ASAP Report for 2009 **(EUMETNET)**

a. Catalogue of ASAP vessels in 2009 (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, particulary at crew changes. Thus, operating errors are difficult to avoid.

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.

b. Other comments:

One ship was lost due to bankruptcy of the owner. But four stations were re-installed on board other ships.

In 2009 all ten ships under E-ASAP management started to report TEMP and HiRes 10sec Bufr from the ships. This was possible by replacing Inmarsat-C by Iridium. Transmitted data volume is now ca. 25 Kbyte instead of 3 Kbyte. Transmission costs are around 7 EUR per sounding.

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)
ASEU01		271	246	23	350	91
ASEU02		396	331	26	350	84
ASEU03		229	158	21	350	69
ASEU04		318	282	25	350	89
ASEU05		411	354	26	350	86
ASDE01		417	397	22	200	95
ASDE02		302	291	23	200	96
ASDE03		311	248	22	200	80
ASDE04		508	487	23	200	96
ASGB01		268	210	26	350	78

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.

Appendix 3. Catalogue of ships participating in ASAP in 2009. **(EUMETNET)**

10 ASAP units operated during the year on 10 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.
Research	Maria S. Merian	DBBT	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 15 m	Worldwide	ASEU01
Merchant	Liverpool Express	DDSD2	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic	ASEU02
Merchant	Endurance	ZCBE7	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU03
Merchant	Power	ZCBF3	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU04
Merchant	Atlantic Companion	SKPE	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 29 m	North Atlantic	ASEU05
Merchant	Atlantic Compass	SKUN	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 25 m	North Atlantic	ASDE01
Research	Meteor	DBBH	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 6 m	Worldwide	ASDE02
Merchant	Atlantic Concert	SKOZ	Iridium	GPS/Vaisala RS92-SGP	deck launcher (portable)	ca. 25 m	North Atlantic	ASDE03
Merchant	Hornbay	ELML7	Iridium	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 15 m	North Atlantic	ASDE04
Merchant	Mississauga Express	ZCBP6	Iridium	GPS/Vaisala RS92-SGP	container (semi-automatic) or deck launcher (portable)	ca. 22 m	North Atlantic	ASGB01

(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