

No. 15047

MULTILATERAL

Arrangement between certain member States of the European Space Research Organisation and the European Space Research Organisation concerning the execution of a meteorological satellite programme (with annexes). Concluded at Neuilly-sur-Seine on 12 July 1972

Authentic texts: English and French.

Registered by France on 12 October 1976.

MULTILATÉRAL

Arrangement entre certains États membres de l'Organisation européenne de recherches spatiales et l'Organisation européenne de recherches spatiales concernant l'exécution d'un programme de satellite météorologique (avec annexes). Conclu à Neuilly-sur-Seine le 12 juillet 1972

Textes authentiques : anglais et français.

Enregistré par la France le 12 octobre 1976.

ARRANGEMENT¹ BETWEEN CERTAIN MEMBER STATES OF THE EUROPEAN SPACE RESEARCH ORGANISATION AND THE EUROPEAN SPACE RESEARCH ORGANISATION CONCERNING THE EXECUTION OF A METEOROLOGICAL SATELLITE PROGRAMME

PREAMBLE

The Governments of the Federal Republic of Germany, the Kingdom of Belgium, the Kingdom of Denmark, the French Republic, the Italian Republic, the United Kingdom of Great Britain and Northern Ireland, the Kingdom of Sweden and the Swiss Confederation (hereinafter referred to as “the Participants”), being Governments of the States parties to the Convention for the establishment of a European Space Research Organisation opened for signature in Paris on 14 June 1962¹ (hereinafter referred to as “the Convention”) and

The European Space Research Organisation (hereinafter referred to as “the Organisation”),

Having regard to the objectives elaborated by the World Meteorological Organisation and the International Council of Scientific Unions, in connection with the development of meteorology under the World Weather Watch programme and the Global Atmospheric Research Programme (GARP), with the aim of improving — by international coordination and the use of advanced techniques — the services provided by the meteorological agencies; and having regard also to the interest which these agencies have expressed in European participation in the attainment of these objectives,

Desiring, to this end, to carry out a European programme comprising the design, development, construction, placing in orbit, management and control of a pre-operational meteorological satellite, and the development and installation of associated ground facilities, and furthermore to develop in Europe the technology in this field,

Recognising the desirability of making optimum use of all available resources, and especially of the experience already acquired in Europe in the field of meteorological satellites, and taking into account in particular the offer made to the Organisation by the French Government at the 39th Session of the Council of the Organisation,

Having regard to the Declaration dated 9 May 1972 made by the representatives on the Council of the Organisation of the Governments referred to above,

¹ Came into force on 29 September 1972, the date when it had been signed on behalf of the European Space Research Organisation and on which States representing two thirds of the total contributions on the basis of the scale set out in annex B had signed it without reservation as to ratification or approval or, having signed it with such a reservation, had deposited their instrument of ratification or approval with the Government of France, in accordance with article 13 (3). Signatures were affixed and instruments of ratification, approval or accession deposited as follows:

<i>Organisation or State</i>	<i>Date of definitive signature</i>
European Space Research Organisation	24 July 1972
France	24 July 1972
United Kingdom of Great Britain and Northern Ireland	12 September 1972
Denmark	29 September 1972
Germany, Federal Republic of	29 September 1972

(With a declaration of application to *Land Berlin*.)

² United Nations, *Treaty Series*, vol. 528, p. 33.

Having regard to the Resolution adopted by the Council of the Organisation at its 47th Session, concerning the acceptance of the request to execute this programme within the framework of the Organisation,

Have agreed as follows:

Article 1. The Participants shall undertake a programme having as its objective the design, development, construction, placing in orbit, management and control of a pre-operational meteorological satellite (Meteosat) and development and installation of associated ground facilities, as defined in Annex A to this Arrangement.

Article 2. 1. The Organisation shall, under Article VIII of the Convention, execute the programme referred to in Article 1 of this Arrangement, in conformity with the timetable and other provisions set out in Annex A to this Arrangement.

2. For the execution of this programme the Organisation will make use of the results of the studies already carried out under the French national programme, and of certain facilities and personnel of France's Centre National d'Etudes Spatiales (hereinafter referred to as "CNES"). The conditions and arrangements under which CNES will provide its assistance and under which the Organisation will employ it will be laid down in an Agreement to be concluded between the Organisation and CNES.

Article 3. 1. A Programme Board composed of representatives of the Participants shall be responsible for the programme and take all decisions relating to it, in conformity with the provisions of this Arrangement.

2. For matters affecting more than one programme of the Organisation, the Programme Board shall be advisory to the Council, to which it will on such matters make all necessary recommendations.

3. The Programme Board will also be responsible for maintaining close links with the national and international meteorological agencies, and for defining the rules for using the system.

4. The Programme Board may establish such advisory bodies as it may deem necessary for the proper execution of the programme.

Article 4. Except where otherwise provided in this Arrangement, the decisions of the Programme Board referred to in Article 3 shall be taken in accordance with the Rules of Procedure for the Organisation's Council, which shall apply *mutatis mutandis*.

Article 5. Except where otherwise provided in this Arrangement, the Organisation shall execute the programme in conformity with the rules and procedures in force in the Organisation. It will consult CNES as necessary with regard to the areas of cooperation covered by the Agreement referred to in Article 2, paragraph 2 of the present Arrangement.

Article 6. 1. The expenditure resulting from the execution of the programme by the Organisation under this Arrangement shall be met by the Participants, in accordance with the detailed provisions set out in Annex B to this Arrangement, and within the limits of an overall financial envelope of one hundred and fifteen million accounting units (at mid-1971 prices).

2. The relevant annual budgets shall be subject to the approval of the Programme Board by a two-thirds majority within the financial envelope mentioned in paragraph 1 of this Article or revised in accordance with the provisions contained in Article 7.

Article 7. 1. The Participants agree, in order that the envelope referred to in the foregoing article may be revised in the event of changes in price levels, to apply the procedure in force in the Organisation at that time.

2. Where the envelope needs to be revised for reasons other than changes in price level, the Participants shall apply the following provisions:

- (a) If the cumulative overruns of estimated costs to completion do not exceed 20% of the amount of the envelope referred to in Article 6, paragraph 1, the Programme Board shall decide on the additional expenditure by a two-thirds majority of the Participants;
- (b) If the cumulative overruns of estimated costs to completion exceed 20% of the amounts of this envelope, the Participants who so wish, may withdraw from the programme subject to the provisions of Article 17. The other Participants wishing to continue the programme shall consult among themselves and determine the arrangements for such continuation. They shall report accordingly to the Council which will take any necessary decision.

Article 8. Intellectual property rights arising from the execution of the programme, as well as access to technical information so arising, shall be reserved to the Participants, but the Organisation shall have the right to make use of them free of charge for its activities as a whole.

Article 9. 1. The Participants authorise the Organisation to conclude the necessary contracts for the execution of the programme in conformity with the Organisation's rules and procedures. However, in placing contracts and sub-contracts for the execution of this programme, preference shall be given, wherever possible, to execution of the work in the territories of the Participants, taking into consideration the Council's decisions in the matter of industrial policy and distribution of work.

2. The amounts paid by the Organisation to CNES, in respect of expenditure relating to staff made available to the Organisation, and to invoiced tests carried out, shall be taken into account when calculating France's share in respect of the geographical distribution of the Organisation's contracts.

Article 10. The Organisation, acting on behalf of the Participants, shall be the owner of the satellite developed under the programme, as well as of the facilities and equipments acquired for its execution, up to and including the pre-operational phase.

Article 11. 1. The Participants shall indemnify the Organisation in respect of any liability it may incur should its international responsibility be involved as a result of the execution of the programme.

2. Any compensation for damage received by the Organisation with respect to the programme shall be credited to the annual budgets of the programme referred to in Article 6, paragraph 2.

Article 12. 1. Any dispute which arises between two or more of the Participants, or between any of them and the Organisation, concerning the interpretation or application of this Arrangement, and which cannot be settled amicably, shall be submitted at the request of any party to the dispute to a single arbitrator to be appointed by the President of the International Court of Justice. The arbitrator may not be a national of a State which is party to the dispute.

2. Those parties to the Arrangement which are not parties to the dispute shall have the right to join in the proceedings and the arbitrator's decision shall be binding on all the Participants and the Organisation, whether or not they have joined in the proceedings.

Article 13. 1. This Arrangement shall be open for signature by the Participants until 30 September 1972.

2. The States shall become parties to this Arrangement:

- upon signature not subject to ratification or approval,
- upon depositing an instrument of ratification or approval with the Government of the French Republic if the Arrangement was signed subject to ratification or approval.

