a. Programme descripti	a. Programme description:					
Category	No. of ships at 31 Dec 2012	Recruitments in 2012	De-recruitments In 2012	Comments		
Selected	0	0	0			
Selected AWS	0	0	0			
VOSClim	102	0	39			
VOSClim AWS	0	0	0			
Supplementary	0	0	0			
Supplementary AWS	0	0	0			
Auxiliary	0	0	0			
Auxiliary AWS	0	0	0			
Other	0	0	0			
National VOS Total	102					

National VOS Target	102
National VOSClim Target	102

b. Data management:				
Total number of ship observations (BBXX) distributed on the GTS in 2012	<mark>44026</mark>			
Frequency of VOS data submitted to the GCC in 2012	Hourly, Intermediate and Main hour OBS's. Main hours are priority.			

c.	Shipboard Automatic Weather System						
	Туре	No. of ships at 31 Dec 2012	Manual Input Yes / No	Method of Comms	2013 Planned installations		
none	)						

d. Electronic logbooks: (Tur	Electronic logbooks: (TurboWin, SEAS, OBSJMA)					
Software & version	No. of ships at 31 Dec 2012	Implementation plans				
TurboWin 4.5	39	Aim forTBW 5.0 or TWeb.				
TurboWin 5.0	57	Aim for Tweb				
SatCom-C	53	Aim for E-Mail or TWeb				
Email	43	Aim for TWeb				
TurboWeb	6					
Semi Compressed Format	32	We aim for a change to email or TurboWeb.				

## e. Major challenges and difficulties:

Keeping crews onboard motivated to perform. We aks for a monthly average of 30 OBS's on a yearly basis. We do this to enhance the routine and so aim for more quality. Economic crisis and crews working on contract basis put the effort for VOS under pressure.

## f. Research / development / testing:

Work is done to soon (2013) implement the testing phase of S-AWS. TurboWeb (OBS by internet connection) is developed and operational. Effort is put into widespread acceptance of TurboWin/TurboWeb. Efforts are undertaken to financially secure the development of TurboWin. Semi compressed transmission of OBS's through Meteo-France are implemented. The use of Email and TurboWeb for transmission protocol is promoted.

## g. Other comments:

Our aim for Tweb is based on two arguments:

First cost reduction as compared to the use of SatCom-C and secondly as TurboWeb is remotely installed we aim for an easier update policy as compared to the standalone versions of TurboWin