



Treaty Series No. 39 (1976)

Arrangement

between certain Member States of the European Space
Research Organisation and the European Space
Research Organisation

concerning the Execution of the
Spacelab Programme

Neuilly-sur-Seine, 1 March–23 September 1973

[The Arrangement entered into force on 10 August 1973]

*Presented to Parliament
by the Secretary of State for Foreign and Commonwealth Affairs
by Command of Her Majesty
June 1976*

LONDON

HER MAJESTY'S STATIONERY OFFICE

28p net

**ARRANGEMENT
BETWEEN CERTAIN MEMBER STATES OF THE EUROPEAN
SPACE RESEARCH ORGANISATION AND THE EUROPEAN SPACE
RESEARCH ORGANISATION CONCERNING THE EXECUTION OF
THE SPACELAB PROGRAMME**

PREAMBLE

The Governments signatories of this Arrangement, (hereinafter referred to as "the Participants"), being Governments of States parties to the Convention for the establishment of a European Space Research Organisation opened for signature on 14 June 1962⁽¹⁾ (hereinafter referred to as "the Convention"), and the European Space Research Organisation (hereinafter referred to as "the Organisation"),

Having regard to the United States Authorities' offer to Europe to take part in the post-Apollo programme by developing one or more research and application modules and by making use of the shuttle and orbital system,

Recalling Resolution No. 3 of 24 July 1970 of the European Space Conference on co-operation in the post-Apollo programme, and the agreement reached by the European Space Conference at its meeting in Brussels on 20 December 1972, concerning the execution of the Spacelab programme, which has been notified to the United States Authorities, and under which this programme shall be executed in the first instance by the Organisation and be pursued later on by the future European Space Agency,

Considering the advantage to international co-operation from an active contribution from Europe towards the execution of the most important space programme currently developed and the advantage to Europe from developing its space technology through participation in this programme,

Recalling the authority already granted by the Council of the Organisation at its 50th Session (ESRO/C/MIN/50), on the basis of which the Director-General has initiated the project definition phase of the Spacelab programme,

Considering the draft Memorandum of Understanding (ESRO/C(73)2, rev. 1 Annex III) between the Organisation and the National Aeronautics and Space Administration (NASA) of the United States Government (hereinafter referred to as the "Memorandum of Understanding"),

Having regard to the Resolution adopted by the Council of the Organisation at its 53rd Session, concerning the approval to execute the Spacelab programme within the framework of the Organisation (ESRO/C/LIII/Res. 1 (Final)),

Have agreed as follows:

(¹) Treaty Series No. 56 (1964), Cmnd. 2489.

ARTICLE 1

1. The Participants shall, under the provisions of the present Arrangement and in particular of Article 5 thereof, undertake in close co-operation with the United States Authorities a programme having as its objective the definition, design, development and construction of the Spacelab as a technically integrated part of the United States' shuttle and orbital system and Europe's contribution to the post-Apollo programme with which it is to be used.

2. The objectives and elements of the spacelab programme are described in Annex A to the present Arrangement.

ARTICLE 2

The programme referred to in Article 1 above shall be broken down into two phases, a definition phase which has already been started and a design, development and construction phase.

1. The purpose of the definition phase (sub-phases B1-B3) of the Spacelab programme is to establish the configuration of the Spacelab in the light of the requirements of the users and to define the corresponding sub-systems. The results available at the end of sub-phase B2 will serve as a basis for the preparation of a technical proposal and a development plan, together with a detailed cost analysis and an estimate of the cost of the design, development and construction phase.

2. The elements for the detailed analysis referred to in paragraph 1 of the present Article shall be available to the Participants by 1 August 1973 and will also be notified to the other Member States of the Organisation.

3. The decision to proceed to the design, development and construction phase shall be taken in conformity with the provisions of Article 5 below.

ARTICLE 3

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

2. 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.

3. For the purpose of the co-operation with NASA referred to in Article 1 above, and in order to ensure close integration of the Spacelab with the other elements of the shuttle and orbital system, particularly with the development of the space shuttle, the Organisation shall set up, on the basis of the Memorandum of Understanding, a structure for co-operation and co-ordination with NASA. The European scientific and technical users shall be associated with the work of the Organisation and NASA.

ARTICLE 4

1. A Programme Board, composed of representatives of the Participants, shall be responsible for the programme and shall 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 of the Organisation, to which it will on such matters make all necessary recommendations.

3. The Programme Board shall in particular :

(a) provide the Director-General of the Organisation with all necessary instructions concerning the execution of the programme, in particular regarding the interfaces of the programme with the other elements of the shuttle and orbital system of the United States,

(b) ensure that close links are established by the Organisation with the future European users of the Spacelab system,

(c) ensure implementation of the Memorandum of Understanding and any other relevant legal documents as far as the rights and obligations of the Participants are concerned,

(d) study, if possible at least three years before the end of the development of Spacelab, the rules for implementing the principles referred to in Article 10 of this Arrangement.

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

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

ARTICLE 5

1. The financial envelope of the programme on the date of opening the present Arrangement for signature is estimated at 308 millions of accounting units at mid-1973 prices, on the basis of the elements described in Annex B to the present Arrangement. This amount will be reviewed at the end of sub-phase B2 of the definition phase.

The Participants agree that, should this review confirm the overall financial assumptions, they will continue the programme and initiate sub-phase B3 of the definition phase, as well as the design, development and construction phase. Should it appear that the estimates will be significantly exceeded, the Participants who so wish may withdraw from the programme; however, those Participants that wish to continue with the programme shall consult among themselves and determine arrangements for such continuation.

2. The Participants fix a financial envelope of 10 millions of accounting units for the definition phase studies due to be completed by the end of 1973. The Participants agree to contribute to the financing of these studies in accordance with the scale set out in Annex B of the present Arrangement, but only up to the amounts required for the execution of sub-phases B1 and

B2 due to be completed by the end of July 1973. When the review referred to in paragraph 1 of the present Article is carried out, the Participants will decide whether to unblock the amount of the envelope that relates to sub-phase B3.

3. When fixing the overall financial envelope of this programme in accordance with the provisions of paragraph 1 of the present Article, the Participants shall determine, by unanimous agreement, their individual percentage contributions.

4. The relevant annual budgets shall be subject to the approval of the Programme Board by a two-thirds majority within the relevant financial envelope.

ARTICLE 6

1. The Participants agree, in order that the overall financial envelope of the programme referred to in Article 5, paragraph 3 of the present Arrangement may be revised in the event of changes in price levels, to apply the procedure in force in the Organisation at that time.

2. If the overall financial envelope needs to be revised for reasons other than changes in price levels, the following provisions shall apply:

- (a) if the cumulative overruns of estimated costs to completion do not exceed 20% of the amount of the overall financial envelope of the programme, no Participant shall be entitled to withdraw from the programme and the Programme Board shall decide on the additional expenditure by a two-thirds majority;
- (b) if the cumulative overruns of estimated costs to completion exceed 20% of the amount of the overall financial envelope, the Participants who so wish may withdraw from the programme subject to the provisions of Article 17. Those Participants that wish to continue the programme shall consult among themselves and determine the arrangements for such continuation. They shall report accordingly to the Council of the Organisation which will take any necessary decision.

ARTICLE 7

Intellectual property rights arising from the execution of the programme, as well as access to and use of technical information so arising, shall be reserved to the Participants insofar as this is consistent with the relevant terms of the Memorandum of Understanding, but the Organisation shall have the right to make use of them free of charge for its activities as a whole.

ARTICLE 8

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 the programme, first preference shall be given, wherever possible, to having the work executed in the territories of

the Participants and second preference to having it done in the territories of other Member States of the Organisation, taking into consideration the decisions of the Council of the Organisation in the matter of contractual policy and distribution of work.

2. For this purpose the geographical distribution of contracts among the Participants concerning the Spacelab programme shall correspond to the percentage contributions of the Participants. Since the percentage of work to be performed in non-Member States either by direct contracts from the Organisation or by sub-contracts issued by the industrial prime contractor, will probably in this programme be unusually high, the Organisation shall keep the amount of such contracts and sub-contracts under review and ensure that they are excluded from the preparation of statistics on the geographical distribution of contracts amongst Participants.