3. This Arrangement shall come into force when it has been signed by the Organisation and when the aggregate contributions payable — on the basis of the scale set out in Annex B — by the States that have become parties to this Arrangement in accordance with paragraph 2 of this Article amount to two-thirds of the total contributions payable.

4. For the purpose of paragraph 3 of this Article, the deposit of a declaration of intent to apply the Arrangement provisionally and to seek ratification or approval as soon as possible shall be considered as the deposit, with the depository Government, of an instrument of ratification or approval.

5. The Government of any Member State of the Organisation which has not signed the Arrangement by 30 September 1972 may become party to it after it has come into force, provided the other Governments party to the Arrangement agree. The Government in question must deposit an instrument of accession with the Government of the French Republic.

6. Unless the Programme Board unanimously decides otherwise, a Government that becomes a party to this Arrangement after its entry into force shall pay a contribution equal to that which it would have paid if it had been a party to the Arrangement at the moment of its entry into force and this contribution shall be credited *pro rata* to the contributions of the Participants.

Article 14. The Government of a non-Member State of the Organisation may present a request to the Council of the Organisation to accede to the programme; a Council decision to grant such a request shall require unanimity and must be taken in agreement with the Programme Board, which shall unanimously determine the terms of the accession.

Article 15. The Organisation shall notify the Governments, after consultation with the Programme Board, when the programme has been duly completed in accordance with the provisions of this Arrangement and this Arrangement shall expire upon receipt of such notification.

Article 16. The Participants may decide to cease the execution of the programme by a two-thirds majority representing also at least two-thirds of the contributions to the programme.

Article 17. 1. A Participant wishing to withdraw under the terms of Article 7, paragraph 2(b) of this Arrangement shall notify its withdrawal to the Organisation. This withdrawal shall take effect at the date of the notification, subject to the following provisions:

- (a) The withdrawing Participant shall be bound to pay in the manner agreed its contributions adopted under the current Annual Budget.
- (b) The withdrawing Participant shall be bound to honour payment appropriations corresponding to approved contract authority used at the time of notification of withdrawal.
- (c) The withdrawing Participant shall remain a member of the Programme Board until his obligations under (a) and (b) above have been fulfilled and shall have a right to vote only on matters which are directly related to these obligations.

2. The withdrawing Participant shall retain the rights acquired up to the date on which its withdrawal takes effect. As regards actions and developments decided upon after the taking effect of the withdrawal, no further right or obligation shall arise from the part of the programme to which it no longer contributes, unless and to the extent agreed otherwise between the remaining Participants and the withdrawing Participant. The provisions of Article XVII of the Convention of the Organisation shall apply *mutatis mutandis*.

3. Should a non-Member State which had acceded to the programme in accordance with the provisions of Article 14 of this Arrangement wish to withdraw from the programme the provisions of this Article shall apply *mutatis mutandis*.

Article 18. Annexes A and B to this Arrangement form an integral part of it.

Article 19. 1. This Arrangement may be reviewed at the request of a Participant or of the Organisation. Any amendments shall come into force when all parties have notified their approval to the depository Government.

2. The Annexes to this Arrangement may be revised by the Programme Board in accordance with the provisions of the revision clauses of those Annexes.

Article 20. Upon entry into force of the Arrangement, the Government of the French Republic shall register it with the Secretariat of the United Nations, in accordance with Article 102 of the United Nations Charter.

Article 21. The Government of the French Republic shall be the depository of this Arrangement and shall notify the Participants and the Organisation of the date of entry into force of this Arrangement and any amendments thereto, and of all instruments of ratification, approval, accession and declaration of intent to apply the Arrangement provisionally.

IN WITNESS WHEREOF the undersigned Representatives, having been duly authorised thereto, have signed this Arrangement.

DONE in Neuilly-sur-Seine this twelfth day of July nineteen hundred and seventy-two in the English and French languages, both texts being equally authoritative, in a single copy, which shall be deposited in the archives of the Government of the French Republic, which shall transmit certified copies to each of the Participants and to the Organisation.

