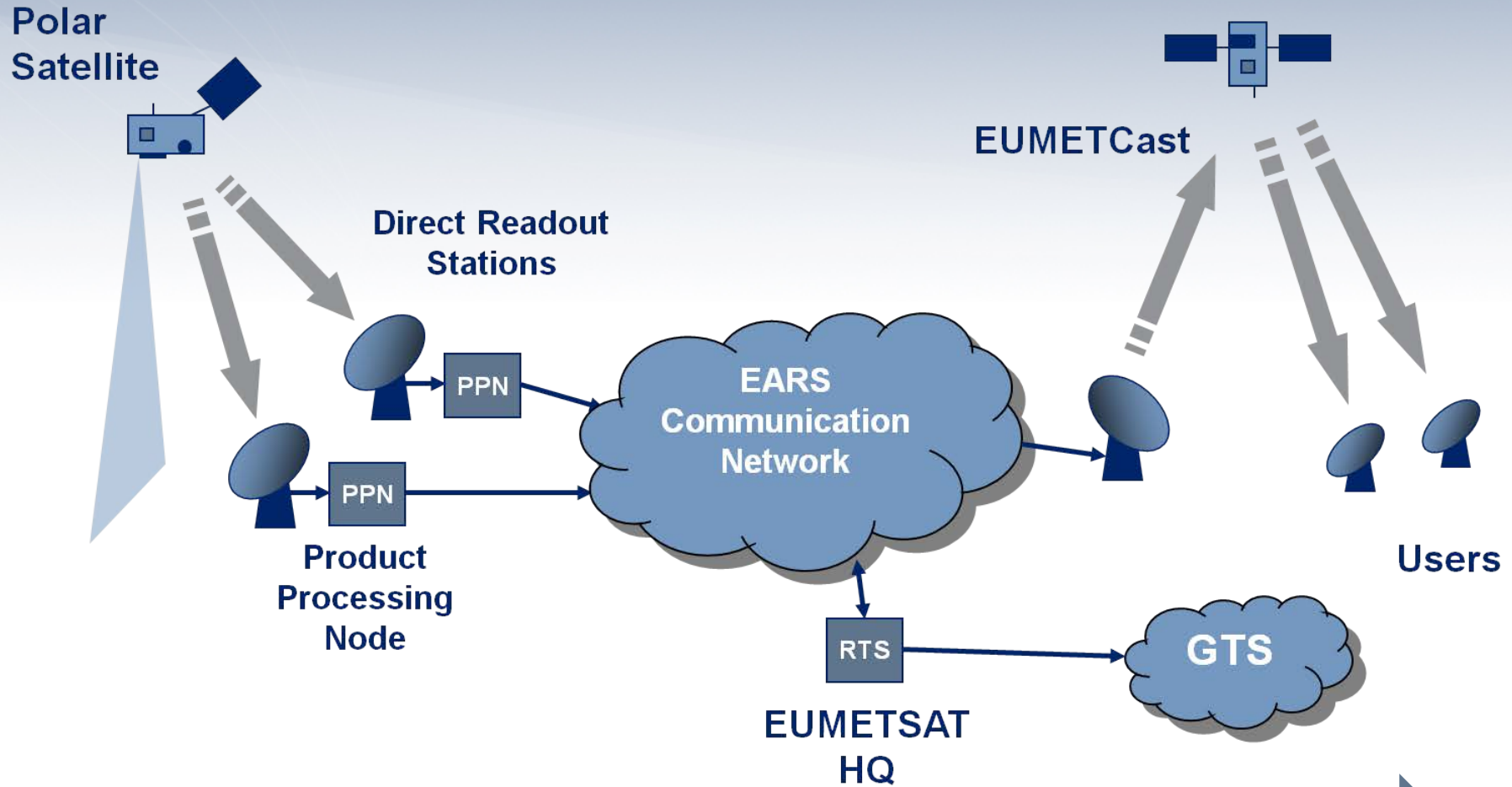
To provide Users with high timeliness regional data from Polar Orbiting Meteorological Satellites in support of Numerical Weather Prediction (NWP) and Nowcasting (NWC).

Principle

Achieved through a regional network of Direct Readout ground stations collecting, processing and retransmitting data to Users in near real time.



