SCIENCE AND TECHNOLOGY



Treaty Series No. 8 (1973)

Agreement

on the Implementation of a European Concerted Action Project in the Field of Metallurgy on the Topic "Materials for Desalination Plants"

Brussels, 23 November 1971

[The Agreement entered into force on 1 November 1972]

Presented to Parliament

by the Secretary of State for Foreign and Commonwealth Affairs

by Command of Her Majesty

April 1973

LONDON
HER MAJESTY'S STATIONERY OFFICE

8p net

AGREEMENT

ON THE IMPLEMENTATION OF A EUROPEAN CONCERTED ACTION PROJECT IN THE FIELD OF METALLURGY ON THE TOPIC "MATERIALS FOR DESALINATION PLANTS"

The Governments of

the Federal Republic of Germany,

Spain,

the French Republic,

the Italian Republic,

the Kingdom of the Netherlands,

the Socialist Federal Republic of Yugoslavia,

the Republic of Austria,

hereinafter referred to as "the Signatories",

HAVE ACCEPTED participation in the project described below, hereinafter referred to as "the project", and HAVE AGREED as follows:

ARTICLE 1

The Signatories shall co-ordinate their efforts in the project, which is being undertaken in order to stimulate research and development in the field of metallurgy on the topic "materials for desalination plants". An outline description of the work envisaged for this project is contained in the Annex.

The aim of the project is to stimulate the carrying out of co-ordinated research and development operations on the above topic by means of contracts between the competent public bodies on the one hand and industrial firms and research establishments (public or private research centres, university centres and joint centres), on the other, or by entrusting work to Government research establishments which agree to work in association on a multinational basis.

ARTICLE 2

The duration envisaged for work on the project shall be a period not exceeding three years, unless otherwise determined unanimously by the Signatories.

ARTICLE 3

This Agreement is open for signature by other European Governments which participated in the Ministerial Conference held in Brussels on 22 and 23 November 1971 and by the European Communities, subject to the unanimous consent of the Signatories. This unanimous consent shall not however be required until after the entry into force of the Agreement on condition that the annual sum allocated by new Signatories to work on the project is no less than 40,000 Units of Account.

ARTICLE 4

A Management Committee, hereinafter referred to as "the Committee", composed of one representative of each Signatory, is hereby established. Each representative may be accompanied by such experts or advisers as he may need.

The Committee shall draw up its rules of procedure. The rules shall lay down the quorum required for the validity of the decisions of the Committee.

The Committee shall draw up reasoned recommendations based on the research proposals submitted to it. These recommendations to be adopted by a simple majority; minority views and the reasoning behind them may be expressed in these recommendations.

Each representative shall have one vote in the Committee. Decisions concerning procedure shall be adopted by a simple majority. All other decisions shall be taken by unanimous vote; however, abstention by one or more representatives shall not preclude unanimity.

ARTICLE 5

The Committee shall:

- (a) invite industrial undertakings and research establishments to submit research proposals, preferably on a multinational basis, on the subject of the project;
- (b) examine the research proposals submitted by industrial undertakings and research establishments:
- (c) recommend the allocation of research tasks among the industrial undertakings and research establishments and address to the bodies concerned recommendations on the proposed contracts which, in its view, should be adopted, as well as on the duration of these contracts;
- (d) promote associations between partners from different countries;
- (e) follow the progress of the work and recommend, where appropriate, such changes as may be necessary in the direction or the volume of the work being undertaken;
- (f) draw up programme proposals for any extension of the work beyond the expiry of this Agreement;
- (g) publish an annual progress report.
- All matters dealt with by the Committee shall be kept confidential.

ARTICLE 6

At the request of the Signatories, the Secretariat of the Management Committee shall be provided by the Commission of the European Communities.

ARTICLE 7

The research outlay devoted to the work to be carried out under the project shall be divided as follows among the Signatories:

| Signatories | | Maximum annual contributions in UA | |
|--|-----|------------------------------------|--|
| Governments of | | | |
| Federal Republic of Germany | | 200,000 | |
| Spain | ••• | 40,000 | |
| French Republic | | 200,000 | |
| Italian Republic | ••• | 100,000 | |
| Kingdom of the Netherlands | | 80,000 | |
| Socialist Federal Republic of Yugoslavia | ••• | 50,000 | |
| Republic of Austria | | 80,000 | |

These amounts include both contributions from public funds and those made by industrial undertakings and their research establishments.

Any joint expenses shall be shared equally among the Signatories, with the exception of Secretariat costs.