ARTICLE 9

1. The Organisation, acting on behalf of the Participants, shall be the owner of the Spacelab elements developed under the programme, as well as of the facilities and equipment acquired for its execution.

2. The terms and conditions for making available to NASA the elements developed under this Arrangement, as defined in Annex A, shall be fixed by the Memorandum of Understanding between the Organisation and NASA and, as appropriate, by the intergovernmental Agreement between the Participants and the Government of the United States, referred to in Article 10 below.

Any transfer of facilities and equipment acquired shall be decided on by the Programme Board, in consultation with the Council of the Organisation.

ARTICLE 10

The Participants intend to define, in consultation with the Council of the Organisation, in an Agreement with the Government of the United States, the principles relating to the use of the Spacelab and the other parts of the shuttle and orbital system, in particular the space shuttle, access to United States technology, and all other questions appropriate to such an Agreement.

ARTICLE 11

1. The Participants shall indemnify the Organisation in respect of any obligation it may incur should its international liability 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 programme budgets referred to in Article 5, paragraph 4.

ARTICLE 12

The Participants have noted the provisions of the proposed Memorandum of Understanding with NASA and their rights and obligations arising therefrom, and they agree to the Council of the Organisation authorising the Director-General to sign the text as approved by the Programme Board and the Council. Should this Memorandum not enter into force, or should it be modified substantially, the Participants will consult among themselves with a view to determine the appropriate measures to be taken.

ARTICLE 13

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 by mutual consent, 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, nor be permanently resident in that State.

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 14

1. This Arrangement shall be open for signature by the Member States of the Organisation from 1 March 1973 to 10 August 1973. If, on this date, the Arrangement has entered into force in accordance with the provisions of paragraph 3 of this Article, it shall remain open for signature until 23 September.

2. The States shall become parties to this Arrangement:

—either by signature not subject to ratification or approval,

—or by depositing an instrument of ratification or approval with the Government of the French Republic if the Arrangement has been 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, for the sub-phase B2.⁽²⁾

4. For the purpose of paragraph 3 of this Article, the deposit, with the depositary Government, 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 of an instrument of ratification or approval.

5. The Government of any Member State of the Organisation which has not signed the Arrangement by 10 August 1973 may become party to it after

⁽²⁾ The Arrangement came into force on 10 August, 1973.

that date, provided the other Governments parties to the Arrangement agree. In such case, the Government in question must deposit an instrument of accession with the Government of the French Republic; it may also apply the provisions of paragraph 4 of this Article in order to become a party to this Arrangement.

6. Unless the Programme Board unanimously decides otherwise, a Government that becomes a party to this Arrangement under the terms of paragraph 5 of the present Article, 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, which shall also cover a contribution to the expenses for the definition phase, and this contribution shall be credited to the other Participants *pro rata* to their contributions to the programme budget.

ARTICLE 15

The Government of a State that is not a Member 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 detailed terms of accession.

ARTICLE 16

The Organisation shall notify the Participants, 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 17

1. A Participant wishing to withdraw under the terms of Article 6, paragraph 2, 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 or previous annual budget(s);
- (b) the withdrawing Participant shall remain bound to pay its share of the payment appropriations corresponding to approved contract authority used under the budget for the current or previous financial year(s) and relating to the design, development and construction phase;
- (c) the withdrawing Participant shall remain a member of the Programme Board until its obligations under (a) and (b) above have been fulfilled. It shall only have a right to vote 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 its withdrawal, no further right or obligation shall arise in respect of that 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 has acceded to the programme in accordance with the provisions of Article 15 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. Without prejudice to the relevant provisions of the Memorandum of Understanding, this Arrangement may be amended at the request of a Participant or of the Organisation. Any amendment shall come into force when all parties have notified their approval to the depositary Government.