EARS – System Overview

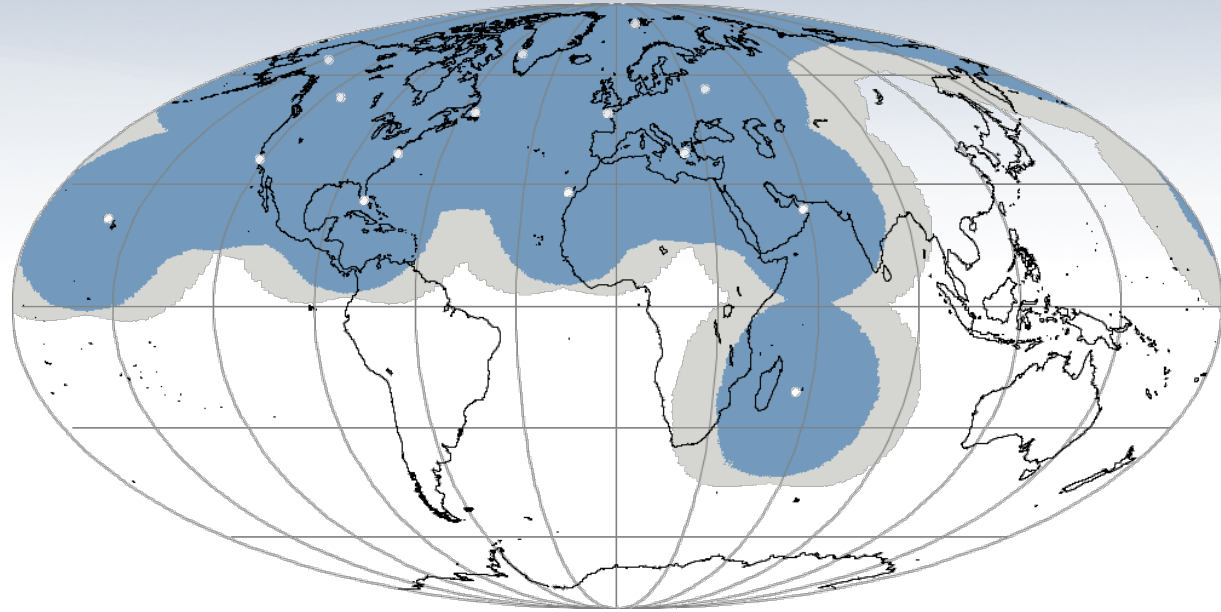


10-30 Minutes



EARS – Current Status

Services	
EARS-ATOVS	L1
EARS-ASCAT	L2 Winds
EARS-AVHRR	L0
EARS-IASI	L1C
EARS-NWC	L2 Clouds



