EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

- Measures of the Permanent Commission -

MEASURE N° 84/33

authorising the Agency to open negotiations and to conclude a Special Agreement with the Republic of Hungary for the provision of Advisory Services for the Modernisation of their Air Traffic Control System.

THE PERMANENT COMMISSION FOR THE SAFETY OF AIR NAVIGATION:

Having regard to the EUROCONTROL International Convention relating to Co-operation for the Safety of Air Navigation, as amended by the Protocol signed at Brussels on 12 February 1981, and in particular Articles 2.2.(a), 7.2. and 11.3. thereof;

on the proposal of the Committee of Management;

HEREBY TAKES THE FOLLOWING MEASURE:

1. The Agency is delegated the authority to open negotiations and to conclude with the Republic of Hungary the Agreement at annex to this Measure.

2. The Agreement shall be signed on behalf of the Organisation by the Director General of the Agency.

Done at Brussels on 04 OCT, 1996

Adamos ADAMIDES
President of the Permanent Commission
AGREEMENT

for the Provision of Advisory Services

by EUROCONTROL for

the Modernisation of the Air Traffic Control System

of the Republic of Hungary

The European Organisation for the Safety of Air Navigation (EUROCONTROL), established by the EUROCONTROL Convention relating to Co-operation for the Safety of Air Navigation as amended at Brussels in 1981, represented by its Director General, Mr. Y.Lambert,

hereinafter referred to as "EUROCONTROL",

and

The Air Traffic and Airport Administration of the Republic of Hungary / Légiforgalmi és Repülötéri Igazgatóság (LRI), itself represented by its Director General, Mr. T.Erdei,

hereinafter referred to as “the LRI”

Having regard to Articles 2.2 (a), 7.2, 11.3 and 12 of the EUROCONTROL International Convention relating to Co-operation for the Safety of Air Navigation, signed in Brussels on 13 December 1960, as amended by the Protocol signed in Brussels on 12 February 1981,

Having regard to Measure N° .......... of the Permanent Commission of ........., authorising the Agency to open negotiations and conclude agreements relating to the provision of Advisory Services by EUROCONTROL (EAS),

HAVE AGREED AS FOLLOWS:
Article 1

The subject of this Agreement is the provision by EUROCONTROL of advisory services for the Modernisation of the Hungarian Air Traffic Control System.

Article 2

2.1 The services to be provided by EUROCONTROL are detailed in the Specifications attached as Annex 1.

2.2 The services provided by EUROCONTROL in the framework of the present Agreement shall meet the requirements of the LRI and shall be in line with the EATCHIP and CIP objectives.

2.3 EUROCONTROL shall not, however, be held responsible for any decision in the operational, technical, financial and/or managerial field which has been taken by the LRI in the execution of its duties and/or prerogatives.

Article 3

EUROCONTROL shall be empowered to conclude any contracts required for the execution of the present Agreement, with the consent of the LRI, including outsourcing or sub-contracting in accordance with the Contract Regulations for the EUROCONTROL Organisation in force at the time.

Article 4

4.1 Costs incurred by EUROCONTROL for the implementation of the present Agreement shall be borne by the LRI and the necessary funds shall be made available to EUROCONTROL as provided for in Article 5 below.

4.2 The cost for the implementation of the present agreement has been estimated at 433.436 XEU. This estimate is based on the most realistic information available at the time of drawing up the Agreement and upon the current rules governing the costing of the supply of services by EUROCONTROL.

The cost estimate is detailed in Annex 2.

EUROCONTROL shall be free to modify the allotment of funds laid down in Annex 2 whenever required for the implementation of the present Agreement.

The above mentioned cost estimate shall be subject to revision in accordance with the conditions in paragraph 4.3 hereunder.

4.3 The following charging arrangements based on the principle of non-profit making shall apply:
4.3.1 The supply of EUROCONTROL’s effort and services shall be costed in accordance with the cost price reimbursement rules as approved by the competent authorities of EUROCONTROL and in conformity with the provisions of the Staff Regulations governing the officials of the EUROCONTROL Agency.

4.3.2 All costs related to the supply of equipment and/or effort and services by third parties under contract shall be charged accordingly. The charge shall be determined inclusive of value added tax, where applicable.

4.3.3 Managerial and administrative overhead costs will not be charged.

4.3.4 The charging arrangements as set out above are based on the rules governing the costing of the supply of EUROCONTROL’s services applicable at the date of signature of the present Agreement. In the event of any modification of these rules by EUROCONTROL’s competent authorities during the implementation of the present Agreement, the modified rules shall apply, the present Agreement being modified in accordance with Article 10 below.

Article 5

5.1 The funds shall be made available by the LRI to EUROCONTROL through a Special Annex to EUROCONTROL’s Budget.

5.2 EUROCONTROL shall request instalments every three months from the LRI as the implementation of the present Agreement progresses. Payment shall be made within a period of 60 days beginning from the date the invoice has been issued.

