Canada

a. Programme d	Programme description:	
Category	No. of ships at 31 Dec 2008	Comments
Selected	35	
Supplementary	11	
Auxiliary	0	
Other (specify)	0	
Total National VOS Fleet	46	

b. VOS:	
Number of VOS vessels recruited in 2008	03
Number of VOS vessels de-recruited in 2008	00
Target number of ships in the national VOS Fleet	75 Automatic VOS (AVOS) Ships

c. VOSClim:	
Number of VOSClim vessels at 31 December 2008	46
Number of VOSClim vessels recruited in 2008	04
Number of VOSClim de-recruitments in 2008	00
Number of VOSClim recruitments planned for 2009	08
Target number of ships to participate in VOSClim	75 (The complete AVOS Network)

d. Automated o	Automated observing systems:			
Туре	No. of ships at 31 Dec 2008	Manual Input Yes / No	Method of Comms	2009 Planned installations
AVOS manufactured by AXYS technologies	45	Both	INMARSAT	04
AVOS manufactured by AXYS technologies	1	Both	IRIDIUM	04

e. Data management:	
Total number of ship observations (BBXX) distributed on the GTS in 2008	Total 65000(Auto 63651/Manual 1349)
Frequency of VOS data submitted to the GCC in 2008	

f. Electronic logbooks:			
Software & version	No. of ships at 31 Dec 2008	Implementation/upgrade plans	
1.23.15 Bridge PC 1.19	1	All new installs and retrofits will be version 1.23.15 Bridge PC 1.19 or higher	
1.23.15 Bridge PC 1.17	5		
1.23.14 Bridge PC 1.17	4		
1.23.15 Bridge PC 1.16	1		
1.23.14 Bridge PC 1.16	35		

g. Major challenges and diff	ficulties:
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- Data collection rate low in the high northern latitudes and arctic with INMARSAT
- Accurate SST measurement remains an issue due to mounting location of sensor and technique
- Delay of call sign masking means the continued use of stealth mode. Working on proper call sign masking.

h. Research / development / testing:

- After 1.5 years of testing on Iridium communication in northern seas, the results look promising with over 90% data availability. Testing completed; going for implementation.
- Research for better SST measurement technique is underway.

i.	Other comments: