THE MSG PRE-OPERATIONAL PROGRAMME

Adopted at the 18th meeting of the EUMETSAT Council on 10 - 11 March 1992

The EUMETSAT Council,

RECALLING Council Resolution EUM/C/Res. XXXIX defining the EUMETSAT Council proposals to ESA's Council concerning the Long Term Plan,

NOTING with satisfaction the consideration of the MSG Programme in the ESA Long Term Plan, as defined in Resolution ESA/C-M/XCVII Res.2,

STRESSING the necessity to launch the first satellite of the MSG series before 1999:

- I INVITES the ESA Executive to prepare a programme proposal covering the pre-operational phase of the MSG programme, for approval through an Enabling Resolution by the ESA Council before the end of 1992,
- II AGREES, to facilitate this, to mandate the Director to negotiate with the ESA Executive, the programme content and a Cooperation Agreement according to the principles defined in the Appendix to this Resolution in order to present a programme proposal including a contribution to the ESA pre-operational programme for consideration at the 20th EUMETSAT Council Meeting.

PRINCIPLES FOR IMPLEMENTING

THE MSG PRE-OPERATIONAL PROGRAMME

- I The EUMETSAT Meteosat Second Generation Programme shall be implemented in two phases, a demonstration pre-operational programme (MSG/A) and an operational programme (MSG/B).
- II The Pre-operational Programme MSG/A will have following objectives:
 - a) Development, assembling, testing, launch and in-orbit commissioning of the prototype satellite of the MSG series (MSG-1),
 - b) Development, assembling and testing of the ground infrastructure required for MSG system operation,
 - c) Procurement of a second flight model MSG-2, to be ready for launch in the framework of the follow-on operational programme or as a back-up in case of an MSG-1 failure,
 - d) Operations of the new system as a demonstration and transition with the MOP and MTP Programmes.
- III The MSG/A Programme planning should be such as to enable the first flight model to be launched before 1999.
- IV The MSG/A Programme will be developed jointly by EUMETSAT and ESA, with the following responsibilities:
 - a) An ESA Programme (MSG/A/ESA) for the development, launch and commissioning of MSG-1, plus a set of spare parts,
 - b) A EUMETSAT Programme (MSG/A/EUM) covering development of the Ground System, provision of a launcher for MSG-1, manufacturing MSG-2 and system demonstration operations.

Both programmes will cover the period 1993-2002; the provisional estimation of expenditure amounts to 372 MECU for the ESA Programme and 264 MECU for the EUMETSAT Programme.

V The EUMETSAT Council is prepared to

- a) consider making a fixed financial contribution to the ESA Programme with an amount currently estimated at 90 MECU, the final amount being determined after a mutual agreement on the system specifications has been reached; such contribution to be considered in the expectation that property rights in the satellite after commissioning will be vested in EUMETSAT,
- b) consider starting this contribution as from 1993 in order to ensure a first launch before 1999.
- VI The Cooperation Agreement to be established between EUMETSAT and ESA for MSG/A implementation shall ensure an appropriate EUMETSAT participation in the relevant ESA bodies.

THE PROPOSED ESA POEM-1 FLIGHT OPPORTUNITY

Adopted at the 18th meeting of the EUMETSAT Council on 10 - 11 March 1992

The EUMETSAT Council,

EXPRESSING satisfaction with the strong support for Earth Observation within the ESA Long Term Plan given by the ESA Council meeting at Ministerial level on 18 - 20 November 1991 in Munich,

NOTING Resolution ESA/C-M/XCVII Res. 2 (Final) adopted on 20 November 1991 by the ESA Council at Ministerial level, particularly:

- Article III.1 which approves the execution of the POEM-1 programme in two phases,
- Article III.2 which notes that a primary objective of POEM-1 is to provide a demonstration flight opportunity for a polar meteorological payload package provided by EUMETSAT,
- Article IV concerned with a future preparatory programme for follow-on missions,

NOTING the ESA Declaration on the POEM-1 programme expressed in ESA/PB-EO/XXVII/DEC1 drawn up on 27.02.92.