For the Government of the Federal Republic of Germany:

RUETE F. R. GÜNTSCH

For the Government of the Kingdom of Belgium:

J. BOUHA
sous réserve de ratification¹

For the Government of the Kingdom of Denmark:

PAUL FISCHER

For the Government of the French Republic:

BOISGELIN

For the Government of the Italian Republic:

M. PINNA CABONI
sous réserve de ratification¹

For the European Space Research Organisation:

A. HOCKER

For the Government of the United Kingdom of Great Britain and Northern Ireland:

A. GOODSON

For the Government of the Kingdom of Sweden:

LARS KARLSTROEM
Subject to ratification

For the Government of the Swiss Confederation:

E. BAUERMEISTER
sous réserve de ratification¹

A N N E X A

TO THE ARRANGEMENT BETWEEN CERTAIN MEMBER STATES OF THE EUROPEAN SPACE RESEARCH ORGANISATION AND THE EUROPEAN SPACE RESEARCH ORGANISATION CONCERNING THE EXECUTION OF A METEOROLOGICAL SATELLITE PROGRAMME

1. *Objectives of the European Meteorological Satellite Programme*

The programme shall provide for the design, development, construction, placing in orbit, management and control of a geostationary meteorological satellite (Meteosat), as well as for

¹ Subject to ratification.

the development and installation of associated ground facilities. This system is to represent a European contribution to the GARP (Global Atmospheric Research Programme) and to the World Weather Watch of the World Meteorological Organisation, and is to meet European meteorologists' requirements in respect of space facilities.

2. *Description of the programme*

The programme covered by the Arrangement consists of two parts, relating to the space segment and earth segment, respectively.

2.1. *Space segment*

This part of the programme comprises the following basic elements:

- (a) Development of a geostationary satellite designed to:
 - provide images in the infra-red and visible bands of the spectrum,
 - distribute these images to the users,
 - collect the data emitted by automatic stations and, where applicable, interrogate these stations;
- (b) Production of two flight units of the satellite, and of a set of spare units;
- (c) Launch of one flight unit, whose position on the geostationary orbit will be laid down by the Programme Board.

2.2. *Earth segment.*

This part of the programme comprises (*):

- (a) Production of associated ground facilities which include:
 - (i) A Data Acquisition, Telecommand and Tracking Station (DATTS),
 - (ii) An Operations Control Centre (OCC),
 - (iii) A Data Referencing and Conditioning Centre (DRCC),
 - (iv) A Meteorological Information Extraction Centre (MIEC),
 - (v) A Meteorological Terminal (MT),
 - (vi) Development of a prototype and preparation of manufacturing specifications for a Primary Data User's Station (PDUS) and for a Secondary Data User's Station (SDUS),
 - (vii) Development of prototype equipment for the interconnections between the Data-Collection Platforms (DCP) and the space system, and preparation of manufacturing specifications for this equipment,

the aggregate of facilities (i) to (iv) being referred to as the Ground Facility Meteosat (GFM);
- (b) Preparation of the software for the operation of the ground facilities, the software of the MIEC excluded;
- (c) Integration of the various facilities of the Earth Sector (DTTS, OCC, DRCC, MIEC, Meteorological Terminal (MT), PDUS and SDUS) and running in of the corresponding system.

The part relating to the earth sector does not include:

- the links between the Meteorological Terminal (MT), and the national meteorological centres (MC),
- the software of the Meteorological Information Extraction Centre (MIEC) and all the modifications it may require,
- the running costs of the earth sector (staff, rentals, consumables) in the operational phase following the launch and the verification of overall system working.

* The terminology used is explained in the attached table.

3. *Timetable*

The tentative timetable for the programme is as follows:

- start of the competitive project definition phase (PDP): December 1972,
- launch of satellite: end 1976.

4. *Revision Clause*

The provisions of this Annex may be revised by a unanimous decision of the Programme Board.

