

EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

"EUROCONTROL"

- Measures of the Permanent Commission -

MEASURE N° 04/103

concerning the approval of a new Memorandum of Co-operation between EUROCONTROL and the Federal Aviation Administration of the Department of Transportation of the United States of America (FAA) and delegating authority to the Agency to conclude annexes and appendixes thereto

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, amended by the Protocol signed at Brussels on 12 February 1981, and in particular Articles 2.1, 7.2, 11.3 and 12 thereof;

Having regard to the Memorandum of Cooperation of 23 June 1992 between the Federal Aviation Administration of the Department of Transportation of the United States of America (FAA) and EUROCONTROL;

Considering the need to replace it by a new Memorandum, which would extend the scope of co-operation to analysis and exchanges of information in relation to ATM operations and would simplify the working structure;

Considering that it is desirable to facilitate the smooth functioning of the new Memorandum by delegating to the Agency the authority to conclude the annexes and appendices to the new Memorandum;

On the proposal of the Director General and the Provisional Council,

TAKES THE FOLLOWING MEASURE:

Article 1

The Memorandum of Co-operation and the five Annexes attached thereto, reproduced at Annex to this Measure, are hereby approved.

Article 2

1. The Memorandum and the five Annexes shall be signed on behalf of the Organisation by the Director General of the Agency.

2. Subject to its informing the Permanent Commission accordingly, the Agency shall be delegated authority to conclude, in the name of the Organisation, further annexes and appendices to the Memorandum.

Done at Brussels on **20.09.04**

P. LUNARDI
President of the Commission

A handwritten signature in black ink, appearing to read 'P. Lunardi', written in a cursive style.

MEMORANDUM OF COOPERATION NAT-I-3454

BETWEEN THE

**FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA**

AND THE

**EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)**

WHEREAS, the Federal Aviation Administration of the Department of Transportation of the United States of America (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) have a common interest in the development of international air traffic control systems; and

WHEREAS, Section 40104 of title 49 of the U.S. Code directs the Administrator of the FAA to encourage the development of civil aeronautics and the safety of air commerce in the U.S. and abroad; and

WHEREAS, Section 44505 of title 49 of the U.S. Code directs the Administrator of the FAA to develop, modify, test, and evaluate systems, procedures, facilities, and devices to meet the needs for safe and efficient air navigation and air traffic control; and

WHEREAS, the FAA is authorized to enter into co-operative agreements to achieve these objectives; and

WHEREAS, Article 2, paragraph 1, Article 6, paragraph 3, Article 11, paragraph 3 and Article 12 of the International Convention Relating to Cooperation for the Safety of Air Navigation, signed at Brussels December 13, 1960, as amended by the Protocol signed at Brussels February 12, 1981, authorizes EUROCONTROL to conclude agreements necessary for the performance of the tasks of the Organization;

Having regard to Measure No. xxx of the Permanent Commission concerning the approval of the Memorandum of Cooperation between the Federal Aviation Administration and EUROCONTROL and authorising the Director General to sign the said Memorandum of Cooperation on behalf of the Organisation;

NOW THEREFORE, the FAA and EUROCONTROL hereinafter referred to as the Parties, agree to mutually cooperate, in accordance with the following understanding and arrangements.

ARTICLE I – OBJECTIVE

- A. This Memorandum of Cooperation (hereinafter referred to as “MOC “) establishes the terms and conditions for mutual cooperation in the promotion and development of civil aviation.
- B. For this purpose, the Parties may, subject to the availability of appropriated funds and necessary resources, provide personnel, resources, and related services to cooperate to the extent called for in the annexes and appendices to this MOC.
- C. This objective may be achieved by cooperation in any of the following areas:
 - 1. The exchange of information regarding the operational domain and research program activities such as those concerning procedures, operational safety, capacity enhancements, research results or publications. This includes such activities as data exchanges in support of ATM performance, Aeronautical Information, Air Traffic Flow Management and spectrum management.
 - 2. The execution of joint analyses.
 - 3. The exchange of scientific, technical and/or operational personnel.
 - 4. The coordination of research and development initiatives and projects, and their execution based on shared effort.
 - 5. The loan and/or purchase of specific equipment and systems to meet the objective of this MOC.
 - 6. The joint organization of symposia, conferences or technical interchange meetings.