WELCOMING the offer to provide a flight opportunity for the operational meteorological instruments on POEM-1,

NOTING that EUMETSAT is requested to confirm its acceptance of this offer by 20 May 1992,

BEING AWARE that the final payload and configuration of POEM-1 remain open until the decision is taken on phase 2 at the end of 1992,

NOTING that an agreement is yet to be finalised with NOAA on the NOAA provided instruments on the ESA platform and the EUMETSAT provided instruments on the NOAA and NASA satellites.

NOTING that certain technical evolutions are still to be expected which may influence the final ESA decision regarding phase 2,

NOTING that ESA has not yet taken a final position on any of the EUMETSAT technical requirements including the confirmation of the flight of the IASI instrument and concerning vital operational aspects such as orbit and instrument duty cycles,

STRESSING that EUMETSAT's final decision can only be taken when these issues are decided, since they will affect the ultimate design, cost and usefulness of the EUMETSAT provided instruments,

RECALLING the request of the EUMETSAT Council, in Resolution XXXIX adopted on 30 October 1991, that ESA develop a prototype of Meteosat Second Generation as well as a prototype of a polar satellite system meeting EUMETSAT requirements,

BEING AWARE that the mix of operational and experimental instruments on POEM-1 leads to concerns about its viability as a long term solution for operational activities,

STRESSING again the absolute need for continuous provision of data for operational meteorology,

RECALLING the necessity to give consideration to the requirements of long term operational climate monitoring,

CONSIDERING that a METOP class of medium-sized satellite platforms could be defined which would be capable of carrying operational meteorological instruments as well as a suite of other instruments dedicated to operational climate monitoring,

WELCOMING ESA's consideration of a METOP variant of the POEM-1 platform concept, dedicated to operational payloads in polar orbit, which could be more consistent with EUMETSAT's operational and continuity requirements and which could be regarded as an operational prototype, for flight either subsequently to POEM-1 or in parallel with a version of POEM-1,

NOTING that because of EUMETSAT's requirements regarding operational viability and data continuity, it is believed that the necessary unanimous vote on a final agreement with ESA could only be achieved if ESA confirms its intention to work with EUMETSAT to develop a satellite of the METOP class as a prototype for a series of operational satellites,

AGREES:

I to respond favourably to the recent ESA statements at its Council Meeting at Ministerial level with regard to future cooperation with EUMETSAT on the development of polar orbiting satellite systems,

- to confirm EUMETSAT's intention to supply, in support of POEM-1 and at no cost to ESA, the operational meteorological instruments, the associated communications package and the related Ground Segment for processing, disseminating and archiving the data; on the understanding that there shall be an ESA Preparatory Programme to provide flight continuity beyond POEM-1 and that this will lead to the development by ESA, with a EUMETSAT financial contribution, of a prototype satellite of the METOP class,
- III to request the Director to negotiate with ESA a Cooperation Agreement under the guidelines set out in II above,
- IV to request the Director to propose urgent preparatory activities starting in 1993, for a EUMETSAT programme in polar orbit, including the continuation of the development of instruments and the preparatory activities needed for the associated ground segment,
- V to request the Director to undertake urgent negotiations with NOAA with regard to the timely delivery of the US funded instruments, and with the appropriate authorities with regard to the early flight of IASI.
- VI to review progress in all these matters before the end of 1992, with the intention of making a decision for a programme starting in 1993, taking into account possible changes to POEM-1 and the definition of the ESA POEM-1 follow-on Preparatory Programme.