5.3 Any delay in the payment of the amounts due to paragraph 2 of this Article shall give rise to the payment of interest, on arrears calculated on the basis of the XEU rate. Each day’s delay beyond the periods mentioned in paragraph 2 of this Article shall be calculated as 1/360 of a year. The XEU interest rate shall be that applicable to the appropriate 3-month term deposits published by the Statistical Office of the European Communities (EUROSTAT) in its monthly journal “ECU-EMS Information”.

5.4 The LRI shall communicate to EUROCONTROL the appropriate payment services and EUROCONTROL shall communicate to the LRI the appropriate bank details.

5.5 The financial management of the present Agreement shall be executed in accordance with the provisions of the Financial Regulations of the EUROCONTROL Agency. A final statement of account shall be submitted to the LRI within a period of six months after the completion of the present Agreement.
5.6 The LRI shall be authorised to scrutinise the relevant accounts.

Article 6

6.1 EUROCONTROL staff assigned to the LRI for the execution of the present Agreement shall remain subject to the Staff Regulations governing the officials of the EUROCONTROL Agency.

6.2 The LRI shall provide office accommodation and normal administrative support including the use of the telephone and telefax facilities for official purposes.

Article 7

7.1 Each Contracting Party shall exonerate the other from all civil liability arising from loss, damage or bodily injury suffered by its staff as a result of the performance of the present Agreement, where such loss, damage or bodily injury is not due to grave negligence or deliberate omission or wrongful act on the part of the other Contracting Party or its staff.

7.2 Each Contracting Party shall indemnify the other and its staff against any action for compensation for loss, damage or bodily injury to third parties, including their own staff or any staff under contract, arising from the performance of the present Agreement, where such loss, damage or bodily injury is not due to grave negligence or deliberate omission or wrongful act on the part of the other Contracting Party or its staff.

7.3 Staff of each Contracting Party to the present Agreement shall observe the laws of the respective host country and the rules relating to the conduct of foreigners.

Article 8

8.1 Any copyrights, royalties and present or future legal rights relating to property - whether tangible or intellectual - accruing from the performance of the present Agreement, shall be the exclusive property of both Contracting Parties, who shall not dispose of them to third parties for commercial reasons without the prior and express written consent of the other.
8.2 All modifications to existing software and/or new software which may be developed as well as all documentation produced and/or modified, together with all general results and expert knowledge acquired during the implementation of the present Agreement, shall be the property of both Contracting Parties who shall be free to use them in the fulfilment of their proper tasks.

Article 9

9.1 Except with the prior consent of the other Contracting Party neither Contracting Party shall disclose any technical or financial detail of the present Agreement, or any specification, document and/or any other information acquired in connection with its implementation to any person other than a person employed or engaged by them, or to any other persons officially entitled to handle such information.

9.2 Any disclosure to any person permitted under paragraph 9.1. above shall be in strict confidence and shall extend so far only as may be necessary for the purpose of the present Agreement.

Article 10

10.1 The present Agreement may be modified only by an instrument in writing of equal formality, signed by the duly authorised representatives of both Contracting Parties.

10.2 Any modification to the Annexes, with the exception to the total estimated cost stated in Article 4.2 above and in Annex 2, which will require the formal approval of the duly authorised representatives of both Contracting Parties, may be made by formal exchange of letters between the Director General of the LRI and the Director General of EUROCONTROL.

10.3 The Annexes shall constitute an integral part to the present Agreement.

Article 11

In the event of a dispute arising between the Contracting Parties to the present Agreement concerning the interpretation or application thereof which cannot be settled through direct negotiation or in any other manner, the provisions of Article 31 of the amended EUROCONTROL International Convention relating to the Co-operation for the Safety of Air Navigation shall apply.
Article 12

12.1 The present Agreement shall enter into force on the day of its signature by both Contracting Parties.

12.2 The present Agreement shall remain in force until declaration by both Contracting Parties that its objective has been met successfully.

12.3 Notwithstanding the provision of paragraph 12.2 above, the present Agreement may be terminated by either Contracting Parties subject to giving a six months' prior written notice. The LRI remains liable for full payment of all costs incurred by EUROCONTROL up to the expiry of the present Agreement.

12.4 In case of emergency or war the provisions of the present Agreement may be suspended by either Contracting Party.

Done at

on

in two originals in the English language.

