

RESOLUTION ON
COMPONENT PROCUREMENT FOR
THE METEOSAT TRANSITION PROGRAMME (MTP)

Adopted at the 12th meeting of the EUMETSAT Council
on 31 May - 1 June 1990

The EUMETSAT Member States,

RECALLING the primary objectives of the Organisation to establish, maintain and exploit European systems of operational meteorological satellites,

CONSIDERING the end of the Meteosat Operational Programme in November 1995,

WISHING to ensure a continuous operational service as regards data from geostationary satellites,

BEARING IN MIND the urgency to ensure availability of electronic components for the space segment of MTP,

AGREE:

- I** on component procurement as from 1 July 1990 in order to safeguard the implementation of a later Meteosat Transition Programme,
- II** the measures to be taken for component procurement are defined in the document EUM/C/90/4,
- III** the maximum cost for the component procurement relating to one satellite amounts to 14.5 MECU,
- IV** for 1990 the expenditure shall be limited to 3 MECU. This amount shall be pre-financed from the surplus 1989 of MOP. It shall be refunded to MOP in 1991 within the MTP budget to be agreed,
- V** the Scale of Contributions of a new Meteosat Transition Programme remains open until a decision is taken,
- VI** this decision on component procurement does not prejudice a decision on the new Meteosat Transition Programme.

RESOLUTION ON
THE TECHNICAL OPTION TO BE CHOSEN FOR
METEOSAT SECOND GENERATION

Adopted at the 12th meeting of the EUMETSAT Council
on 31 May - 1 June 1990

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 that for the accomplishment of this objective in geostationary orbit, a second generation of Meteosat satellites should be available as soon as possible after expiration of the Meteosat Operational Programme (MOP),

NOTING the output of the feasibility studies for the spinning concept, which presents the minimum cost and development risk, whilst potentially able to provide a significant improvement in mission performance,

NOTING that a Programme Proposal for Meteosat Second Generation starting in 1991 shall be submitted to the 13th Council Meeting,

AGREE that the technical content of this programme would consist of a series of **spin-stabilised satellites**, the main characteristics of which are described in the Attachment to this Resolution.

TECHNICAL CONTENT OF THE MSG SPACE SEGMENT PROGRAMME

The Meteosat Second Generation Programme would consist of a series of **spin-stabilised satellites**,

The core payload to be studied during Phase A will comprise a visible and infra-red imaging capability with a high resolution visible channel, and include a capability for improved wind measurement accuracy and monitoring of atmospheric instability,

The platform would have a growth potential for additional scientific or pre-operational instruments, which would not be design drivers for the telecommunications payload, nor cost drivers for the entire system.

RESOLUTION

CONCERNING THE USE OF THE ESA POLAR PLATFORM

**Adopted at the 12th meeting of the EUMETSAT Council
on 31 May - 1 June 1990**

The EUMETSAT Member States,

HAVING REGARD for the EUMETSAT requirement for operational meteorological data in the morning polar orbit, which are of particular value to European meteorological services,

BEING AWARE that from about 1997 the USA will concentrate on provision of data from the afternoon polar orbit, which are of particular value to the Americas,

NOTING the ESA Programme Proposal for a first Polar Platform,

TAKING INTO ACCOUNT the published ESA Strategy for earth observation,

WELCOMING the offer by ESA to provide a flight opportunity for operational instruments on the first ESA Polar Platform,

HAVING REGARD to the EUMETSAT requirements for long term data continuity which are not met by the single ESA platform,

NOTING that the complexity of the large ESA Polar Platform could cause economic constraints on the possibility of reflight following a potential premature failure of the meteorological operational payload,

NOTING the recommendation by the EUMETSAT Scientific and Technical Group at its 11th meeting on 20 - 22 March 1990,

AGREE:

- I** to instruct EUMETSAT urgently to negotiate with ESA with the aim of reaching a satisfactory solution to EUMETSAT's requirements before the end of September 1990,
- II** that the Director be instructed to inform ESA that use of the Polar Platform will be considered by EUMETSAT if EUMETSAT's operational requirements can be met,