STATEMENT BY FRANCE REGARDING EUM/C/92/RES. II

(Original: French)

La délégation française indique qu'elle vote contre, bien que la Résolution soit acceptable pour elle à l'exception uniquement du paragraphe AGREE II. Elle donne l'explication suivante de son vote:

La délégation française n'envisagera pas de contribuer à un programme d'EUMETSAT destiné à faire voler des instruments opérationnels dans le cadre d'un programme de l'ASE tant que celui-ci n'inclurera pas la réalisation du satellite prototype d'une série opérationnelle dont EUMETSAT pourrait assurer la continuité.

La délégation française demande que son explication de vote soit communiquée à l'ASE en même temps que la Résolution du Conseil, de manière à éviter un malentendu sur la signification de son vote.

TRANSLATION

The French delegation cannot support this Resolution and votes against it although it is acceptable for France with the exception of AGREE II.

The French delegation explains its vote as follows:

The French delegation shall not consider a commitment to a EUMETSAT Programme providing operational instruments to an ESA Programme as long as this programme does not include the implementation of the prototype of an operational series the continuity of which could be ensured by EUMETSAT.

The French delegation wants to have this explanation of vote sent to ESA together with the Council Resolution in order to avoid any misunderstanding which could arise from the significance of its vote.

EUMETSAT'S LONG-TERM MANAGEMENT POLICY

Adopted at the 18th meeting of the EUMETSAT Council on 10 - 11 March 1992

The EUMETSAT Member States,

HAVING REGARD to the EUMETSAT Convention which states that the primary objective of EUMETSAT is to establish, maintain and exploit European systems of operational meteorological satellites,

BEARING IN MIND the Council's decisions to ensure a continuous operational service after the end of the Meteosat Operational Programme in 1995 with regard to geostationary satellites (Meteosat Transition Programme, Meteosat Second Generation),

BEARING IN MIND the Council's decisions to consider a EUMETSAT Polar System,

NOTING the Council's decision for EUMETSAT to develop a ground segment and to take over operations of the MOP and MTP satellites from December 1995,

NOTING the general consensus in the 15th EUMETSAT Council Meeting on EUMETSAT taking responsibility for the continuity of the space segment and management of the ground segment of future programmes,

NOTING the available expertise, in Europe, in space agencies as well as in the meteorological services and in the private sector,

RECALLING the role of the European Space Agency in developing space technology,

EMPHASISING the need to set-up clear guidelines for EUMETSAT's future management in order to ensure the future of EUMETSAT on a coherent, clear and cost-effective basis,

AGREE:

- I that the requirements for the Space Segment of new satellite systems such as MSG and EPS shall be defined by the EUMETSAT Council,
- II that ESA shall be requested to develop a prototype under an ESA development programme and to prove in orbit its operational qualification in accordance with EUMETSAT's requirements,

- **III** that EUMETSAT may contribute to the ESA development programme with a fixed contribution,
- IV that EUMETSAT shall take overall responsibility for the space segment after the in-orbit commissioning of a prototype,
- V to define EUMETSAT's requirements for a Ground Segment,
- VI to establish a Ground Segment under EUMETSAT responsibility and to decide on its architecture and location, taking into account technical, management, cost and other relevant factors.
- VII that the Secretariat shall act as the single Design Authority for the Ground Segment and shall exercise managerial control to be defined on a case by case basis of European funded facilities,
- **VIII** to base in general all procurement actions on open tender in accordance with the EUMETSAT rules.

THE ESA LONG TERM PLAN

Adopted at the 20th meeting of the EUMETSAT Council on 22 - 23 September 1992

The EUMETSAT Council,

CONSIDERING EUMETSAT's fundamental requirement to achieve continuity of observation from geostationary orbit whilst improving the performance of the current Meteosat system,

BEING AWARE of the necessity of a long term commitment to contribute to the polar system by providing observations from the morning orbit,

RECALLING Resolution EUM/C/Res. XXXIX concerning the ESA Long Term Plan submitted to the Chairman of the ESA Council at Ministerial level in November 1991.