For the LRI For EUROCONTROL
The Director General The Director General

Mr. T. Erdei Mr. Y. Lambert
Operational and Technical Specification concerning the Special Agreement between the LRI and EUROCONTROL relating to the supply of Advisory Services for the Modernisation of the Air Traffic Control System of the Republic of Hungary

1. Introduction

1.1 This Annex describes the Advisory Services to be provided by EUROCONTROL and the required activities of the LRI related to the modernisation of the Hungarian ATC system. The modalities of Advisory Services to be provided are covered in general terms in paragraph 3.2.2 below. The activities under paragraphs 3.2.2.1 to 3.2.2.5 included have been performed, and were provided at no cost.

1.2 The activity in paragraph 3.2.2.6.a is still outstanding and will be covered under the same rule (no cost). The activities under paragraphs 3.2.2.6 (except subparagraph a) to 3.2.2.8 are being charged.

1.3 It is to be noted that the MATIAS Project will benefit from a number of EATCHIP activities to which EAS will contribute, however outside the scope of this Agreement. This relates to the development of a civil-military coordination concept, interface meetings with neighbouring Aviation Administrations, simulation preparation, all of which activities are conducted in the context of EATCHIP and CIP.

2. Scope of the Modernisation of the Hungarian ATC system

The modernisation of the Hungarian ATC system requires enhancement and/or development and implementation of the following system components:

a. Terminal radar system consisting of Primary and Monopulse Secondary Surveillance Radars;

b. New joint ATS Building;

c. Equipment, Data Processing, Communications and Support Systems for the new ATCC;

d. Training Facilities (Simulators) for Radar and Aerodrome Control;

e. Various Support Systems, e.g. AIS, Navigational Aids.
3. Principles of Division of Responsibility

3.1. LRI Activities

The LRI shall assume the execution of the following activities:

a. provision and preparation of the building, of the mechanical and electrical facilities as well as of the related general technical infrastructure, required for the ATC Centre;

b. provision of air/ground communications stations and of the links to the Centre and of the corresponding backup and control equipment in the Centre;

c. overall responsibility for the implementation of the facilities listed under 3.2.1.1 to 3.2.1.6;

d. in the context of the general agreed planning, making available the necessary operational and technical staff in time for cooperation with the EUROCONTROL team as well as for participation in the various training programmes;

e. handling of the necessary administrative formalities which are required for EUROCONTROL staff for carrying out their tasks (e.g. site access).

3.2 EUROCONTROL Activities

3.2.1 EUROCONTROL shall provide Advisory Services/Assistance in order to permit the LRI to assume their responsibilities, i.e. directly assisting the LRI in the system definition, implementation and testing, or the progressing of the implementation, as well as in the organisation of the running of the following systems:

3.2.1.1 Radar Surveillance System

New terminal area PR and SSR station as required by the LRI.

3.2.1.2 Automation

a. Radar data processing system for ACC and APP

i. multi-radar data processing equipment including all required peripherals;

ii. operator input and display system serving the required number of working positions (including one bright display for the TWR);
iii. all equipment required to interface with incoming digitised radar data.

b. Flight plan processing system for ACC and APP
i. a flight plan processing system for the ACC, APP and TWR, providing electronic flight progress data and input/output facilities;

ii. all equipment required to interface with incoming flight plan data.

3.2.1.3 Voice Communication System

a. a voice distribution system for air/ground communications, including remote control devices for all ACC/APP/TWR radio equipment required;

b. provision of a reliable R/T system;

c. a ground/ground communications system providing circuit switching capabilities between the different working positions in the ACC, APP and TWR on the one hand, and with adjacent units on the other hand.

3.2.1.4 Ancillary Systems

These sub-systems comprise equipment such as Information Display System, Clock System and Recording and Replay Systems which are usually required for the operation of the ACC, APP and TWR.

3.2.1.5 Radar Simulator for Controller Training

3.2.1.6 Ground Navigation Aids

3.2.2 In particular, EUROCONTROL's Advisory Services/Assistance shall be given within the following frame:

3.2.2.1 Operational and Engineering Plan

Assistance to provide an ATC system definition comprising

a. a complete and detailed list of all operational and technical functions of data to be processed and the related telecommunications and data transmission requirements;

b. the basic performance requirements for the system components mentioned in paragraph 2 above and definition of the interfaces between these and the main system;
c. an assessment of the telecommunications environment as necessary;

3.2.2.2 Radar Siting

Concerning the new PR/MSSR station to be implemented, theoretical coverage diagrams, a site survey and site selection will be made.

3.2.2.3 Tender Specifications

For each equipment, detailed technical specifications will be established. These specifications will be based on existing EUROCONTROL Specifications, adapted to the requirements laid down in the system definition.

3.2.2.4 Call for Tender

Assistance will be given in the following activities:

a. establishment of lists of possible suppliers;

b. drawing up of administrative and financial conditions for tender;

c. clarification of queries raised by the Tenderers.

3.2.2.5 Evaluation of Tenders

Assistance will be given for the detailed operational and technical analysis of the proposals received and the choice of the supplier. This activity includes all discussions with the supplier required to clarify the proposal, and the elaboration of final Contract Specifications.