ARTICLE II – IMPLEMENTATION

- A. This MOC shall be implemented through annexes and appendices, which shall form part of this MOC when mutually agreed by both Parties. Such annexes and appendices shall contain a description of any cooperation or assistance to be performed, including the personnel and resources required to accomplish the tasks, the estimated costs, implementation plans, and duration.

- B. The Parties shall meet periodically to review the general functioning of the MOC and examine potential areas for further cooperation. A joint review of the status of ongoing activities, which are the subject of annexes and appendices to this MOC, shall be conducted per annex and related appendix at such intervals as mutually agreed by the Parties.
- C. The designated offices for the coordination and management of this MOC, and where all requests for services under this MOC should be made, are:

1. For the FAA:

Federal Aviation Administration
Office of International Aviation, AIA-300
800 Independence Ave., S.W.
Washington, D.C. 20591

Telephone: (202) 385 8885
Facsimile: (202) 267 5306

2. For EUROCONTROL:

European ATM Systems and Convergence Business Division
SD/ESC
Rue de la Fusée, 96
Brussels, B-1130
BELGIUM

Telephone: +32 2 729 33 11
Facsimile: +32 2 729 90 83

- D. Technical program liaison for specific activities shall be established as indicated in the annexes and appendices to this MOC.

ARTICLE III - EXCHANGE OF PERSONNEL

The Parties may exchange scientific, technical or operational personnel as required to pursue the activities described in the annexes and appendices to this MOC, in accordance with their respective legal requirements. The terms and conditions for all such exchanges shall be defined in the annexes and appendices and be for limited periods of time. Such personnel will accomplish work as mutually agreed upon by the Parties, as indicated in the annexes and appendices. Such personnel (including specialized research institute or industry personnel) may be from the FAA, EUROCONTROL, or supporting government agencies or contractors, as mutually agreed.

ARTICLE IV - FUNDING

- A. Unless otherwise specified in the annexes or appendices to this MOC, each Party shall assume the cost of work to be done by it.
- B. If the FAA or EUROCONTROL elect to utilize specialized institutes or industry to accomplish work under this MOC, a description, costs and funding (including co-financing) of such projects will be detailed in the relevant annex or appendix to this MOC, updated as needed and agreed to by the Parties.
- C. MOC number NAT-I-3454 has been assigned by the FAA to identify this cooperative agreement and shall be referenced in all correspondence related to this MOC.

ARTICLE V - EQUIPMENT AND LOAN ARRANGEMENTS

Equipment may be loaned by one party to the other as specified under an annex or appendix to this MOC. Any equipment loaned shall be identified in the appropriate annex or appendix. The following general provisions shall apply to all loans of equipment unless otherwise specified in the annexes or appendices:

- A. The lender shall identify the value of the equipment, and at its own expense, transport the equipment to the borrower's designated location.
- B. The borrower shall assume custody and possession of said equipment upon its delivery to the designated receiving point.
- C. The borrower shall be responsible for installation of equipment at the borrower's location.
- D. Upon completion of use or expiration or termination of the pertinent annex, appendix, or MOC, the borrower shall return the equipment to the lender at the borrower's expense. The equipment shall remain in the custody of the borrower until returned to the lender's designated receiving point.
- E. The party shipping the equipment shall assist in securing any export licenses and other documents required for the shipment of the equipment.
- F. The lender shall assist the borrower in locating sources of supplies for common items and parts peculiar that are not readily available to the borrower.
- G. The borrower shall place and install equipment in accordance with the agreed work plan, as set out in the relevant annex or appendix.