RECALLING Resolutions EUM/C/Res/92/I and II adopted in March 1992 relating to the geostationary and polar systems respectively,

NOTING the complementary objectives of ESA and EUMETSAT concerning the development of space programmes and their operational exploitation,

BEING AWARE of the importance of the ESA Council at Ministerial level in Granada on 9 and 10th November 1992 for European Space Policy on Earth Observation,

BEING INFORMED of the proposals prepared by the ESA Director General for this Council meeting and subject to the satisfactory outcome of discussions on the financial contributions to be made by EUMETSAT and ESA members:

CONCERNING OBSERVATIONS FROM GEOSTATIONARY ORBIT

- I Welcomes the progress accomplished by ESA in cooperation with EUMETSAT in developing the MSG Programme Proposal which meets the basic requirements of the EUMETSAT Member States for observations from a geostationary orbit,
- II Confirms its intention to cooperate with ESA and to make a fixed financial contribution to the development of MSG on the basis of jointly agreed mission specifications and legal framework,

- III Confirms its intention to develop a compatible Ground Segment and make provision for launch of the prototype,
- IV Expresses its wish that the ESA Council at Ministerial level adopts an Enabling Resolution to start an MSG development programme in due time to launch the first flight model in 1999, or at the latest, 2000.
- V Confirms its intention to implement an MSG operational programme based upon the experience gained during these development programmes,

CONCERNING OBSERVATIONS FROM POLAR ORBIT

- VI Recalls that in order to meet the requirements of the EUMETSAT Member States, the polar platform developed by ESA shall be the prototype of an operational series,
- **VII** Welcomes the proposal of the ESA Director General which foresees the development of a pre-operational METOP Programme intended to meet EUMETSAT requirements in polar orbit,
- VIII Invites the ESA Council at Ministerial level to adopt an Enabling Resolution to this effect and to complete the definition of the METOP Mission in cooperation with EUMETSAT, taking particularly into account the recurrent cost constraints,
- IX Plans to provide a contribution to ESA for such a Programme, the detailed specifications of which shall be established in common agreement between ESA and EUMETSAT, leading to the launch of the first flight model in 2000.

POLICY FOR EUMETSAT GROUND SYSTEMS AND THE IMPLEMENTATION OF THE MTP GROUND SYSTEM

Adopted at the 21st meeting of the EUMETSAT Council on 23 - 25 November 1992

The EUMETSAT Council,

WISHING to establish a longterm policy regarding EUMETSAT ground systems,

BEARING IN MIND that future EUMETSAT programmes are expected to greatly enlarge the scope of the processing of data and products which will encompass many different disciplines,

NOTING that a distributed configuration taking advantage of national specialized activities and centres of excellence is appropriate to such an enlarged scope,

NOTING also that the development of European expertise rests on the harmonious relationship between intergovernmental and national entities,

BEING AWARE of the importance of establishing a central facility with sufficient technical and scientific expertise to manage and control the total system effectively,

CONSIDERING that a centralized system has produced excellent results in specialized areas and that this positive experience should be transferred to the greatest extent possible to a new system,

NOTING that nevertheless, a fully centralized system may be limited as regards growth potential,

STRESSING the need for reliable and cost-efficient solutions,

CONSIDERING that implementation decisions regarding the Meteosat Transition Programme are now urgently required,

AGREES:

A: Concerning Policy Issues

- I That the EUMETSAT Council establishes, as a policy for future EUMETSAT ground systems, the concept of a networked configuration comprising both distributed elements and a central facility having well defined key objectives,
- II That the central facility shall be established in the EUMETSAT headquarters and shall perform centralized control and management tasks to achieve control

