

## ASAP Report for 2007

(EUMETNET)

## a. Catalogue of ASAP vessels in 2007 (see Appendix 3):

**b. Major challenges and difficulties:**

Major technical problems are damages on the electronic equipment due to permanent vibrations of the ship and unfavorable launching conditions when sailing at 15-20 knots (turbulences etc.)

The average terminal sounding height is calculated as median average instead of mean average. The reason shall be demonstrated by following example: Consider 11 launches out of which 10 reach 30 hPa burst height and one reaches 900 hPa due to adverse launch conditions. The mean average is composed of  $(10 \times 30 + 900)/11 = 109$  hPa while the median average of 30 hPa reflects the statistic in a more representative way

Five in ten vessels under E-ASAP management do not call in base ports of the E-ASAP management in Germany. Maintenance is hampered by the fact that no PMO is available for routine maintenance in 'remote' base ports.

The high loss rate of some units is due to changes in the satellite communication. The implementation of a new satellite transmission technique (direct e-mail instead of SAC 41) coincided with a loss of power of the aged transceivers on board. This led to undefinable transmission problems which were finally solved by installing new transceivers.

**c. Other comments:**

The E-ASAP fleet also includes some units which are not managed by E-ASAP but by the relevant NMS (France, Denmark, Spain, Iceland). All national units followed the E-ASAP generic naming convention by Dec 2007 (i. e. ASFR1, ASFR2, ASDK01, ASDK02, ASES01, ASIS01).

Char 1,2: 'AS', fixed (i. e. 'Aerology' and 'Ship')

Char 3,4: ISO 3166-1-alpha-2 country code ('EU' for EUMETNET)

Char 5,6: sequential number

d. ASAP Performance						
Ship Callsign	Station name	Total number of sondes launched	Number of succesful soundings <sup>(1)</sup>	Average terminal sounding height (km) <sup>(2)</sup>	Balloon size (gm)	Percentage on GTS <sup>(3)</sup>
KRPD	ASEU01	450	275	26	350	61
WPKD	ASEU02	370	220	25	350	59
ZCBE7	ASEU03	301	201	26	350	67
ZCBF3	ASEU04	213	179	20	350	84
V2BD9	ASEU05	359	313	20	350	87
SKUN	ASDE01	352	301	30	200	86
DBBH	ASDE02	237	225	45	200	95
WAAH	ASDE03	450	307	30	200	68
ELML7	ASDE04	476	389	39	200	82
ZCBP6	ASGB01	297	219	29	350	74

<sup>(1)</sup> Due to transmission errors the number of successful soundings is higher than the number of transmissions.

<sup>(2)</sup> The average terminal sounding height is taken from part D (or C, if D is missing) of the TEMP. All balloons are designed to achieve at least 100 hPa. Balloons which do not reach 100 hPa are not representative (low battery, poor telemetry, failing transmission of parts C and D, rough handling, adverse weather conditions, etc.). Therefore, these launches are not taken into account to be compared with the balloon size.

<sup>(3)</sup> **Percentage on the GTS** is the ratio of reports received against reports transmitted, and is based upon reports received at a data centre or GTS insertion point (name) .

Appendix 3. Catalogue of ships participating in ASAP in 2006.

EUMETNET

10 ASAP units operated during the year on 10 ships

Type of ship (1)	Ship name	Call sign	Comms method (2)	Windfind method / sonde type (3)	Launch method (4)	Launch height (5)	Area of operation (6)	ASAP unit ID No.
Merchant	Sealand Performance	KRPD	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic	ASEU01
Merchant	Sealand Achiever	WPKD	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic	ASEU02
Merchant	Endurance	ZCBE7	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU03
Merchant	Power	ZCBF3	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic/ Western Med.	ASEU04
Merchant	Melfi Italia II	V2BD9	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 15 m	North Atlantic	ASEU05
Merchant	Atlantic Compass	SKUN	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic	ASDE01
Research	FS Meteor	DBBH	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	6 m	Worldwide	ASDE02
Merchant	Sealand Motivator	WAAH	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 22 m	North Atlantic	ASDE03
Merchant	Hornbay	ELML7	Inmarsat C	GPS/Vaisala RS92-SGP	container (semi automatic)	ca. 15 m	North Atlantic	ASDE04
Merchant	Mississauga Express	ZCBP6	Inmarsat C	GPS/Vaisala RS92-SGP	Container (semi-automatic) or deck launcher (portable)	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