CGMS-XXVIII
WMO WP-13
Prepared by WMO
Agenda item: F.2

ASAP STATUS REPORT

(Submitted by the WMO)

Summary and purpose of document

The purpose of this document is to inform CGMS Members of the current status of the ASAP Programme.

ACTION PROPOSED

CGMS Members are invited to note the report.

DISCUSSION

The Automated Shipboard Aerological Programme

1. The number of radiosoundings taken in the frame of the Automated Shipboard Aerological Programme (ASAP) has averaged around 5400 soundings annually over the last 5 to 10 years. There are fairly large fluctuations from year to year, mainly through the influence of enhanced activities in specific observational programmes such as FASTEX. This programme was carried out in 1997 and led to a decrease in soundings in the following year. This decrease was more than compensated for in 1999 with a nearly 20% increase in number of soundings compared to 1998. This increase could largely be ascribed to special programmes carried out by the United States and Japan. But also the fact that the United Kingdom started a new unit in mid 1999 led to the increase. The total number of ASAP or similar shipboard sounding units operated in 1999 was 21; the operators are: Denmark (2 units), France (4 units), Germany (3 units), Japan (7 units), Russia (1 unit), Sweden-Iceland (1 unit), United Kingdom (2 units) and the United States (1 unit).

2. The operational statistics provided by the operators for 1999 and the previous years are summarised in Table 1 and Figure 1. This report consists of the individual national reports and monitoring reports provided by ECMWF and EUMETSAT.

3. The ASAP Panel (ASAPP), which formerly was called the ASAP Co-ordinating Committee (ACC), consists of a group of national operators along with ECMWF and EUMETSAT. It held its annual meeting, ACC-XI, in Norrköping, Sweden, 29 September-1 October 1999. The operators from six countries were represented: Denmark, France, Iceland, Sweden, United Kingdom and the United States. Both ECMWF and EUMETSAT participated in the meeting.

4. The total number of ASAP soundings in 1999 corresponds approximately to the number of soundings which could be performed annually by a little less than 8 ocean weather ships. Most of the soundings were taken in the northern Atlantic Ocean.

5. Under EUMETNET, which is a network grouping of 18 European national meteorological services, has been started a programme on ASAP, called E-ASAP. It will establish two ASAPs, one on a route within the Mediterranean, the other on a route between the English Channel and the Southeastern Seaboard of the United States. E-ASAP is jointly funded by the EUMETNET members, taking into account existing activities providing upper-air profile data from the oceans.

6. In order to expand the ASAP globally, the work programme of the ASAPP includes support and visits to selected countries in the Southern Hemisphere to encourage and assist implementation of ASAP in these data sparse ocean areas. Some progress in this area has been noted in 1999, in particular the identification of a suitable route passing both the Cape of Good Hope and Cape Horn, calling upon Australia, New Zealand, Brazil (May to December only) and ports in Western Europe. Such a project should be possible provided some sort of joint funding scheme can be established to cover running costs, and this should include both Southern Hemisphere and European countries (EUMETNET).

7. Both the French and German ASAP units continue to use the IDCS, as do several of the Japanese ship-based upper air sounding systems. The remainder use Inmarsat-C for data collection, despite the increased cost, as this is perceived to be both more reliable and more flexible for operators. The future may thus see an increasing trend to Inmarsat-C usage.

Table 1. Statistics on ASAP units operated during 1999

Operator	ASAP units	Number of soundings	Average terminal sounding height (gpkm)	Percentage of data on the GTS
Denmark	2	752	18.9	96%
France	4	1421	22.5	100%
Germany	3	1210	23.4	74%[1)]
Japan	7	1098	22.5	100%
Russia	1	138[2)]	[3)]	[3)]
Spain	1	[4)]		
Sweden-Iceland	1	174	22.1	66%
United Kingdom	2	151	25.2	100%
United States	1	752	17	98%
Total or average	**22**	**5696**	**21.1**	**90%**

1. Data only partially available

2. Based upon reports received at ECMWF as published in the monthly ECMWF report (only those also reaching 100 hPa)

3. Information not available as of April 2000

4. No activity reported

(KH/DMI, 3 April 2000)

	1994	1995	1996	1997	1998	1999	
Denmark	806	772	772	954	701	752	
France	1389	1336	1249	1383	1364	1421	
Germany	1925	2147	2061	1439	1139	1210	
Japan	530	630	707	747	956	1098	
Russia			109	84	209	138	
Spain	77	174	130	78	0	0	
Sweden-Iceland		35	259	331	265	174	
United Kingdom	287	110	145	53	0	151	
United States		366	277	418	167	752	
Total	5014	5570	5709	5487	4801	5696	
Change to previous year		11%	2%	-4%	-13%	19%