- over the availability of agreed upon key products as well as those mature processing tasks which are not strongly dependent upon user interaction,
- That the distributed network elements shall include Satellite Application Facilities which shall be responsible for necessary research, development and operational activities not carried out by the central facility. Such Satellite Application Facilities shall be located within National Meteorological Services of EUMETSAT Member States or other agreed entities linked to a user community. Each Satellite Application Facility shall be established under a EUMETSAT contract which preserves EUMETSAT control and responsibility. Scientists from all Member States shall be able to participate in such EUMETSAT funded Satellite Application Facilities.
- IV That the resulting products, intellectual property and proprietary technical data, including all algorithms and software, shall belong to EUMETSAT and be available to all Member States.
- **B:** Concerning EUMETSAT Future Programmes (MSG and EPS)
- V AGREES to implement the agreed policy as soon as possible in preparation for operations under future programmes.
- **VI REQUESTS** the Director to prepare a proposal for a unified Ground Segment programme based on the agreed policy,
- **C:** Concerning the Meteosat Transition Programme (MTP)

AGREES:

- VII That the Mission Control Centre (Core Facility, User Station Display Facility) shall be established at the EUMETSAT Headquarters in Darmstadt,
- VIII That the Primary Ground Station shall be established in Fucino, Italy,
- IX That the Meteorological Product Extraction Facility (MPEF) for production of Cloud Track Winds and other existing products shall be established within the EUMETSAT Headquarters,
- X That the Meteorological Archive and Retrieval Facility (MARF) may be located either within the EUMETSAT Headquarters or within the Primary Ground Station.

THE METEOSAT SECOND GENERATION PROGRAMME

Presented for Adoption at the 21st Meeting of the EUMETSAT Council on 23 - 25 November 1992

Adopted at the 25th Meeting of the EUMETSAT Council on 22 – 24 June 1994

The EUMETSAT Member States

HAVING REGARD to the EUMETSAT Convention which states that the primary objective of EUMETSAT is to establish, maintain and exploit European systems of operational meteorological satellites,

CONSIDERING that the activities under the Meteosat Operational Programme (MOP) as extended under the Meteosat Transition Programme (MTP) will end in December 2000,

NOTING the EUMETSAT Resolution on Policy for EUMETSAT Ground Systems and the Implementation of the MTP Ground System adopted at the 21st Council Meeting,

WELCOMING the Resolution by the ESA Council at Ministerial level held in Granada concerning the Meteosat Second Generation Programme,

REQUIRING to ensure a continuous operational service to provide data from geostationary satellites over Europe and Africa and adjacent ocean areas,

RECOGNISING the benefits to the operational service that can be derived from advances in technology,

BEARING IN MIND the urgency of the development schedules of the space and ground segments to enable continuation of operations beyond the Meteosat Transition Programme,

HAVING REGARD to Art. 17.3 of the EUMETSAT Convention,

AGREE:

- I to establish a Meteosat Second Generation Programme (MSG) commencing in 1993, with a first launch at the latest in the year 2000 and with operations expected to last until 2012,
- II that the Meteosat Second Generation Programme shall be undertaken in parallel with a corresponding ESA programme and shall include:

- a) participation to the detailed definition, development and demonstration of the MSG prototype satellite MSG-1, including associated equipment spares, by means of a fixed financial contribution of 162 MECU at 1992 economic conditions to the ESA MSG Programme,
- b) procurement of the launcher for the MSG prototype satellite,
- c) the detailed definition of the ground segment and associated products,
- d) the development, procurement and test of the ground segment for the operations of the MSG system,
- e) system commissioning following the launch of the prototype satellite,
- f) procurement of two recurring flight models, MSG-2 and MSG-3, and their launch, ensuring availability of equipment spares,
- g) system operations beginning not later than 2001 and lasting for 12 years;

III that the Programme will be implemented in two slices:

- a) the first slice, or MSG Demonstration Slice (MSG-D), includes the fixed financial contribution to the ESA prototype development programme, the procurement of a launcher for the prototype, the definition, development and procurement of the Ground Segment and system commissioning [items a) to e) under II],
- b) the second slice, or MSG Operational Slice (MSG-O), includes the procurement and launch of two further satellites and system operations, until 2012 [items f) and g) under II];
- IV that the overall programme ceiling amounts to 1035 MECU at 1992 economic conditions, with an indicative payment profile as shown in the Annex to this Resolution;
- V to establish a cooperation agreement with ESA, to be agreed by Council, regarding the joint execution of the complementary programmes;
- VI to authorise the implementation of the Demonstration Slice as from 1993 within the financial envelope of 352 MECU at 1992 economic conditions;

