ASAP Report for 2008 (EUMETNET)

a. Catalogue of ASAP vessels in 2008 (see Appendix 3):

## b. Major challenges and difficulties:

Major technical problems are damages of the electronic/mechanic equipment due to permanent vibrations of the ship as well as unfavorable launching conditions when sailing at ca. 20 knots (turbulences etc.).

Most ships in the E-ASAP fleet are merchant container ships. The ASAP stations are operated by the nautical staff beside their routine tasks. Experience and knowledge differ widely from operator to operator, particularly at crew changes. Thus, operating errors are difficult to avoid.

In 2008 E-ASAP had to cope with the loss of following four ships due to changes in the line service:

- EWL Central America II (ASEU05): The ship terminated sounding operations in July. The ASAP container was returned from Jamaica and re-installed on the ship Atlantic Companion in Hamburg in November.
- SL Performance (ASEU01) and SL Achiever (ASEU02): The ships terminated sounding operations in November. Both ASAP containers were returned from Algeciras, Spain, to Hamburg.
- SL Achiever (ASDE03): The ship terminated sounding operations in November. The container was returned from Bremerhaven, Germany, to Hamburg.

So far, no replacement ships were acquired for the stations ASEU01, ASEU02, ASDE03.

## b. Other comments:

The current financial crisis has an impact on the shipping business due to reduced transport of goods and containers. This leads to shorter charter contracts and reduced line services. As result it is difficult to find replacement ships for ASAP stations.

Further problem to find new ships is the limited space on deck of modern ships. Generally it is difficult to find appropriate space for a container launcher. It is easier to find positions for a deck launcher.

d. ASAP Performance												
Callsign	Total number of sondes launched	Total number of launches	Soundings on GTS	Average terminal sounding height (km)	Balloon size (gm)	Percentage on GTS (see note)						
KRPD	ASEU01	290	215	24	350	74						
WPKD	ASEU02	164	135	26	350	82						
ZCBE7	ASEU03	202	134	21	350	66						
ZCBF3	ASEU04	198	197	24	350	99						
V2BD9, SKPE	ASEU05	271	238	26	350	88						
SKUN	ASDE01	301	277	24	200	92						
DBBH	ASDE02	241	226	22	200	94						
WAAH	ASDE03	344	258	24	200	75						
ELML7	ASDE04	295	265	21	200	90						
ZCBP6	ASGB01	263	212	25	350	81						

There is only little discrepancy between the number of transmitted soundings from board the ships and the number of soundings on the GTS. Therefore the 'Percentage on GTS' is based on the number of launches on board against the number of soundings on the GTS. This ratio includes failed launches and failed satcom transmissions.

## (EUMETNET)

## 10 ASAP units operated during the year on 11 ships

Type of ship (1)	Ship name	Callsign	Comms method (2)	Windfind method / sonde type (3)	Launch method (4)	Launch height (5)	Area of operation (6)	ASAP unit ID No.				
	Sealand				container (semi							
Merchant	Performance	KRPD	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 22 m	North Atlantic	ASEU01				
	Sealand				container (semi							
Merchant	Achiever	WPKD	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 22 m	North Atlantic	ASEU02				
					container (semi		North Atlantic/					
Merchant	Endurance	ZCBE7	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 22 m	Western Med.	ASEU03				
					container (semi		North Atlantic/					
Merchant	Power	ZCBF3	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 22 m	Western Med.	ASEU04				
	EWL Central				container (semi							
Merchant	America II	V2BD9	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 15 m	North Atlantic	ASEU05				
	Atlantic				container (semi							
Merchant	Compass	SKUN	Iridium	GPS/Vaisala RS92-SGP	automatic)	ca. 25 m	North Atlantic	ASDE01				
					container (semi							
Research	FS Meteor	DBBH	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	6 m	Worldwide	ASDE02				
	Sealand				container (semi							
Merchant	Motivator	WAAH	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 22 m	North Atlantic	ASDE03				
					container (semi							
Merchant	Hornbay	ELML7	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 15 m	North Atlantic	ASDE04				
					Container (semi-							
	Mississauga				automatic) or deck							
Merchant	Express	ZCBP6	Inmarsat C	GPS/Vaisala RS92-SGP	launcher (portable)	22 m	North Atlantic	ASGB01				
Replacement sl	Replacement ship for EWL Central America II (since Nov 08):											
					container (semi							
Merchant	Atlantic Companie	on SKPE	Inmarsat C	GPS/Vaisala RS92-SGP	automatic)	ca. 27 m	North Atlantic	ASEU05				

- (1) Type of ship: Merchant, research, supply
- (2) Comms method: Inmarsat C or others
- (3) Windfind method / sonde type: eg. GPS/Vaisala RS80-G, Loran/Vaisala RS80-L, VIZ GPS Mark II Microsonde, etc (4) Launch method: deck launcher (portable), deck launcher (fixed), container (manual), container (semi automatic), other
- (5) Launch height: height above sea level from where the sonde is released
- (6) Ocean area: North Pacific, North Atlantic, Indian Ocean, variable