2. Without prejudice to the relevant provisions of the Memorandum of Understanding, the Annexes to the Arrangement may be revised by the Programme Board in accordance with the special provisions contained in 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.⁽³⁾

ARTICLE 21

The Government of the French Republic shall be the depositary 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 the deposit 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,

⁽³⁾ Treaty Series No. 67 (1946), Cmd. 7015.

Done in Neuilly-sur-Seine, this fifteenth day of February nineteen hundred and seventy-three, in the English, French and German languages,⁽⁴⁾ the three 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 signatures see page 14]

⁽⁴⁾ After the Arrangement has been registered with the United Nations, texts in French and German will appear in the United Nations Treaty Series, available through Agency Section, Her Majesty's Stationery Office, PO Box 569, London SE1 9NY—Tel. 01-928 6977 ext. 410.

ANNEX A

1. Objectives of the Spacelab programme

The Spacelab programme includes the definition, design, development and construction of mannable pressurised laboratory modules and unpressurised instrument platforms (pallets) suitable for conducting research and application activities on shuttle sortie missions. The laboratory module and the pallet, either separately or together, will be transported to and from earth orbit in the shuttle payload bay and will be attached to and supported by the shuttle orbiter stage throughout the mission. The laboratory module will be characterised by a pressurised (shirt-sleeve) environment, a versatile capability for accommodating laboratory and observatory equipment at minimum cost to users, rapid access for users, and minimum interference with shuttle orbiter ground turnaround operations. The pallet, supporting telescopes, antennas and other instruments and equipment requiring direct space exposure, will normally be attached to the laboratory module with its experiments remotely operated from the laboratory module, but can also be attached directly to the shuttle orbiter and operated from the orbiter cabin. Additional descriptive material of the concept will be included in the Preliminary Project Plan drawn up jointly with NASA.

2. Description of the programme

2.1 *Definition phase*

(Phase B)

Sub-phase B1 :

- continuation of the study on the selected concept,
- identification of those sub-systems that are critical from the cost viewpoint,
- possible adaptation of the industrial structures.

Sub-phase B2 :

Production of a technical proposal leading to the choice of a system and a corresponding development plan, together with a cost analysis, and of an estimate, to be prepared by the Organisation, of a cost proposal for the design, development and construction phase.

Sub-phase B3 :

On the basis of the system selected at the end of sub-phase B2, the following action will be taken :

- preliminary project study of the corresponding sub-system,
- analysis of operations,
- establishment of a firm proposition for the design, development and construction phase.

This sub-phase will be completed by the selection of the main contractor for the following phase.

2.2 *Design, development and construction phase*

- Preparation of the detailed specification of and construction plans for the different Spacelab elements.
- Development of the Spacelab elements.
- Testing, assembling and checkout of the complete Spacelab.

The following elements are planned for delivery to NASA: one Spacelab flight unit, one Spacelab functional mock-up and two series of Spacelab ground support equipment, possibly together with the necessary spares and relevant documentation.

3. **Timetable**

The timetable currently envisaged is as follows:

- Definition phase (Phase B)

Sub-phase B1:

mid-November 1972–end-January 1973,

Sub-phase B2:

start February 1973–end July 1973,

Sub-phase B3:

beginning August 1973–end-1973.

- Design, development and construction phase.

The first Spacelab flight is planned for 1979.

4. **Revision Clause**

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

ANNEX B⁽⁵⁾

1. **Cost of the programme**

The overall financial envelope is estimated at 308 millions of accounting units (MAU) at mid-1973 prices and is composed of the following elements:

- Definition phase: the financial envelope for this phase is fixed at 10 MAU, and divided as follows:

sub-phase B2: 7 MAU,

sub-phase B3: 3 MAU.

- Design, development and construction phase: the financial envelope shall be determined in accordance with the provisions of Article 5, paragraph 1 of the Arrangement. The cost of the main development contract is estimated at 175 MAU.

⁽⁵⁾ For revision of Annex B, see page 15.

- Internal expenditure (estimated at 30 MAU) and share of common and support costs (estimated at 33 MAU).
- Contingency, including space technology, fixed at 15 MAU, and modifications resulting from the shuttle programme, not covered by the main development contract, estimated at 45 MAU.

