



Royal Netherlands
Meteorological Institute
*Ministry of Transport, Public Works
and Water Management*

SHIPBORNE AUTOMATIC WEATHER STATION (S-AWS)



SHIPBORNE AUTOMATIC WEATHER STATION

Joint project of a number of European National Meteorological Services, to select, procure and operate a system to carry out meteorological observations on board of ships automatically.

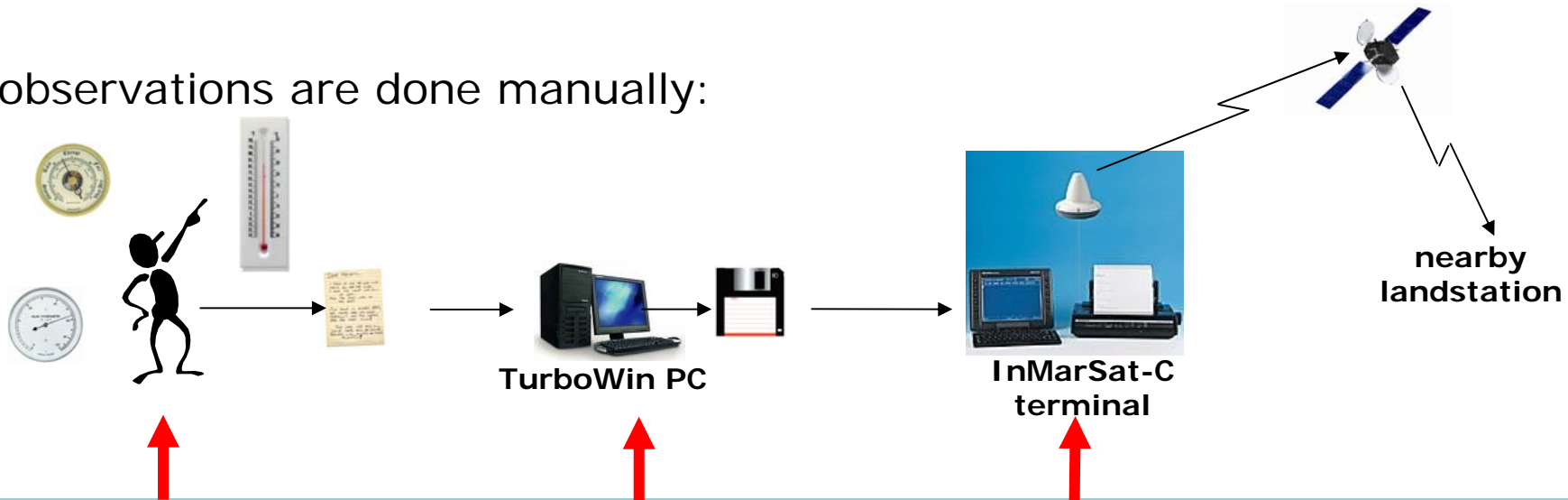
Topics:

- OBSERVATIONS ON SHIPS
- CONTEXT OF THE PROJECT
- TENDERING SCENARIOS
- CONCEPT OF S-AWS
- ACTIONS AND TIMESCALE



Observations on ships

- observations at sea are carried out by ships officers of Voluntary Observing Ships (VOS)
P, H, T, SST, Visibility, Weather, Cloud and Wave info
- VOS fleet recruited by NMS, e.g. KNMI
KNMI VOS-fleet: 130 ships, total number of VOS-ships: 2000
- observations are done manually:





Observations on ships

Disadvantages of the current observing method:

- Susceptible for human errors
- Low observing frequency
- Crew members have to be instructed

→ possible solution: **Automation of the observing process**



Context of the project

EUMETNET

Network of European Meteorological Services (currently 24 countries)

EUCOS is the **EUMETNET** Composite Observing System, comprising a number of programs.

E-SURFMAR is a **EUCOS** program, to coordinate and optimize the surface-marine observations of the European VOS-fleet, and of moored and drifting buoys.