ARTICLE 8

The financial contribution of each Signatory to be supplied out of public funds shall not, in principle, exceed 60% for each contract in the case of contracts concluded with industrial undertakings or their research centres, and 75% in the case of contracts concluded with other research establishments. These provisions shall not apply to research organisations financed entirely or chiefly by public authorities.

The Signatories shall, if they so desire, have the opportunity to make provision in their contracts for a total or partial refund of their contributions by the State if the research is successful.

ARTICLE 9

Applications for the award of contracts may be submitted by industrial undertakings and research establishments, preferably working in association, which are capable of carrying out all or any part of the planned research or having certain parts thereof carried out on their behalf and on their responsibility.

ARTICLE 10

The Signatories shall address their research proposals directly or via their competent public bodies to the Secretariat of the Committee.

Industrial undertakings and research establishments agreeing to associate for the purposes of carrying out a research project on a multinational basis shall freely negotiate between themselves the terms and conditions of their co-operation.

ARTICLE 11

The Signatories shall be responsible for the administration and financial management of the contracts which they conclude.

ARTICLE 12

The Signatories shall insert in the contracts a clause requiring the industrial undertakings or research establishments to submit periodic progress reports and a final report.

The progress reports shall be circulated in a limited number of copies to the Signatories and to the Committee and shall be confidential to the extent that they contain detailed technical information. The circulation of the final report, the sole purpose of which shall be to report on the results obtained, shall be much wider, embracing at least the industrial undertakings and research establishments concerned in the countries of the participants in this project.

ARTICLE 13

- 1. Without prejudice to the provisions of national laws, the Signatories shall insert in the research contracts, clauses enabling the application of the following provisions for as long as the industrial property rights arising out of the studies, research and development (hereinafter referred to as "research"), excluding know-how, remain valid:
 - (a) The industrial property rights over the research results belonging to the undertakings or research establishments which carried out the research or had it carried out on their behalf shall remain their property, but a Signatory concluding contracts which, in execution, gave rise to such property rights, may reserve certain rights which shall be defined in the contracts.

As regards contracts concluded with research establishments (public or private research centres, university institutes and joint centres), it may be agreed that the industrial property rights are to belong to the Signatory concerned or to any other body designated by that Signatory.

The filing of applications for industrial property rights resulting from the research shall be brought to the attention of the Signatories through the agency of the State or body financing the research.

- (b) Without prejudice to the provisions of sub-paragraph (c), the proprietor of industrial property rights resulting from research or acquired during it shall be at liberty to grant licences or dispose of the industrial property rights, it being his responsibility to inform the Signatories of such an intention through the agency of the State or body financing the research.
- (c) In so far as the stipulations of the Treaties establishing the European Communities, the laws and regulations in force in the territory of the Signatory concerned and obligations previously contracted by the undertakings granted research contracts and notified at the time of the conclusion of these contracts do not constitute any obstacle thereto, each of the Signatories shall have the right to oppose the granting to undertakings established outside the territories of the Signatories of industrial property rights acquired by the undertakings granted research contracts during the implementation of these

contracts and enabling the undertakings established outside the territories of the Signatories to manufacture or sell on the territory of the Signatory.

- (d) The proprietor of the industrial property rights shall, in the cases enumerated below, be obliged to grant a licence at the request of any Signatory other than the one who concluded the contract which in execution gave rise to the industrial property rights:
 - (i) where this is necessary in order to meet the individual requirements of the Signatory requesting the licence in the fields of safety and public health;
 - (ii) where the market requirements in the territory of the Signatory requesting the licence are not satisfied, in which case the licence is to be granted to an undertaking designated by that Signatory for the purpose of enabling that undertaking to meet the requirements of the market. However, a licence shall not be granted if the proprietor establishes legitimate grounds for refusing it, in particular that he has not been given adequate notice.

To obtain the grant of these licences, the applicant Signatory shall apply to the Signatory which concluded the contract which in execution gave rise to the industrial property rights.

These licences shall be granted on fair and reasonable terms and shall be accompanied by the right to grant a sub-licence on the same terms. They may, under the same conditions, cover the prior industrial property rights and applications for property rights of the licensor, in so far as is necessary for their utilisation.

2. The provisions of paragraph 1 shall apply mutatis mutandis to information not covered by industrial property rights (know-how, etc.).

ARTICLE 14

The Signatories shall consult with each other, if one of them so requests, on any problem arising out of the application of this Agreement.