2. Scale of contributions

(a) Subject to the provisions of Article 5, paragraph 2 of the present Arrangement, each Participant shall, in accordance with the following scale applicable for 1973, contribute to the expenditure resulting from the execution by the Organisation, under the terms of this Arrangement, of the sub-phase B2 of the definition phase.

<i>State</i>	<i>Share of contributions</i>
	%
Federal Republic of Germany	52.55
Belgium	4.20
Spain	2.80
France	10.00
Netherlands	2.00
United Kingdom	6.30
Switzerland	1.00
Italy and other States	21.15
	<hr/>
TOTAL	100.00

(b) The scale for the execution of the sub-phase B3 and the design, development and construction phase will be fixed by the States parties to the Arrangement on the completion of sub-phase B2 (see Article 5 of the present Arrangement).

3. Reports by the Organisation on the financial and contractual 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-up of contributions, the expenditures 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 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

The direct expenditure resulting from the execution of the programme by the Organisation under the foregoing Arrangement shall be charged to a programme budget 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 budget 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.

SIGNATURES AND RATIFICATIONS

	<i>Date of signature</i>	<i>Date of ratification</i>
Belgium*†	10 Aug. 1973	
Denmark*	21 Sept. 1973	
France	10 Aug. 1973	
Germany, Federal Republic of	10 Aug. 1973	
Italy*	20 Sept. 1973	
Netherlands*†	14 Aug. 1973	
Spain	18 Sept. 1973	
Switzerland*	10 Aug. 1973	29 Apr. 1975
United Kingdom (with reservation)‡	10 Aug. 1973	
European Space Research Organisation	10 Aug. 1973	

ACCESSION

	<i>Date</i>
Austria	21 Oct. 1975

* Subject to ratification.

† On signing the Governments of Belgium and the Netherlands deposited declarations of intent to apply the Arrangement on a provisional basis.

‡ On signing the Arrangement the Government of the United Kingdom made the following reservation:

“The signature of this text is subject to the reservation that the outstanding balances of contributions to the 3 programmes agreed at the European Space Conference, namely Spacelab (i.e. 21·10%), as well as L3S and MAROTS, are forthcoming by noon on 21 September 1973 at the latest, and that the Committee of Alternates approve by the same date the text of a document, the general lines of which were agreed by Ministers on 31 July 1973, relating to the creation of the European Space Agency.”

ANNEX B TO THE ARRANGEMENT⁽⁹⁾

Amendment No. 1

Paragraph 2—Scale of contributions

Replace the present table by the following:

<i>State</i>	<i>Share of contributions</i>
	%
Federal Republic of Germany	52.55
Belgium	4.20
Denmark	1.50
Spain	2.80
France	10.00
Italy	18.00
Netherlands	2.10
United Kingdom	6.30
Switzerland	1.00
Other countries(*)	1.55

(*) Weight of vote to be attributed to the Federal Republic of Germany as long as the provisions of (c) below are applicable.

Amendment No. 2

Paragraph 2

Add a new sub-paragraph (c) as follows:

“(c) The Government of the Federal Republic of Germany guarantees the payment of any sums shown under the heading “Other countries” in the above table until such time as they are otherwise covered.”

The French Government, depositary of the Arrangement, will notify the Participants and the Organisation, in conformity with the provisions of the Arrangement, of the date of entry into force of these amendments.

⁽⁹⁾ These amendments were unanimously approved at the Twelfth Meeting of the Spacelab Programme Board, held on 5 November 1973, and entered into force on that date.

HER MAJESTY'S STATIONERY OFFICE

Government Bookshops

49 High Holborn, London WC1V 6HB

13a Castle Street, Edinburgh EH2 3AR

41 The Hayes, Cardiff CF1 1JW

Brazennose Street, Manchester M60 8AS

Southey House, Wine Street, Bristol BS1 2BQ

258 Broad Street, Birmingham B1 2HE

80 Chichester Street, Belfast BT1 4JY

*Government publications are also available
through booksellers*