- III** that the essential requirements of EUMETSAT are:
- i. continuity and reliability of the operational observations,
 - ii. compatibility in payload, data and reliability with the NOAA operational missions,
 - iii. appropriate priority for the operational payload in technical and programme aspects,
- IV** that EUMETSAT has a strong need for the inclusion in the operational payload of an advanced infra-red sounder,
- V** that the desired strategy to meet EUMETSAT requirements for data continuity would be for ESA to take a binding commitment to prepare, with the cooperation of EUMETSAT, a series of Polar Platforms on which the operational payload could be carried at suitable intervals,
- VI** that a satellite concept suited to EUMETSAT needs would be such that it could be adapted for use and affordable by EUMETSAT independently should ESA not be able to proceed beyond the first platform,
- VII** that, in order to achieve EUMETSAT's requirements, ESA should consider combining the operational meteorological payload with the emerging operational requirements for monitoring other components of the climate system on missions which are operational in character,
- VIII** that EUMETSAT shall continue to seek alternative means to achieve its requirements for observations from polar orbit.

RESOLUTION ON
AMENDMENTS TO THE EUMETSAT CONVENTION

**Adopted at the 12th meeting of the EUMETSAT Council
on 31 May - 1 June 1990**

The EUMETSAT Member States,

HAVING REGARD to the EUMETSAT Convention in force since 19 June 1986,

RECALLING that the EUMETSAT Convention, although allowing to exploit several satellite programmes, was originally conceived to manage the initial Meteosat Operational Programme,

NOTING that during the implementation of the Convention a number of deficiencies were identified,

CONSIDERING that EUMETSAT is currently preparing major investments into its future,

EMPHASISING that the envisaged Meteosat Transition Programme, Meteosat Second Generation and EUMETSAT Polar System are future programmes of high importance to the whole European Meteorological Community and should therefore be core programmes of EUMETSAT funded by all Member States,

REALISING the need for EUMETSAT to have an appropriate legal frame for an efficient management of its future programmes,

BEARING IN MIND the urgency to set up the new programmes without any delay,

AGREE:

I to consider a number of points in the EUMETSAT Convention for amendments:

- inclusion of core and optional programmes,
- voting procedures which should distinguish between the basic management of the Convention (voting procedures as in the current Convention) and the management of a programme (voting procedures linked to contributions),
- mechanism for determining the financial ceilings of programmes and reviewing them in special cases as necessary (e.g. excessive

expenditure),

- review of other aspects which have been found deficient and not adapted to requirements of EUMETSAT (e.g. management of several budgets and ownership of data),

II to invite the Secretariat to submit to the next Council through PAC a draft proposal for amendments to the Convention,

III to prepare new programmes and amendments of the Convention in parallel. The basic elements of amendments should be agreed by Council before the main programme proposals are adopted. Any amendments agreed would then undergo the formal procedure of acceptance by the Member States without delaying the setting up of new programmes, at the same time ensuring that the major elements of the amendments might become relevant already for the implementation of any new programme.

**RESOLUTION ON
THE METEOSAT TRANSITION PROGRAMME (MTP)**

**Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990**

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) will end in November 1995,

NEEDING to ensure a continuous operational service to provide data from geostationary satellites, and to fill the gap between MOP and MSG,

BEARING IN MIND the urgency of the development schedules of the space and ground segments to enable continuation of operations from December 1995,

AGREE:

- I** to establish a Meteosat Transition Programme in order to provide an operational service from the end of the Meteosat Operational Programme in November 1995 until December 2000,
- II** that the Meteosat Transition Programme shall include:
- the manufacture and launch of one new satellite with a scheduled launch date in the last quarter of 1995,
 - advance activities in order to ensure the possibility of a future decision to manufacture a second new satellite,
 - the development of a ground segment to take over operations of the MOP and MTP satellites from December 1995,
 - the necessary operations of the ground segment until December 2000,
 - the necessary programme management and technical resources for the space and ground segments,
 - technical protection of data according to the EUMETSAT data policy,

III that the programme will be implemented in two slices.

