ASAP Report for 2010 **EIG EUMETNET**

a. Catalogue of ASAP vessels in 2010 (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.

Short charter contracts and reduced line services makes it difficult to find suitable ASAP ships. Further problem to find 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.

Beginning of 2010, Meteo France installed two new ships (Fort Saint Georges and Fort Sainte Marie). Occasional problems were reported regarding satellite transmission. In July there were no soundings from one of the ship due to lack of experienced operator.

b. Other comments:

11 stations transmit TEMP and HiRes Bufr reports from the ships via Iridium. The HiRes Bufr was reduced from 10 sec levels to 20 sec levels (i.e. 80-100 m vertical resolution) to reduce transmission size and time (WMO requirements: Goal = 100 m, Breakthrough = 200 m).

The residual 7 stations shall change to Iridium and commence BUFR transmission in 2011.

d. ASAP Performance

Callsign	Total number of launches	Number of TEMP SHIP transmitted	Number of relaunches	Average terminal sounding height (km)	Balloon size (gm)	Percentage on GTS (see note)
ASEU01	266			27	350	96
ASEU02	269			27	350	96
ASEU03	331			25	350	78
ASEU04	295			25	350	99
ASEU05	325			27	350	85
ASDE01	391			21	200	96
ASDE02	306			22	200	98
ASDE03	414			21	200	80
ASDE04	341			23	200	90
ASGB01	280			24	350	75
ASFR1	277	252	9	23	300	92
ASFR2	315	292	4	23	300	97
ASFR3	258	238	3	24	300	78
ASFR4	252	228	2	24	300	75
OXVH2	423			21	300	88
OXGN2	429			22	300	86
OXYH2	361			20	300	77
EBUQ	210			24	350	79

There is only little difference 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 versus 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 2010. **(insert Country)**

18 ASAP units operated during the year on 18 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	container (semi automatic)	ca. 15 m	Worldwide	ASEU01
Merchant	Liverpool Express	DDSD2	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic	ASEU02
Merchant	Endurance	ZCBE7	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU03
Merchant	Power	ZCBF3	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU04
Merchant	Atlantic Companion	SKPE	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 29 m	North Atlantic	ASEU05
Merchant	Atlantic Compass	SKUN	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 25 m	North Atlantic	ASDE01
Research	Meteor	DBBH	Iridium	GPS/Vaisala RS92	container (semi automatic)	ca. 6 m	Worldwide	ASDE02
Merchant	Atlantic Concert	SKOZ	Iridium	GPS/Vaisala RS92	deck launcher (portable)	ca. 25 m	North Atlantic	ASDE03
Merchant	Dublin Express	DDSB2	Iridium	GPS/Vaisala RS92	deck launcher (fixed)	ca. 22 m	North Atlantic	ASDE04
Merchant	Mississauga Express	ZCBP6	Iridium	GPS/Vaisala RS92	container (semi-automatic) & deck launcher (portable)	ca. 22 m	North Atlantic	ASGB01
Merchant	Fort Saint Louis	FQFL	Inmarsat C	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR1
Merchant	Fort Saint Pierre	FQFM	Inmarsat C	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR2
Merchant	Fort Saint Georges	FQWZ	Inmarsat C	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR3
Merchant	Fort Ste Marie	FQXJ	Inmarsat C	GPS 3D Modem M2K2 DC	Deck Launcher (fixed)	27 m	Atlantic	ASFR4
Merchant	Naja Arctica	OXVH2	Iridium	Loran/Vaisala RS92-KL GPS/VaisalaRS92-	Container (semi automatic)	18	North Atlantic	ASDK01

				SGPW				
Merchant	Mary Arctica	OXGN2	Iridium	Loran/Vaisala RS92-KL GPS/VaisalaRS92-SGPW	Built-in launcher (semi automatic)	15	North Atlantic	ASDK02
Merchant	Nuka Arctica	OXYH2	Iridium	GPS/GRAW DFM-06	Container (semi automatic)	18	North Atlantic	ASDK3
Supply	Esperanza del Mar	EBUQ	Iridium	GPS/Vaisala RS92	container (semi automatic)	12	Canary Islands, off Mauritania	ASES01

(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