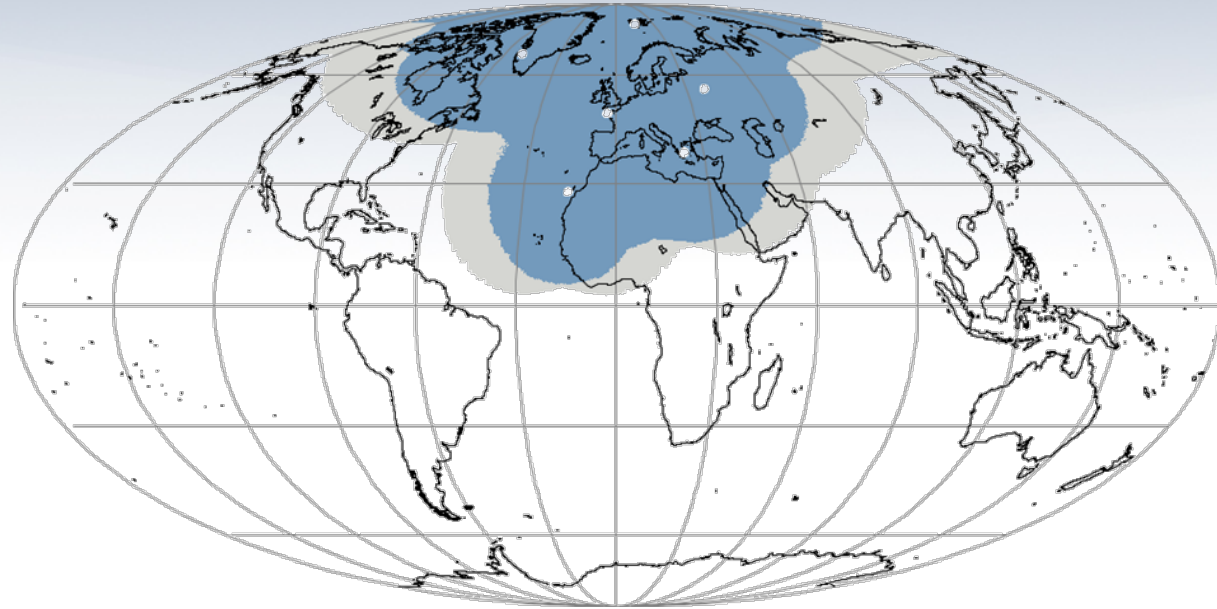
Satellites: NOAA POES
Metop



EARS – New Regional Suomi NPP Services

Services	
EARS-ATOVS	L1
EARS-ASCAT	L2 Winds
EARS-AVHRR	L0
EARS-IASI	L1C
EARS-NWC	L2 Clouds
EARS-ATMS	SDR (L1)
EARS-CrIS	SDR (L1)
EARS-VIIRS	SDR (L1)

Initial Suomi NPP Coverage



Satellites: NOAA POES
Metop
Suomi NPP



New EUMETSAT Provided Global and Regional NPP Services

Global	Regional
ATMS	ATMS
CrIS	CrIS
	VIIRS

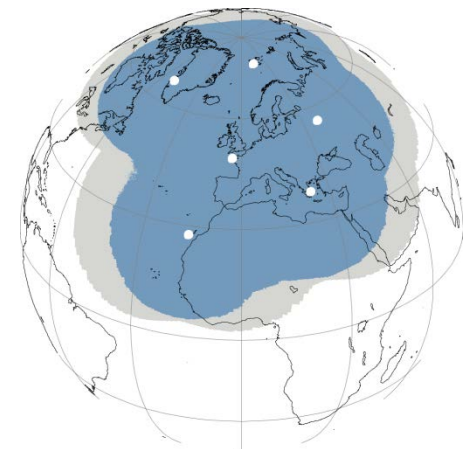
New EUMETSAT Provided Global and Regional NPP Services

Acquisition of NPP Data

By NOAA via
NOAA's main
ground station(s)
for global data

Global	Regional
ATMS	ATMS
CrIS	CrIS
	VIIRS

By EUMETSAT via
EARS network of
Local Reception
Stations



New EUMETSAT Provided Global and Regional NPP Services

Product Processing

By NOAA at
IDPS/NDE

Global	Regional
ATMS	ATMS
CrIS	CrIS
	VIIRS

By EUMETSAT
using CSPP/AAPP

New EUMETSAT Provided Global and Regional NPP Services

Timeliness

15 minutes after products are made available by NOAA

Global	Regional
ATMS	ATMS
CrIS	CrIS
	VIIRS

30 minutes
(pass based)

15 minutes
(segment based)

New EUMETSAT Provided Global and Regional NPP Services Product Content via EUMETCast Europe

All Calibrated and Geolocated (SDR)

	Global	Regional	
All 22 Channels All FoV	ATMS	ATMS	All 22 Channels All FoV
All 1305 Channels All FoV Cloud Information	CrIS	CrIS	399 Channels All FoV Cloud Information
		VIIRS	All 16 M-Band Channels

New EUMETSAT Provided Global and Regional NPP Services Product Content via RMDCN/GTS

All Calibrated and Geolocated (SDR)

	Global	Regional	
All 22 Channels All FoV	ATMS	ATMS	All 22 Channels All FoV
399 Channels All FoV Cloud Information	CrIS	CrIS	399 Channels All FoV Cloud Information
		VIIRS	

New EUMETSAT Provided Global and Regional NPP Services

Product Formatting

All Calibrated and Geolocated (SDR)

	Global	Regional	
BUFR	ATMS	ATMS	BUFR
BUFR	CrIS	CrIS	BUFR
		VIIRS	HDF5 Geolocation info on tie-point grid



NPP Regional Services - Conclusion

- Preparations well underway at all Stations. Expected Operational Readiness indicated as Quarter in 2012.
- New EARS Suomi NPP Services to start during 2012.
- The contributions from the:
 - Station Partners
 - NWP-SAF
 - CSPP Team
 - Users

are essential for the successful implementation of the new services and are highly appreciated!