- H. The borrower shall operate and maintain the equipment in proper condition during the period of the loan, shall ensure the continued operability of the equipment, and shall permit inspection by the lender at any reasonable time.
- I. In the event of loss or damage of any equipment loaned under this MOC, and for which the borrower has assumed custody and possession, the borrower shall compensate the lender for value (as identified by the lender in paragraph 1 of this Article) of the lost or damaged equipment.
- J. Any equipment loaned under this MOC shall be solely for research or developmental purposes and shall not be used in any way whatsoever for active civil aviation or other operational use, unless specifically provided for in the annex or appendix.
- K. Any transfers of equipment, including any transfers of technology, pursuant to this MOC shall be subject to the applicable laws and policies of the parties.

ARTICLE VI - RIGHTS

Each Party shall provide the other Party with all information necessary for the co-operation and the implementation of the activities agreed under the annexes and appendices, subject to its own rules on exchange of information. Neither Party shall release any information or material pertinent to the tasks, or related to the agreed program, to third parties other than contractors or subcontractors engaged in the program. However, information or material may be released if its release is required by applicable law, or if both Parties otherwise agree to the release of such information or material.

ARTICLE VII - LIABILITY

- A. Each Party to this MOC shall waive any and all claims against the other Party for all loss, damage or injury including but not limited to damage to or loss of hardware or other equipment used to operate software exchanged, resulting from the activities under this MOC, its annexes or appendices.
- B. In order to mitigate any potential third party liability, the Parties agree that all activities undertaken pursuant to this MOC, its annexes or appendices shall be undertaken with due professional care and that every reasonable effort shall be made to minimize potential risks and to fulfill all safety and oversight requirements.
- C. EUROCONTROL agrees to defend any suit brought in any jurisdiction other than the United States or pay for the defense of any suit brought in the United States against the

Government of the United States, the FAA, or any instrumentality, officer or employee of the United States arising out of the activities performed under this MOC, its annexes or appendices. EUROCONTROL further agrees to hold harmless the Government of the United States, the FAA, or any instrumentality, officer or employee of the United States against any claim by EUROCONTROL or by third parties for personal injury, death or property damage arising out of the work performed under the above-mentioned MOC, its annexes or appendices.

- D. The Parties agree that the provisions of Paragraph C shall not be applicable to potentially high-value liabilities arising from activities performed under this MOC, its annexes or appendices. In such cases, the Parties agree to determine jointly what arrangements shall apply in respect of liability. This paragraph shall apply at the request of EUROCONTROL for any specific appendix, having regard to the outcome of the mitigating work to be carried out under Paragraph B. Any such determination shall be made by the Parties and documented in the respective appendix to the annex to this MOC. Where no such determination is made, on completion of the activities foreseen under Paragraph B, the liability provisions of Paragraph C shall apply.

ARTICLE VIII - AMENDMENTS

This MOC or its annexes or appendices may be amended by mutual consent of the Parties. The details of any such amendment shall be memorialized by written agreement signed by both Parties.

ARTICLE IX - RESOLUTION OF DISAGREEMENTS

Any disagreement regarding the interpretation or application of this MOC or its annexes and appendices shall be resolved by consultations between the Parties and shall not be referred to any international tribunal or third party for settlement.

ARTICLE X - ENTRY INTO FORCE AND TERMINATION

- A. This MOC shall enter into force on the date of the last signature and shall remain in force until terminated.
- B. Either Party may terminate this MOC or its annexes or appendices at any time by providing sixty (60) days notice in writing to the other Party.
- C. This MOC shall supersede the FAA/EUROCONTROL MOC AIA/CA-57 signed June 23, 1992, its annexes and its appendices.

ARTICLE XI – AUTHORITY

The Parties agree to the provisions of this MOC as indicated by the signatures of their duly authorized representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____

ANNEX 1 TO
MEMORANDUM OF COOPERATION NAT-I-3454
BETWEEN THE
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA
AND THE
EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)

** Air Traffic Management (ATM) Research **

ARTICLE I — PURPOSE

This Annex to Memorandum of Co-operation NAT-I-3454 (the MOC) sets forth the terms and conditions under which the Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) may cooperate in basic ATM research.