- VII to consider the authorization of the Operational Slice not later than 1995 by a vote taken by two-thirds majority of the Member States present and voting, representing also at least two-thirds of the total amount of contributions;
- VIII to fund the Meteosat Second Generation Programme with a scale of contributions based on Gross National Product of the Member States;
- IX by a vote representing at least two-thirds of the Member States present and voting, representing also at least two-thirds of the total amount of contributions, to approve possible cost overruns of up to 10% of the overall programme ceiling and financial envelope in respectively IV and VI above;

DECIDE to amend the Annexes to the EUMETSAT Convention as necessary, before the end of April 1993.

	ESA	EUMETSAT		
Year		MSG/D	MSG/O	TOTAL
1993		8*		8*
1994	2	37*		37*
1995	8	49	9	58
1996	27	73	20	93
1997	51	87	22	109
1998	78	57	33	90
1999	77	31	41	72
2000	70	10	65	75
2001			72	72
2002			68	68
2003			74	74
2004			81	81
2005			66	66
2006			50	50
2007			22	22
2008			12	12
2009			12	12
2010			12	12
2011			12	12
2012			12	12
TOTAL	313	352	683	1,035

Table 1: Indicative Payment Profiles in MECU at 1992 economic conditions.

^{*} Including expenditure within the MSG Preparatory Programme in 1993 and 1994.

THE EXTENSION OF THE PREPARATORY PROGRAMME FOR MSG

Adopted at the 21st meeting of the EUMETSAT Council on 23 - 25 November 1992

The EUMETSAT Member States.

RECALLING Council Resolution EUM/C/Res. XXVIII concerning the definition of the Meteosat Second Generation Preparatory Programme and Resolution EUM/C/Res. XLI concerning its Extension in 1992,

NOTING that the 21st Council Meeting could not achieve the unanimity required for the adoption of the full MSG Programme,

RECOGNISING the necessity to continue the definition activities of the MSG system until a final decision has been taken on the Programme,

AGREE:

- I To extend the Meteosat Second Generation Preparatory Programme until 1994,
- that the financial envelope of this extension shall be limited to 1.640 MECU at 1991 economic conditions (1.805 MECU at 1993 economic conditions) in Commitment Appropriations, in order to perform the activities normally scheduled for the corresponding period in the full MSG Programme,
- **III** to amend Annexes I and II of the Convention as follows:
 - * Annex I, Chapter D:
 - Para 1, replace alinea 2 by:"This Phase is foreseen for 4 years, starting from 1.1.1991."
 - Para 1, alinea 3, replace "1991/1992" by "1991/1992/1993/1994".
 - * Annex II, Chapter D:
 - Replace by:

"The budgetary envelope for the MSG/PP Programme is fixed at 4.2 MECU at 1991 economic conditions for the financial years 1991, 1992, 1993 and 1994 with a scale of contribution based on the GNP of the Member States."

THE EUMETSAT POLAR SYSTEM PREPARATORY PROGRAMME

Presented for adoption at the 21st Meeting of the EUMETSAT Council on 23 - 25 November 1992

Adopted at the 25th Meeting of the EUMETSAT Council on 22 - 24 June 1994

The EUMETSAT Member States,

HAVING REGARD to the EUMETSAT Convention which states that the primary objective of EUMETSAT is to establish, maintain and exploit European systems of operational meteorological satellites,

RECALLING the EUMETSAT Council Resolutions to establish a European polar system,

WELCOMING the Resolution by the ESA Council at Ministerial level held in Granada concerning the METOP mission,

BEARING IN MIND that polar satellites in both morning and afternoon orbits are essential for operational meteorology and that the morning orbit is of particular importance for Europe for geographical reasons,