The first slice includes the manufacture of one new satellite, advance activities for a possible second satellite, definition of the ground segment and programme management.

The second slice includes the implementation of the ground segment, the satellite launch and the operation of space and ground segments for 5 years,

IV to authorise the implementation of the first slice of activities as from 1st January 1991, within the financial envelope of 110 MECU at 1989 economic conditions,

V to consider the authorisation of the second slice of activities after relevant results become available from the first slice, however, within an overall programme ceiling of 280 MECU at 1989 economic conditions,

VI to fund the Meteosat Transition Programme on a Scale of Contributions based on the Gross National Product of the Member States,

VII to amend Annexes I and II of the EUMETSAT Convention as defined in the attachment to this Resolution.

ANNEX I of the Convention will be amended as follows:

The current "System Description", as amended by EUM/C/Res. XVIII remains unchanged, but under a new Chapter "C" the activities associated with the MTP will be defined as follows:

C - METEOSAT TRANSITION PROGRAMME

1 INTRODUCTION

The Meteosat Transition Programme will ensure the continuation of the service provided by meteorological satellites in geostationary orbit after 30 November 1995, until 1 December 2000.

2 THE GROUND SEGMENT

A ground segment will be developed to take over operations of the MOP and MTP satellites in December 1995. The ground segment will be used to provide routine operations support until 1 December 2000.

3 SPACE SEGMENT

The MTP space segment consists of a single new satellite of the same design as the latest Meteosat satellite (MOP-3), with a launch date scheduled for late 1995. In addition, advance activities will be performed to ensure the possibility of a future decision to manufacture a second new satellite.

4 IMPLEMENTATION PLAN

That the programme will be implemented in two slices. The first slice includes the manufacture of one new satellite, advance activities for a possible second satellite, definition of the ground segment and programme management.

The second slice includes the implementation of the ground segment, the satellite launch and the operation of space and ground segments for 5 years.

The authorisation to proceed with the second slice of activities will take into account relevant results from the first slice.

ANNEX II of the Convention will be amended as follows:

The current Chapters A ("Funding of the Meteosat Operational Programme") and B ("Funding of the General Budget") remain unchanged, but a new Chapter "C" will be inserted with the following text:

C - FUNDING OF THE METEOSAT TRANSITION PROGRAMME,

1 FINANCIAL ENVELOPES

The first slice of activities defined in Annex 1, Chapter C ("Meteosat Transition Programme") will have a financial envelope of 110 MECU at 1989 economic conditions. The overall programme envelope (first + second slices) shall not exceed 280 MECU at 1989 economic conditions.

2 SCALE OF CONTRIBUTIONS

The Member States shall contribute to the Meteosat Transition Programme Budget in accordance with the following scale of contributions:

| 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 contributions 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 1991-93. The scale will be updated in tri-annual intervals, starting 1 January 1994.

**RESOLUTION ON
THE METEOSAT SECOND GENERATION PREPARATORY PROGRAMME
(MSG/PP), PHASE A**

**Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990**

The EUMETSAT Member States,

RECALLING the primary objectives of the Organisation, as defined in the EUMETSAT Convention, to establish, maintain and exploit European systems of operational meteorological satellites,

CONSIDERING that the programme of geostationary satellites (Meteosat Operational Programme) will expire in November 1995,

BEARING IN MIND the necessity to ensure the continuity of a meteorological coverage over Europe and Africa after that date, taking into account an advanced space technology,

NOTING with satisfaction the positive results of feasibility studies related to a system of advanced geostationary spin satellites, which have been completed under ESA responsibility,

RECALLING the Council Resolution EUM/C/Res. XXIII on the Council objectives for continuity of a meteorological mission in geostationary orbit,

IN CONFORMITY WITH Article 17.3 of the EUMETSAT Convention,

AGREE:

- I** To establish a Preparatory Programme for Meteosat Second Generation (MSG/PP), Phase A, for a period of one year as from the 1 January 1991,
- II** This MSG Preparatory Programme, Phase A, will correspond to the preparation of a meteorological observation geostationary spin satellite series, to be positioned at 0°N-0°E after 1998. The Programme contents and the provisional total programme cost are described in Doc. EUM/C/90/27,
- III** To fund this Preparatory Programme on the basis of the GNP scale of contributions of the Member States within a cost envelope of 4 MECU,
- IV** To later consider the extension of this Preparatory Programme to a Phase B for the MSG system definition in the light of the results of Phase A. At the end of Phase B the full Programme Proposal shall be decided,

V To amend as follows the Annexes to the EUMETSAT Convention:

ANNEX I of the Convention will be completed by a new chapter "D":

D PREPARATORY PROGRAMME FOR METEOSAT SECOND GENERATION: PHASE A

Phase A of the MSG Preparatory Programme corresponds to the definition of a geostationary satellite system to ensure operational continuity of the present Meteosat system.

This phase is foreseen for one year, starting from the 1 January 1991.

Phase A, in 1991, will study the feasibility of a spin satellite system embarking a visible and infra-red imaging radiometer (SEVIRI) in support of a multi-spectral high resolution imagery mission and of an atmospheric instability monitoring mission as well as complementary instruments which will neither become design drivers nor cost drivers for the system as described in the Annex to this Resolution.

The results of a System Concept Review, to be carried out at completion of Phase A, will allow Council to take a decision on the extension of this Programme to a Phase B.

Phase B, in 1992, will refine and review the concepts studied during Phase A and will lead to the final definition of the system and its architecture.

At the end of Phase B, a decision on the full Programme Proposal will be considered.

ANNEX II of the Convention shall be completed with a next section "D":

D MSG/PP OVERALL ENVELOPE AND SCALE OF CONTRIBUTIONS:

The budgetary envelope for the MSG/PP Programme is estimated at 4 MECU for the financial year 1991, with a scale of contribution based on GNP:

| 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 |

METEOSAT SECOND GENERATION REQUIREMENTS FOR PHASE A

1 SYSTEM DESCRIPTION

- 1 The MSG space segment will consist of a series of spin-stabilised satellites in geostationary orbit at 0 Degree N-0 Degree E and operable between the limits of ± 45 Degree longitude.
- 2 This system, based on two satellites in orbit simultaneously (one operational and one back-up) will be designed for a 12 year operation period after commissioning of the first flight model.
- 3 In accordance with EUM/C/Res. XXIII, all satellites will carry a core payload, consisting of the following sub-systems:
 - a) An imaging radiometer, referred to as SEVIRI (Spinning Enhanced Visible and Infra-Red Imager), in support of both basic and high resolution imagery missions as well as of air mass analysis.
 - b) Meteorological communication payload (MCP) for dissemination and relay of images as well as meteorological and environmental data and products.
- 4 A complementary payload, experimental or operational, which should not become a design driver for the system.
- 5 MSG Ground Segment will comprise the following functional elements:
 - a) satellite and mission control facilities,
 - b) image processing and dissemination facilities,
 - c) meteorological product extraction facilities,
 - d) a central archive.

2 PHASE A: CONTENT

Therefore, in 1991 phase A activities should concentrate on the definition of

- 1 a baseline SEVIRI with the set of channels which has been defined by SGATC and STG as meeting Council requirements stated in EUM/C/Res. XXIII,
- 2 a baseline MCP with raw data downlink and pre-processed data dissemination using the same frequency bands as MOP,
- 3 the complementary payload, after review of a call for ideas,
- 4 meteorological data and products to be disseminated,
- 5 ground segment architecture concepts,
- 6 the legal framework.