Task Team AWS (TT-AWS):

Initial development and basic design of S-AWS
results:

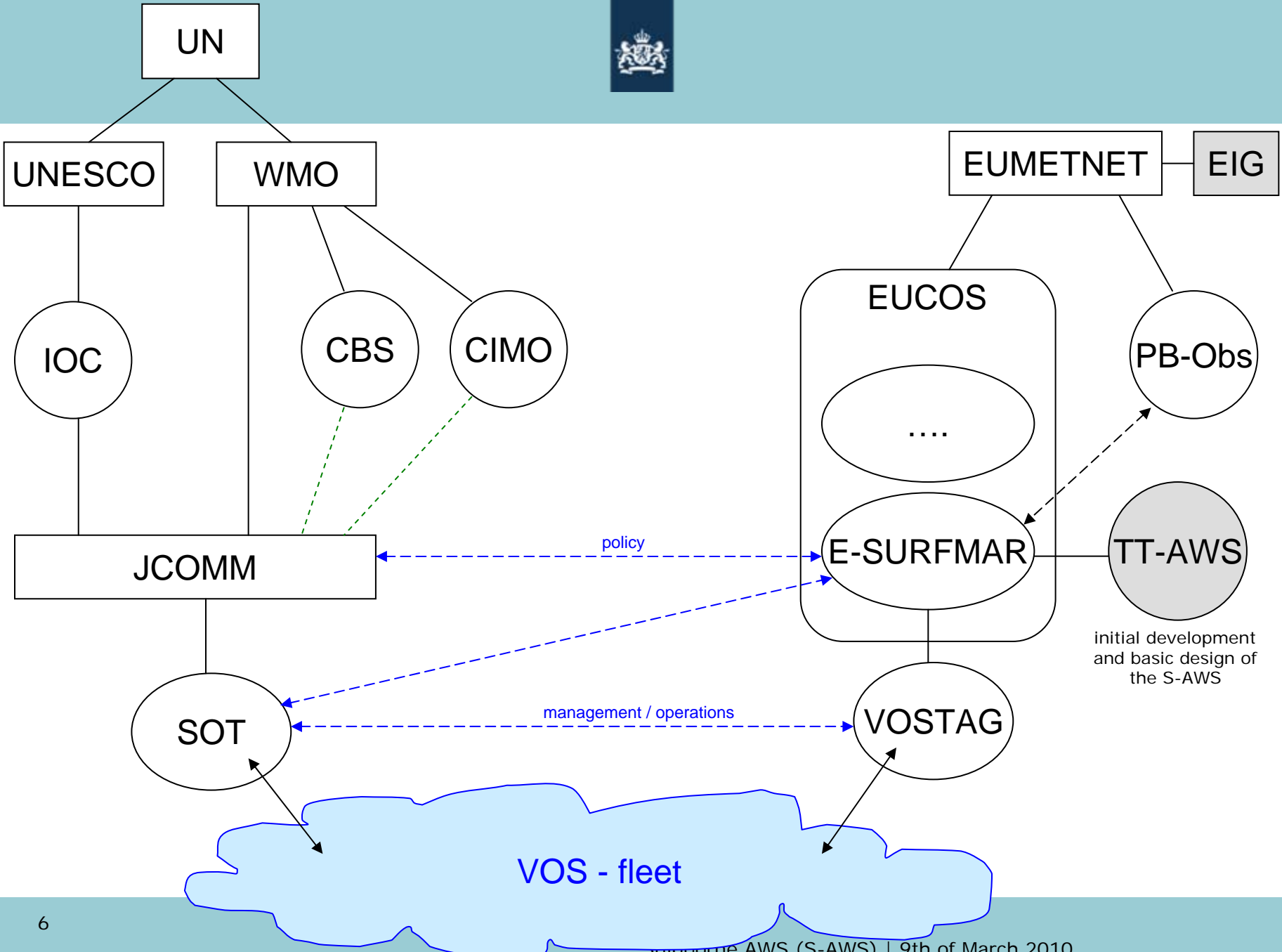
- Requirements document
- Initial Specifications document

Task Team on Tendering (TTonT):

