VOS Report for 2012 EUMETNET

a. Programme descript	. Programme description:				
Category	No. of ships at 31 Dec 2012	Recruitments in 2012	De-recruitments In 2012	Comments	
Selected					
Selected AWS	10	0	0	BATOS stations	
VOSClim					
VOSClim AWS					
Supplementary					
Supplementary AWS	16	6	5	BAROS stations	
Auxiliary					
Auxiliary AWS					
Other					
National VOS Total	26				

National VOS Target	30
National VOSClim Target	13

b. Data management:			
Total number of ship observations (BBXX) distributed on the GTS in 2012	113,685		
Frequency of VOS data submitted to the GCC in 2012	Done by the responsible Eumetnet member for each station.		

C.	Shipboard Automatic Weather System					
	Туре	No. of ships at 31 Dec 2012	Manual Input Yes / No	Method of Comms	2013 Planned installations	
BAT	OS	10	Yes	INMARSAT/IRIDIUM	2	
BAR	OS	16	No	IRIDIUM SBD	2	

d.	Electronic logbooks: (TurboWin, SEAS, OBSJMA)			
	Software & version	No. of ships at 31 Dec 2012	Implementation plans	

e. Major challenges and difficulties:

The maintenance of the E-SURFMAR AWS fleet is not an easy work due to do the change of ship's routes, sales, temporarily decommissions, deconstructions... The help of the MOON community (Mediterranean Operational Oceanography Network), and most especially of ENEA, is very well apreciated

In addition to the funding and the operation of a European S-AWS fleet, E-SURFMAR continues to coordinate the VOS activity in Europe according to the programme objectives. European VOS report more than 50% of all ship observations in the world. One of the main objective of E-SURFMAR consists in optimising the surface marine observations to improve short range forecasts over Europe. One of the challenge is to improve the quality of sea level pressure measurements reported by conventional VOS which remains below the target.

f. Research / development / testing:

<u>New European AWS:</u> A call for tender for the procurement of common shipborne AWS to E-SURFMAR members had been performed in 2012. Three prototypes should be built in 2013 by the manufacturer who was chosen. They should be tested at the end of the year, before members order series.

<u>BATOS AWS</u>: Iridium SBD transmission was developed to replace Inmarsat-C Data Mode on the BATOS stations. This communication system is three times cheaper than Inmarsat for the same volume of data.

<u>BAROS AWS</u>: One BAROS AWS was successfully installed on a moored buoy (Cyclofos) in the Eastern Mediterranean Sea on July 23rd. It is not considered as being part of the E-SURFMAR S-AWS fleet in sections a, b and c of the present report.

<u>Conventional VOS:</u> KNMI started the deployment of the half compression technique – developed in the frame of E-SURFMAR -, on their VOS in 2012. About 35 VOS have been installed. This technique allows to save communication costs thanks to the compression of the data. Over the second half year, these VOS reported 7,430 observations onto the GTS.

<u>Quality controls and reports:</u> Since September 2012, warning messages are sent every Monday by Meteo-France to European VOS operators and PMOs for their ships reporting dubious pressure values. The 20 worst ships belonging to EUMETNET members are only the subject of a message. This action should improve the quality of pressure measurements carried out by conventional VOS.

g. Other comments:

Nil