3.2.2.6 Contract Management

Assistance will cover all operational, technical and contractual actions necessary to ensure the proper and timely production of the system. The main activities are:

a. production of Detailed Functional Specifications;

b. coordination and monitoring of the integration and interfacing of all sub-systems.

c. regular Progress Meetings with the Supplier to supervise the execution of the Contract as scheduled and to solve any problem arising;

d. review of all documents contained in the CDRL (Contract Deliveries Requirements List);
e. FAT;
f. SAT;
g. assessment of penalty cases;
h. all actions required with the supplier during the guarantee period.

3.2.2.7 Final bringing into Operations of the System, Evaluation and Testing Out

Assistance is given to undertake all measures required to put the new system into operation, i.e. to plan, organise and conduct the system evaluation tasks in order to verify the system performance requirements. This covers a trial period with technical and operational inputs, and an Operational Evaluation period before the system is released for operational use. During this period the SAT results will be evaluated as a condition to start the operational utilisation of the system, including the safety check out before release for operations. This activity will also cover parameter adjustments and the implementation of modifications that may be necessary, in order to provide optimum performance of the system.

3.2.2.8 Overall Coordination and Monitoring

This activity is devoted to coordination and monitoring of all project activities, in particular the integration and interfacing of all sub-systems and the participation in the regular Progress Meetings with the Supplier to supervise the execution of the Contract.

3.2.2.9 A dedicated EAS Coordinator will be stationed at the premises of the LRI in Budapest to conduct the daily coordination between the LRI and EUROCONTROL during the development and implementation period of the Hungarian Modernisation Project and, on behalf of the Steering Group, to monitor the Project development.

3.2.3 The above activities will take into consideration the work already undertaken by the LRI in the fields of upgrading of radars, radar data transmission and radar data processing/display.

3.2.4. Whenever in the course of the provision of the Advisory Service, EUROCONTROL will use specific methods to calculate or evaluate the performance of systems or system components the particular method used and the results obtained will be made available to the LRI.
4. **Organisation**

4.1. **Organisation of System Implementation**

In order to permit the project to be realised in an efficient and coherent manner, a Working Structure will be established.

4.1.1 **Contracting Parties**

a. (LRI), Director General of the Air Traffic and Airport Administration/Légiforgalmi és Repülőtéri Igazgatóság

b. EUROCONTROL, Director General.

4.1.2 **Executive Bodies**

a. **Steering Group**

Senior officials at Director level of the LRI and of EUROCONTROL, including the special EAS Advisor to the LRI. Its mandate is to:

i. define and review the overall work programme;

ii. ensure general supervision of the execution of this Agreement;

iii. set-up ATC Implementation Working Groups as required and supervise progress of their work;

b. **Implementation Working Groups**

Two Working Groups are established: the Operational Implementation Group (OIG) and the Technical Implementation Group (TIG).

Experts of the LRI and of EUROCONTROL will cooperate in these two Working Groups, providing their expertise in the following fields:

i. radar and digital extraction

ii. radar data processing

iii. flight plan processing

iv. telecommunications

v. civil-military coordination
vi. support systems
vii. software control and testing
viii. controller training
ix. project management and quality assurance

c. EAS Coordinator

Responsible for the daily coordination LRI - EAS and for the monitoring of the Project.

4.1.3 The Implementation Working Groups will carry out the bulk of the work in conjunction with the planning and implementation of the new systems. In particular they perform the following tasks:

i. define the system on the basis of operational specifications;

ii. prepare tender documents;

iii. evaluate tenders and produce contract specifications;

(Note: i to iii are already performed)

iv. produce detailed functional specifications;

v. supervise system production and installation on-site;

vi. conduct functional tests and technical evaluation for provisional acceptance;

vii. conduct technical and operational evaluations;

viii. bring the system into operational service.

4.2 Principles of Cooperation and Coordination

4.2.1 Problem analysis, definition of system parameters and interfaces will be carried out in close co-operation with the LRI, it being understood that the major part of the work concerning system definition and specification will be carried out at EUROCONTROL Headquarters in Brussels.
EUROCONTROL and the LRI will hold regular meetings of all Groups either in Brussels or in Hungary, at intervals determined by the progress and outstanding activities in each Group, as follows:

a. Steering Group; normally twice a year;

b. Implementation Working Groups: as and when required.
Cost estimate concerning the Special Agreement between the LRI and Eurocontrol relating to the supply of Advisory Services for the Modernisation of the Air Traffic Control System of the Republic of Hungary

The cost estimate given below is established in ECU on the basis of the most realistic estimate of manpower effort to be spent, of all costs to be incurred by Eurocontrol for the performance of this Agreement and in accordance with the charging criteria currently in force.

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