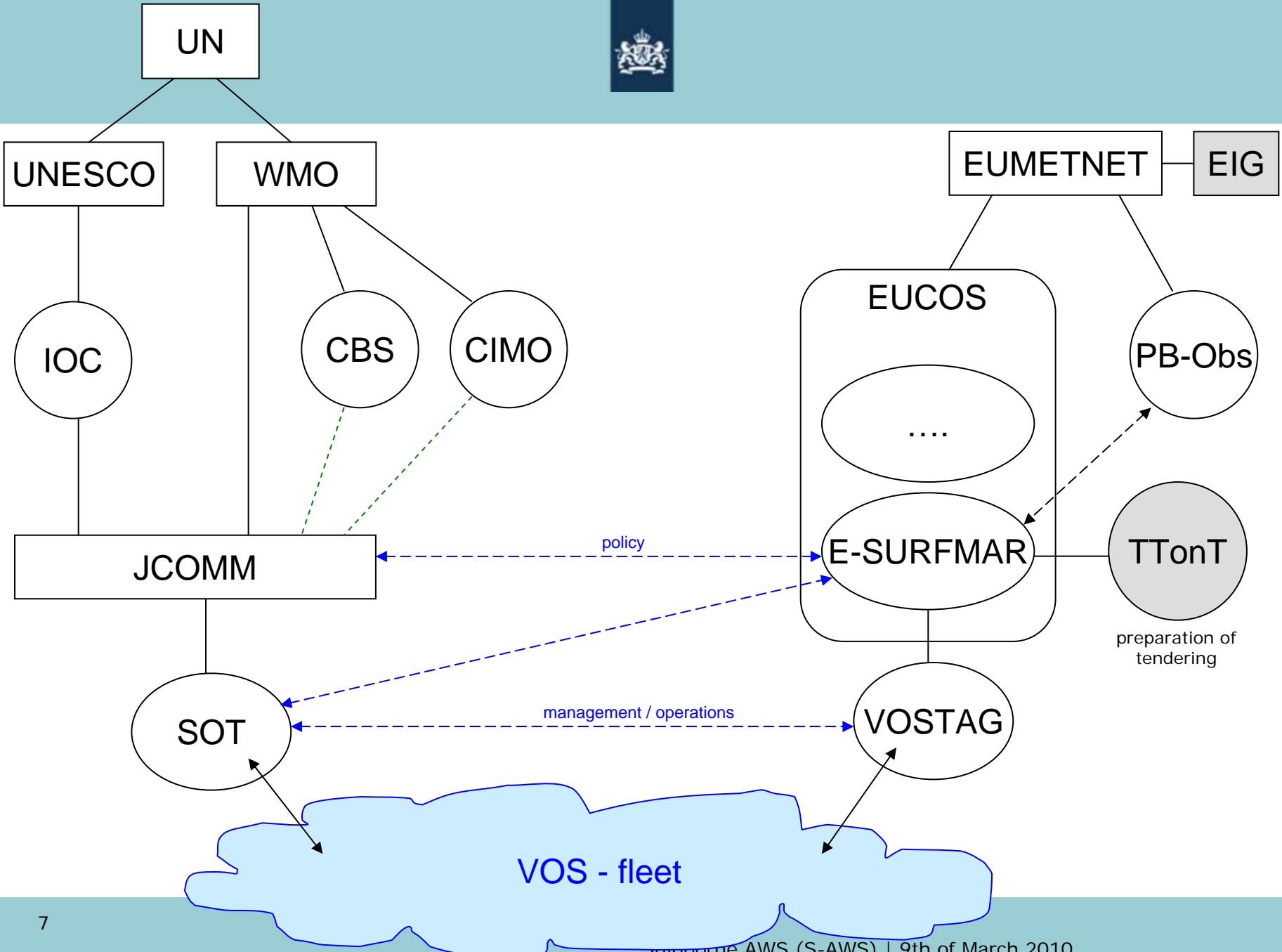
Preparation of tendering

results:

- Advice on the tendering scenario
- All necessary tendering documentation



initial development and basic design of the S-AWS





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results:

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Task Team on Tendering (TTonT):

Preparation of tendering

results:

- Advice on the **tendering scenario**
- All necessary tendering documentation



Tendering scenarios

Scenario	Call for Tender	Budget	Asset Management	Asset Ownership
3-A	Participants	Participants	Participants	Participants
3-B	One managing Member			
3-C	EIG			
5-A	One managing Member	Combined	Participants	One managing Member
5-B			One managing Member	
7-A	EIG	E-SURFMAR	One managing Member	One managing Member
7-B				EIG
8	EIG	E-SURFMAR	EIG	EIG