RESOLUTION ON
TECHNICAL PROTECTION OF EUMETSAT DATA
Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990

The EUMETSAT Member States,

RECALLING that the primary objective of EUMETSAT is to exploit European systems of meteorological satellites,

RECALLING the EUMETSAT Distribution and Charging Policy as defined by the EUMETSAT Council in EUM/C/Res. VII,

NOTING that any efficient distribution policy requires the possibility of control of access to the data,

NOTING that legal instruments alone cannot properly ensure a control of the EUMETSAT distribution policy,

REALISING that an efficient control of data can only be guaranteed by technical means,

NOTING the need to evaluate the cost of technical control,

AGREE:

- I** that access to EUMETSAT's satellite data shall be properly controlled through adequate technical means,
- II** to invite the Secretariat to submit as soon as possible a proposal and a time-schedule with regard to the implementation of the principle of technical control of access to digital image data in current and future programmes,
- III** to invite the Secretariat to prepare, with the STG, detailed schedules of meteorological data to be transmitted over the MDD mission within the framework of the system of MDD technical control now in preparation.

**RESOLUTION ON
STAFF REQUIREMENTS 1991**

**Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990**

The EUMETSAT Member States,

HAVING REGARD to the objectives of EUMETSAT as defined in its Convention, namely establishing, maintaining and exploiting European systems of meteorological satellites,

HAVING REGARD to the tasks of the Secretariat to implement the decisions taken by the Council and to execute the tasks assigned to EUMETSAT,

BEARING IN MIND the Council's decisions on the Meteosat Transition Programme, a Preparatory Programme for MSG, and preparatory activities for EPS,

BEARING IN MIND the need to make sufficient staff available for a proper execution of all EUMETSAT programmes and the preparation of the new programmes,

BEARING IN MIND that the Scientific and Technical Group fully endorsed the staff requirements for the new programmes as set out in Doc. EUM/C/90/31,

NOTING that the Policy Advisory Committee and the Administrative and Finance Group requested to set up a priority list for the 40 staff requested in Doc. EUM/C/90/31,

NOTING that the staff bid raises important issues for the future of EUMETSAT,

AGREE:

- I** to authorise an immediate increase in staff complement by twenty posts in 1991, advising the Director that the immediate priorities are:
 - adequate staff for programme management,
 - staff needed to prepare future ground systems,
 - essential support staff in the Administrative Department,
- II** to request the PAC to make a close examination of the longer term priorities and to recommend an overall policy, especially with respect to the space segment and relationship with ESA,
- III** to re-examine the question at the 14th meeting of Council.

RESOLUTION ON
MODALITIES FOR THE IMPLEMENTATION OF THE
METEOSAT TRANSITION PROGRAMME (MTP)

Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990

The EUMETSAT Member States,

HAVING REGARD to the Res. XXVII and the setting up of the Meteosat Transition Programme as from 1991,

BEARING IN MIND the difficulties incurred by some Member States to immediately meet the requirements of the agreed scale of contributions (GNP),

WISHING to secure the full funding of the MTP Programme as soon as possible,

AGREE that:

Finland and Ireland adapt to the GNP-scale over a period of three years in incremental steps of 1/3 starting from 1991.

**RESOLUTION ON
COMPONENT PROCUREMENT
FOR THE METEOSAT TRANSITION PROGRAMME (MTP)**

**Adopted at the 13th meeting of the EUMETSAT Council
on 27 - 29 November 1990**

The EUMETSAT Member States,

RECALLING the primary objectives of the Organisation to establish, maintain and exploit European systems of operational meteorological satellites,

CONSIDERING the end of the Meteosat Operational Programme in November 1995,

WISHING to ensure a continuous operational service as regards data from geostationary satellites,

BEARING IN MIND the urgency to ensure availability of electronic components for the space segment of MTP,

AGREE:

- I** on component procurement as from 1 July 1990 in order to safeguard the implementation of a later Meteosat Transition Programme,
- II** the measures to be taken for component procurement are defined in documents EUM/C/90/4 and EUM/C/90/33,
- III** the maximum cost for the component procurement amounts to 22.5 MECU,
- IV** for 1990 the expenditure shall be limited to 3 MECU. This amount shall be pre-financed from the surplus 1989 of MOP. It shall be refunded to MOP in 1991 within the MTP budget to be agreed,
- V** the scale of contributions of a new Meteosat Transition Programme remains open until a decision is taken,
- VI** this decision on component procurement does not prejudice a decision on the new Meteosat Transition Programme.