ARTICLE II — SCOPE OF WORK

- A. The work proposed under this Annex shall relate to innovative ATM research. The work may include, but is not limited to:
1. Researching innovative methods in support of air traffic activities contained in the other Annexes to this MOC;
 2. Researching new operational applications and processes; and,
 3. Evaluating and validating concepts for technology use and for the changing roles of human operators.
- B. The parties shall produce, as necessary, joint reports describing concepts of use, evaluations, validation exercises, comparative studies related to the technical and operational aspects of ATM. Evaluations and validations may use a range of tools such as simulations and live trials.

ARTICLE III — IMPLEMENTATION

- A. All work provided under this Annex shall be specified in appendices which, when signed by the duly authorized representatives of the parties, shall become part of this Annex.
- B. Each appendix will be numbered sequentially and shall contain a description of the work to be performed by the parties, the location and planned duration of the work, the personnel and other resources required to accomplish the work, and the estimated costs.

ARTICLE IV — FINANCIAL PROVISIONS

- A. Funding of work to be performed under this Annex shall be provided in accordance with Articles I.B and IV of the MOC.
- B. Unless otherwise specified in the appendices to this Annex, each party shall assume the cost of work to be done by it, including the expenses incurred by its representatives.

ARTICLE V — POINTS OF CONTACT

- A. The designated offices for the coordination and management of this Annex are:

For the FAA: The Office of International Aviation, AIA-300
800 Independence Avenue, S.W.
Washington, DC 20591, USA
Telephone: +1 202-267-3213
Fax: +1 202-267-5032

For EUROCONTROL: European ATM Systems & Convergence Business Division
SD/ESC - EUROCONTROL
Rue de la Fusée, 96
B-1130 Brussels- Belgium
Telephone: +32 2 729 33 11
Fax: +32 2 729 90 83

- B. Technical program liaison for specific activities shall be established as indicated in the appendices to this Annex.

ARTICLE VI — ENTRY INTO FORCE AND TERMINATION

This Annex shall enter into force on the date of the last signature and shall remain in force until terminated in accordance with Article X of the MOC. Termination of this Annex shall terminate all appendices subsequently concluded by the parties pursuant to this Annex.

ARTICLE VII — AUTHORITY

The FAA and EUROCONTROL agree to the provisions of this Annex as indicated by the signatures of their duly authorised representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____

ANNEX 2 TO
MEMORANDUM OF COOPERATION NAT-I-3454
BETWEEN THE
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA
AND THE
EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)

** Strategic air traffic management (ATM) analysis **

ARTICLE I — PURPOSE

This Annex to Memorandum of Co-operation NAT-I-3454 (the MOC) sets forth the terms and conditions under which the Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) may cooperate in strategic ATM issues.

ARTICLE II — SCOPE OF WORK

- A. The work proposed under this Annex shall relate to strategic air traffic ATM analysis. The work may include, but is not limited to:
4. Establishing ATM system definitions;
 5. Developing ATM operational concepts and identifying functional requirements;
 6. Analyzing operational requirements and functional specifications for a future ATM system, including architecture component modelling for the future ATM system(s);
 7. Analyzing and evaluating ATM system performance for current and future systems and architectures. Developing system performance metrics and targets including the definition(s) of required performance;
 8. Evaluating the interplay between aviation and other modes of transportation and analyzing the impact of multi-modal transportation on ATM systems;
 9. Conducting architectural comparisons of ATM systems; and

10. Developing common validation and verification methodologies for operational concepts, new ATM system requirements, and allocation of requirements.
- B. The parties shall produce, as necessary, reports on the current ATM situation; plans for the new system; common ATM system definitions; common validation and verification strategy, method and tools; common models; validation of air traffic operational concepts; functional definitions for the future ATM system and its architecture; and, performance metrics and targets for the ATM system.

