

SOOP Report for 2007

(Australia)

a. Programme description:			
Line	Agency	Sampling programme and mode (if applicable)	No. of ships
IX01	ABOM	FRX+ (Target programme)	8
IX12	ABOM	FRX (Target programme)	5
PX11/IX22	ABOM	LDX (Target programme)	2
PX02	ABOM	LDX (Target programme)	2
IX28	CMAR	HDX, SST/SSS, pCO ₂ , TCO ₂ , alkalinity, pigments, fluorescence, macronutrients	1
PX30	CMAR	HDX	1
PX34	CMAR	HDX	3
	RAN	Operational requirements and or hydrographical surveying	15

b. Data management		
Agency	No. of JJVV messages on the GTS in 2007	Location of delayed-mode data
ABOM	644	US NODC
CMAR	1188	US NODC
RAN	275	US NODC

c. Major challenges and difficulties:

1. Continuing teething problems with Devil XBT has meant that manual QC of JJVV messages is required before the data are submitted to the GTS.
2. A lack of interested and/or suitable ships with long term charters operating between Fremantle and Singapore, resulted in reduced sampling on IX01 after M/V Sagar was decommissioned in March 2007. Sampling on this line has been picked up by ships already sampling IX12 or PX02, but the FRX+ rate (weekly) could not be achieved.
3. The number of transects achieved on all other Bureau lines (IX12, PX02, PX11/IX22) were down due to the normal challenges of the volatile shipping industry.
4. A considerable number of bathy files were lost due to a major malfunction with the RAN's MK12/TESS/computer system.

d. Research / development / testing:

1. Some ships of the Bureau's SOOP were upgraded to Devil XBT version 2.02 during 2007, which included a correction to the bathy message format. This has resulted in an increased number of messages being available for GTS distribution, albeit still in a delayed timeframe.
2. A major Devil XBT upgrade is expected in 2008. This upgrade may overcome the current requirement for manual QC of the RT JJVV data stream and enable real-time distribution on the GTS.
3. CSIRO is about to deploy Devil XBT with an iridium transmitter to deliver messages straight to the GTS, via the Bureau of Meteorology. After testing, this is expected to become fully operational in mid 2008.
4. The RAN tested the Devil system on its frigates and survey ships. Specifications for the RAN's version of Devil software were developed for Turo Technology Pty Ltd.

e. Other comments:

1. The Bureau expects to recruit one additional ship on PX02 (2 in total) and one additional ship on IX22 & PX11 (3 in total) during 2008.