ARTICLE 15

- 1. Each of the Signatories shall notify the Secretary-General of the Council of the European Communities as soon as possible of the completion of the procedures required in accordance with its internal provisions for the purpose of implementing this Agreement.
- 2. For the Signatories which have transmitted the notification provided for in paragraph 1, this Agreement shall enter into force on the first day of the second month following receipt of the notification guaranteeing cover for at least two-thirds of the sum of the amounts provided for in Article 7.(1)

⁽¹⁾ The Agreement entered into force on 1 November 1972 for the Governments of Austria, France, the Federal Republic of Germany, Spain and the United Kingdom.

For those Signatories which transmit this notification after the entry into force of this Agreement, it shall come into force on the date of receipt of the notification.

Signatories which have not yet transmitted this notification at the time of entry into force of this Agreement shall be able to take part in the work of the Committee without voting rights for a period of six months after the entry into force of this Agreement.

3. The Secretary-General of the Council of the European Communities shall notify each of the Signatories of the deposit of the notifications provided for in paragraph 1 and of the date of entry into force of this Agreement.

ARTICLE 16

This Agreement, drawn up in a single copy in the German, English, French, Italian and Dutch languages, all texts being equally authentic, shall be deposited in the archives of the General Secretariat of the Council of the European Communities, which shall transmit a certified true copy to each of the Signatories.

Done at Brussels on the twenty-third day of November in the year one thousand nine hundred and seventy-one.

[For signatures and notifications see page 8.]

ANNEX

The materials to be covered by the research programme described below are intended for desalination plants operating by distillation for which the needs are most clearly defined. The operating temperatures to be envisaged are not to exceed 120°C. Above this temperature difficult problems result from scaling and the mechanical resistance of various structures in the plant.

Research work will be planned to take into account the economic operational limits of the plants (e.g. maximum speeds) and the possibilities for pre-treating the water. The programme is not to include specific studies on the chemistry of water apart from the observations made in the plants as provided for in point 3.

Research subjects (in the adopted order of priorities)

1. Low-percentage steel alloys

Study of the properties of low-percentage steel alloys (containing aluminium, chromium, etc.) with very high resistance to corrosion by hot sea water (formation of a protective film of adherent oxide) which could be suitable for use as building materials for desalination plants. The cost of such steels should be less than double the cost of carbon steels.

If good steels are developed in the course of this programme, they will be tested in existing experimental installations.

2. Copper alloys

Study of the possibilities of improving the resistance of low-cost copper alloys to corrosion-erosion in normal sea-water and more particularly in polluted sea-water (sulphide and ammonia content). Testing of the best alloys in existing experimental buckles.

3. Study of the in-service behaviour of exchanger tubes in large desalination plants

This study will be carried out in plants to be specified.

The aims of the study are to determine the properties of the water in the plant, to measure corrosion rates and to identify the causes of breaking or piercing in the tubes.

4. Concrete

Study of the optimum conditions for the use of improved concrete in the construction of large plants (reinforced concrete, prestressed concrete).

Study of some important properties such as resistance to hot water, resistance to erosion, behaviour and protection of armatures. Construction of models of a scale sufficient for significant testing.

Study of polymer concrete with a view to collecting the technical data required for designing plant using these materials.

5. Protective coatings for construction steel

The aims of the studies are:

- (i) to define the nature of the adherence of coatings to steel pieces and the factors which affect this adherence;
- (ii) to obtain data on the properties (in particular porosity and permeability) of the best available coatings and their development over a period of time;
- (iii) to develop suitable quality-control methods.

An experimental installation should be built for studying the reliability of the coatings in simulated conditions of operation.

SIGNATURES AND NOTIFICATIONS UNDER ARTICLE 15(1)

| Government of: | | | | Date of Signature | Date of deposit of notification |
|-----------------|---------|-------|-----|----------------------|---------------------------------|
| Austria | ••• | | | 23 Nov. 1971 | 9 Aug. 1972 |
| France | ••• | | | 23 Nov. 1971 | 3 Mar. 1972 |
| Germany, Fed. F | Rep. of | | | 23 Nov. 1971 | 26 June 1972 |
| Italy | ••• | | | 23 Nov. 1971 | |
| Netherlands | | | | 23 Nov. 1971 | |
| Spain | | • • • | ••• | 23 Nov. 1971 | 20 Sept. 1972 |
| United Kingdom | | • • • | | 16 June 1972 | 31 July 1972 |
| Yugoslavia | | | | 23 Nov. 1971 | 2 Feb. 1973 |
| | | | | | (date of notification) |