RECOGNISING the importance of METOP for climate monitoring as well as for meteorological observations,

CONSIDERING that the USA freely provided meteorological data from the polar orbit to the rest of the world for more than 30 years,

NOTING with appreciation that the USA will provide operational meteorological observations from the morning polar orbit until the year 2000,

STRESSING the need to conclude negotiations with ESA on the provision of a prototype satellite of an operational series, for early missions compatible with EUMETSAT operational requirements,

RECOGNISING the benefit of performing the EPS Preparatory Programme for optimisation of the technical specifications leading to a more cost effective and affordable full EPS Programme.

IN CONFORMITY WITH Article 17.3 of the EUMETSAT Convention,

AGREE:

- I To establish a Preparatory Programme for a EUMETSAT Polar System commencing in the first quarter of 1993 and lasting until the start of the full EPS Programme expected to be not later than 1996,
- II That the Preparatory Programme shall include:
 - detailed definition of the mission compliant with EUMETSAT requirements and cost constraints,
 - development and refinement of detailed specifications of payload elements for the Space Segment,
 - conduct of feasibility studies and detailed specification studies for the Ground Segment,
 - the necessary programme management and technical resources for the Space and Ground Segments,
 - the establishment of cooperation agreements with ESA and NOAA, to be agreed by Council, regarding the joint execution of the complementary programmes,
 - activities enabling the possible provision of a Microwave Humidity Sounder to NOAA for NOAA-N,
- III That the financial envelope of the Preparatory Programme shall amount to 30 MECU at 1993 economic conditions, with an indicative payment profile of 3.2 MECU in 1993, 13.2 MECU in 1994 and 13.6 MECU in 1995.
- IV To consider no later than December 1994 the implementation of a full EPS Programme to ensure continuity of industrial activities to meet project schedules and maintain maximum economy.
- V To fund the Preparatory Programme on a scale of contributions based on the Gross National Product of the Member States.
- **VI** To amend the Annexes to the EUMETSAT Convention as follows:

ANNEX I of the Convention will be completed by a new chapter "F".

F - PREPARATORY PROGRAMME FOR A EUMETSAT POLAR SYSTEM

The EPS Preparatory Programme covers initial Space Segment Payload and Ground Segment activities related to the development of a series of satellites to provide continuous meteorological observations from morning Polar Orbit.

The activities are broken down into three separate areas:

i) Mission

Detailed definition of the mission and payload, including climate monitoring objectives, in cooperation with ESA and NOAA leading to the establishment of cooperation agreements with both organisations.

ii) Space Segment Payload

Covering the development and refinement of the specifications of the Meteorological Communication Package and start of critical development activities for the Microwave Humidity Sounder.

iii) Ground Segment

Covering the conduct of feasibility studies and subsequently the establishment of detailed specifications of the Ground Segment.

ANNEX II of the Convention will be completed with a new chapter "F".

F - EUMETSAT POLAR SYSTEM PREPARATORY PROGRAMME (EPS/PP) Overall Envelope and Scale of Contributions:

The budgetary envelope for the EPS/PP is estimated at 30 MECU at 1993 economic conditions with a scale of contributions based on Gross National Product:

MEMBER STATES	SCALE (%)	
Germany	22.76	
France	18.03	
Italy	15.33	
United Kingdom	14.63	
Spain	5.99	
Netherlands	4.33	
Switzerland	3.63	
Sweden	3.30	
Belgium	2.87	
Denmark	1.98	
Finland	1.83	
Norway	1.68	
Turkey	1.39	
Greece	0.96	
Portugal	0.74	
Ireland	0.55	
TOTAL	100.00	

The basis for the calculation of the contribution is the Gross National Product statistics issued by the OECD. The current scale of contributions is based on the reference period 1986-1988 applicable for the period 1991-1993. The scale will be updated in triennial intervals, starting 1 January 1994.