VOS Report for 2010 **(EUMETNET)**

a. Programme description:				
Category	**No. of ships at 31 Dec 2010**	**Recruitments in 2010**	**De-recruitments In 2010**	**Comments**
Selected				
Selected AWS	8	2	0	Continuation of the installation of BATOS AWS stations funded by the E-SURFMAR programme
VOSClim				
VOSClim AWS				
Supplementary				
Supplementary AWS	13	7	3	BAROS AWS. Primarily Installed onboard E-ASAP ships, they provide hourly air pressure data only.
Auxiliary				
Auxiliary AWS				
Other				
National VOS Total	21			

National VOS Target	45
National VOSClim Target	13

b. Data management:	
Total number of ship observations (BBXX) distributed on the GTS in 2010	83,824
Frequency of VOS data submitted to the GCC in 2010	Unknown – Should be done through the EUMETNET member who installed the station

c. Shipboard Automatic Weather System				
Type	**No. of ships at 31 Dec 2010**	**Manual Input Yes / No**	**Method of Comms**	**2011 Planned installations**
BATOS	8	Yes	Inmarsat Data Reporting	3
BAROS	13	No	Iridium SBD	7

f. Electronic logbooks: (TurboWin, SEAS, OBSJMA)		
Software & version	**No. of ships at 31 Dec 2010**	**Implementation plans**

g. Major challenges and difficulties:

The funding of ship borne AWS presented in the tables here above (E-SURFMAR fleet), is only a part of the programme VOS duties. E-SURFMAR is actually coordinating the activities of about 50% of active VOS in the world and EUMETNET ships report about 52% of the whole observations. During the 2002-2010 period, the number of air pressure observations reported by European AWS stations passed from 380 to more than 1350 per day. This of pressure observations reported by conventional VOS slightly increased from 790 to 820 per day but the number of observations performed into the EUCOS area of interest decreased from 400 to 320 during the same period.

One of the main objective of E-SURFMAR – as for the other components of EUCOS – consists in optimising the ground observing system to improve short range forecasts over Europe. The sea level pressure is a key parameter for E-SURFMAR. It appears the quality of pressure measurements reported by conventional VOS is worse than this of AWS in average. This problem must be carefully considered and reduced as much as possible.

h. Research / development / testing:

A call for tender for the procurement of common shipborne AWS to E-SURFMAR members is under preparation under the leadership of KNMI. The technical characteristics were specified using the experiences gained by the participants in the project. The call for tender should be issued in 2011. Four prototypes will be then tested before ordering series.

E-SURFMAR activities also include:

- the development and use of data compression techniques to save communication costs;
- the use of normalized GTS identifiers (MASK) to facilitate the monitoring and the management of the E-SURFMAR fleets;
- the development and the use of a metadata database available online. The E-SURFMAR database contains all Pub 47 metadata made available by VOS operators in the world (not only European ones). Every day, the metadata are extracted from the database and made available on a FTP site (CSV and XML formats);
- the development and use of day-to-day monitoring tools.

i. Other comments:

Nil