TERMINOLOGY FOR GROUND FACILITIES

	<i>Term</i>	<i>Abbreviation</i>	<i>Main functions</i>
(1)	Ground Facility Meteosat	GFM	Combines (2) to (5)
(2)	Data Acquisition, Telecommand Tracking Station	DATTS	Data acquisition (meteorological and housekeeping data) Telecommand Tracking
(3)	Operations Control Centre	OCC	Control of spacecraft and operations
(4)	Data Referencing and Conditioning Centre	DRCC	Phase adjustment of radiometer data Gridding and annotation Orbit and attitude computations Editing Imagery: — Rectification — Projection conversion — Information transformation
(5)	Meteorological Information Extraction Centre	MIEC	Extraction of meteorological information: — Sea surface temperatures — Wind fields — Cloud analysis (coverage and top height) — Radiation balance — Editing — Handling of Data Collection Platforms (DCP) data
(6)	Meteorological Terminal	MT	Equipment required by the GFM to provide the interface with the link with the Global Telecommunications System (GTS) of the World Weather Watch (WWW)
(7)	Meteorological Centre	MC	Meteorological analysis by users
(8)	Primary Data User's Station	PDUS	Reception and display of full resolution image data in digital form. Reception of APT type transmissions (in analog form)
(9)	Secondary Data User's Station	SDUS	Reception and display of APT type transmissions (in analog form)
(10)	Data Collection Platform	DCP	<i>In-situ</i> collection of meteorological and related data

ANNEX B

TO THE ARRANGEMENT BETWEEN CERTAIN MEMBER STATES OF THE EUROPEAN SPACE RESEARCH ORGANISATION AND THE EUROPEAN SPACE RESEARCH ORGANISATION CONCERNING THE EXECUTION OF A METEOROLOGICAL SATELLITE PROGRAMME

1. *Cost of programme*

The overall financial envelope of 115 million accounting units laid down in Article 6, paragraph 1 of this Arrangement is based on the following estimates:

(a) The direct expenditure for the programme during the period 1972-1979 is estimated, and allocated indicatively, as follows:

	<i>(In millions of accounting units at mid-1971 prices)</i>
(i) Definition phase (PDP)	3
(ii) Development of the satellite, and production of two flight units and of a set of spares	53
(iii) Launch of one satellite (Thor Delta launcher)	8
(iv) Ground facilities, including:	
— development and installation of a Ground Facility Meteosat (GFM) comprising a Data Acquisition Telecommand Tracking Station, an Operations Control Centre, a Data Referencing and Conditioning Centre and a Meteorological Information Extraction Centre, as well as a Meteorological Terminal,	
— development of a prototype and preparation of manufacturing specifications for a Primary Data User's Station, and a Secondary Data User's Station,	
— development of prototype equipment for the interconnections between the Data Collection Platforms (DCP) and the space system and preparation of manufacturing specifications for this equipment,	
— preparation of the software for the operation of the ground facilities (the software of the Meteorological Information Extraction Centre excluded)	14
(v) Technical contingency allowance	6
(vi) Direct internal costs (staff, running costs, facilities) of the Organisation . . .	6
	TOTAL 90*
	90*

(b) Indirect expenditure, i.e. the programme's share of the Organisation's common and support costs; the amount of this will depend on the size of the overall programme of the Organisation and is currently estimated at 22.8 MAU.

2. *Scale of contributions*

Each Participant shall contribute to the expenditure resulting from the execution of the programme by the Organisation under the foregoing Arrangement, in accordance with the following scale:

* These costs do not include the running costs for the ground segment (staff, rentals, consumables), during the post-launch operational phase.

<i>States</i>	<i>Scale of contributions</i>
	%
Federal Republic of Germany	25.66
Belgium	4.06
Denmark	2.41
France	23.70
Italy	15.07
United Kingdom	20.60
Sweden	5.02
Switzerland	3.48
	<u>100.00</u>

3. *Reports by the Organisation on the financial and contracts situation*

The Director General of the Organisation shall issue the necessary instructions for the presentation of reports on the progress and geographical distribution of the work, on the call-ups of contributions, the expenditure to date and the latest estimates of cost-to-completion of the programme, in accordance with the relevant provisions of the Organisation's Financial Rules dealing with accounts (Chapter III, Section VI of the Financial Rules) and with the provisions adopted by the Council of the Organisation concerning the periodical reports to be presented (document ESRO/C/306, add. 2, rev. 1).

4. *Financial Rules to be observed*

The direct expenditure resulting from the execution of the programme by the Organisation under the foregoing Arrangement shall be charged to a Programme Output Account which shall be established and administered by the Organisation in accordance with the relevant provisions of its Financial Rules. The programme's share of the Organisation's common and support costs shall be established and allocated to the Programme Output Account in accordance with the relevant principles and procedures adopted by the Organisation.

5. *Revision Clause*

The provisions of paragraphs 1 and 2 of this Annex may be revised by a unanimous decision of the Programme Board. The provisions of paragraphs 3 and 4 of this Annex may be revised by a two-thirds majority decision of the Programme Board.