VOS Report for 2013 **Country =** **EUMETNET**

a. Programme description:

Category	No. of ships at 31 Dec 2013	Recruitments in 2013	De-recruitments In 2013	Comments
Selected				
Selected AWS	11	1		New installation: Cap Finistère
VOSClim				
VOSClim AWS				
Supplementary				
Supplementary AWS	17	4	2	
Auxiliary				
Auxiliary AWS				
Other				
National VOS Total	28			

National VOS Target	30
National VOSClim Target	11

b. Data management:

Total number of ship observations (BBXX) distributed on the GTS in 2013	139 996
Date when VOS data submitted to the GCCs in 2013	Done by the responsible Eumetnet member for each station

c. Shipboard Automatic Weather System

Type	No. of ships at 31 Dec 2013	Manual Input Yes / No	Method of Comms	2014 Plans
BATOS	11	Yes	INMARSAT/IRIDIUM SBD	0
BAROS	17	No	IRIDIUM SBD	0

d. Electronic logbooks: (TurboWin, SEAS, OBSJMA)

Software & version	No. of ships at 31 Dec 2013	Implementation plans

e. Standard Meteorological Equipment: (Types and Settings)		
Equipment Type / Element	**Manual Instrumentation**	**AWS Instrumentation**
Barometer		Vaisala PTB220 (on BATOS)
		Vaisala PTB210 (on BAROS)
		MetPak-II multisensor (a few BAROS)
Default national setting	*Station Level*	*Station Level*
Barograph		
Thermometers		PT100 from Vaisala humidity sensor HMP45D or HMP110 (BATOS)
		Gill MetPak-II multisensor (a few BAROS)
Sea Surface Temperature		PT100 (BATOS)
Wind Speed and direction		Gill Windsonic (BATOS)
		Gill MetPak-II multisensor (a few BAROS)

f. PMO ship visit activities: (if a visit is for dual purposes, include all purposes)

Activity	Manual Ship	AWS Ship	Comment
Routine VOS inspections		16	Remark : The EUMETNET S-AWS fleet is maintained by PMOs or technicians
VOS recruitment visits		5	from different NMS or third parties. A part of the related visits may be reported
VOS de-recruitment visits		2	in their respective national report.
VOS courtesy or foreign visits			
Total visits to VOS	23		
Routine ASAP inspections			
ASAP recruitment visits			
ASAP de-recruitment visits			
ASAP courtesy visits			
Total visits to ASAP			
Routine SOOP visits			
SOOP recruitment visits			
SOOP de-recruitment visits			
SOOP courtesy visits			
Total visits to SOOP			
Visits in support of DBCP (drifting buoys)			
Visits in support of Argo (profiling floats)			
Total visits to other programs			
Total visits by national PMOs	23	*Sum of all ship visits (VOS + ASAP + SOOP) + visits to other program (DBCP + Argo)*	

g. 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 appreciated

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.

h. Research / development / testing:

EUCAWS: Resulting from a tender signed in 2013, the European Common AWS is still under development. The first prototype will be available in 2014 for tests. Afterwards, members will order series.

BATOS AWS: Iridium SBD transmission was developed and tested to replace Inmarsat-C Data Mode on the BATOS stations. The last BATOS installation was equipped with Iridium SBD.

BAROS AWS: One of the 2013' installations was done in May on a Portuguese ship plying between Lisbon, Azores Is. and Madeira Is. The AWS is fitted with a MetPak-II multisensor which provides reliable wind data. This station shows the capability of such sensor to cost-effectively measure basic parameters (P, T, U, W) if correctly located on the ship.

i. Other comments