Tendering scenarios

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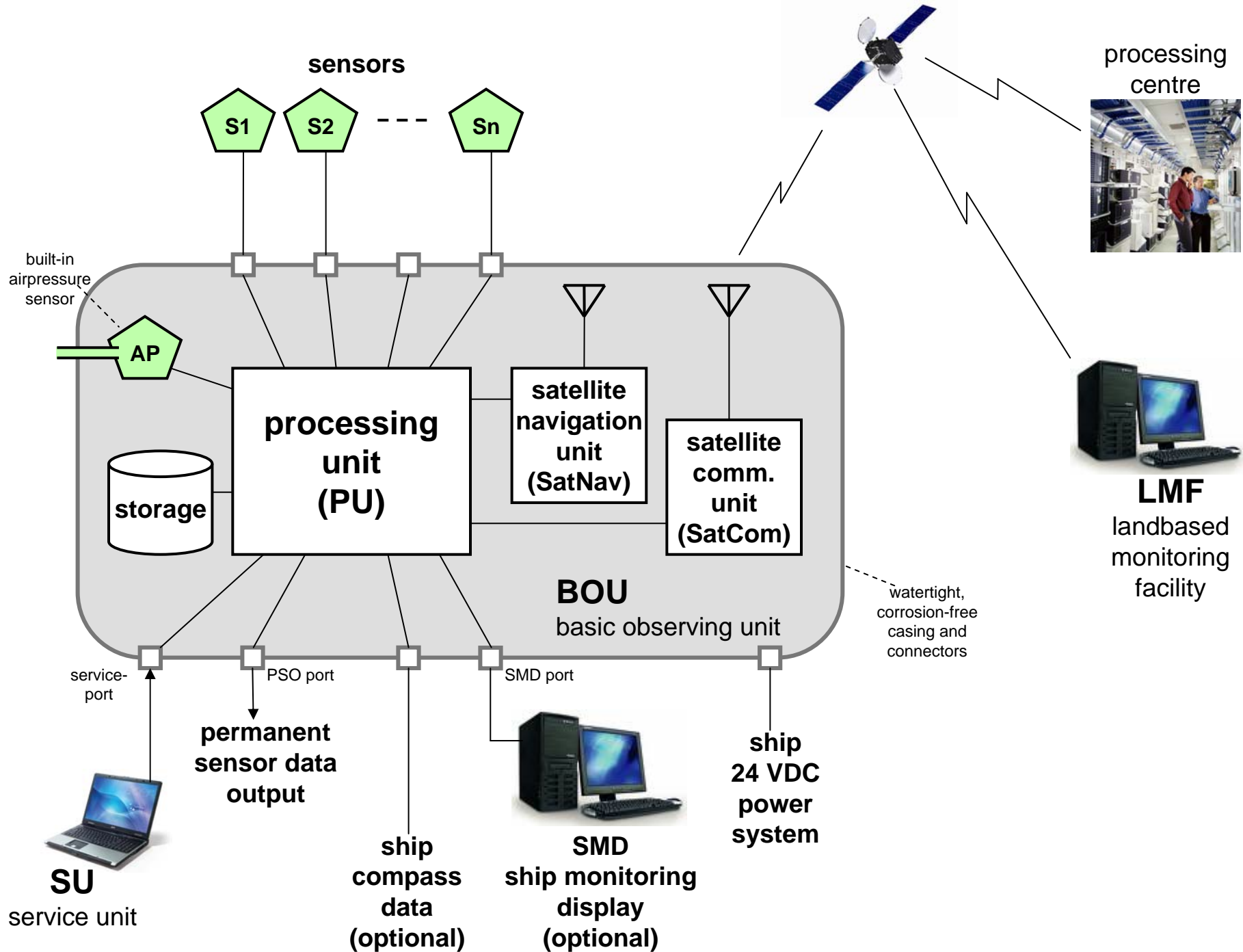
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Concept of S-AWS

- The S-AWS is an automatic observing system for use on board of ships.
- The S-AWS features a positioning system with worldwide coverage.
- The S-AWS features a communication system with worldwide coverage to communicate with landstations.
- The S-AWS can be monitored and configured remotely (i.e. from a landstation).
- Participating countries will be free to use any sensor they prefer.







Actions and Timescale

Task Team on Tendering:

- Jan Rozema (KNMI, chairman)
- Pierre Blouch (Météo-France)
- Henry Kleta (DWD)
- Sarah North (UKMO)
- Thomas Nedergaard (DMI)
- Rob Deibert (KNMI)

KNMI project group:

- Rob Deibert (KNMI, project leader)
- René Rozeboom (WIS)
- Marijn de Haij (IRD)
- Ludo Huisman (InQuest/DPA)



Actions and Timescale

E-SURFMAR Task Team on AWS	User requirements	May 2009	PB-Obs-19
	Initial specifications	November 2009	PB-Obs 20
E-SURFMAR Task Team on Tendering	Tendering scenario	March 2010	PB-Obs 21
	Functional and Technical specifications	June 2010	
	All other tendering documentation	Juli 2010	PB-Obs 22
Future Task Team	European Tender to procure the S-AWS	2011	



QUESTIONS

COMMENTS



DISCUSSION