ARTICLE III — IMPLEMENTATION

- A. All work provided under this Annex shall be specified in appendices which, when signed by the duly authorized representatives of the parties, shall become part of this Annex.
- B. Each appendix will be numbered sequentially and shall contain a description of the work to be performed by the parties, the location and planned duration of the work, the personnel and other resources required to accomplish the work, and the estimated costs.

ARTICLE IV — FINANCIAL PROVISIONS

- A. Funding of work to be performed under this Annex shall be provided in accordance with Articles I.B and IV of the MOC.
- B. Unless otherwise specified in the appendices to this Annex, each party shall assume the cost of work to be done by it, including the expenses incurred by its representatives.

ARTICLE V — POINTS OF CONTACT

- A. The designated offices for the coordination and management of this Annex are:

For the FAA: The Office of International Aviation, AIA-300
800 Independence Avenue, S.W.
Washington, DC 20591, USA
Telephone: +1 202-267-3213
Fax: +1 202-267-5032

For EUROCONTROL: European ATM Systems & Convergence Business Division
SD/ESC - EUROCONTROL
Rue de la Fusée, 96
B-1130 Brussels- Belgium
Telephone: +32 2 729 33 11
Fax: +32 2 729 90 83

- B. Technical program liaison for specific activities shall be established as indicated in the appendices to this Annex.

ARTICLE VI — ENTRY INTO FORCE AND TERMINATION

This Annex shall enter into force on the date of the last signature and shall remain in force until terminated in accordance with Article X of the MOC. Termination of this Annex shall terminate all appendices subsequently concluded by the parties pursuant to this Annex.

ARTICLE VII — AUTHORITY

The FAA and EUROCONTROL agree to the provisions of this Annex as indicated by the signatures of their duly authorised representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____

ANNEX 3 TO
MEMORANDUM OF COOPERATION NAT-I-3454
BETWEEN THE
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA
AND THE
EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)

** Technical Harmonisation **

ARTICLE I — PURPOSE

This Annex to Memorandum of Co-operation NAT-I-3454 (the MOC) sets forth the terms and conditions under which the Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) may cooperate in technical harmonisation.

ARTICLE II — SCOPE OF WORK

- A. The work proposed under the terms of this Annex shall relate to technical harmonisation. The work may include, but is not limited to:
11. Analyzing and reviewing new technologies to establish specific implementation standards including performance criteria;
 12. Cooperating and coordinating the development of proposed standards and recommended practices (SARPS) for the International Civil Aviation Organization (ICAO);
 13. Defining ATM information and exchange protocol standards including controller and pilot decision support tools;
 14. Developing communication standards (air-air, air-ground, ground-ground);
 15. Developing navigation standards (terrestrial and satellite); and
 16. Developing surveillance standards (air-ground and air-air).

- B. The parties shall produce, as necessary, a common list of ATM system performance criteria; common ATM system information data standards and exchange protocols; joint proposals to ICAO on communication, navigation and surveillance standards; and, functional definition of the ATM system support tools.

ARTICLE III — IMPLEMENTATION

- A. All work provided under this Annex shall be specified in appendices which, when signed by the duly authorized representatives of the parties, shall become part of this Annex.
- B. Each appendix will be numbered sequentially and shall contain a description of the work to be performed by the parties, the location and planned duration of the work, the personnel and other resources required to accomplish the work, and the estimated costs.

ARTICLE IV — FINANCIAL PROVISIONS

- A. Funding of work to be performed under this Annex shall be provided in accordance with Articles I.B and IV of the MOC.
- B. Unless otherwise specified in the appendices to this Annex, each party shall assume the cost of work to be done by it, including the expenses incurred by its representatives.

ARTICLE V — POINTS OF CONTACT

- A. The designated offices for the coordination and management of this Annex are:

For the FAA: The Office of International Aviation, AIA-300
800 Independence Avenue, S.W.
Washington, DC 20591, USA
Telephone: +1 202-267-3213
Fax: +1 202-267-5032

For EUROCONTROL: European ATM Systems & Convergence Business Division
SD/ESC - EUROCONTROL
Rue de la Fusée, 96
B-1130 Brussels- Belgium
Telephone: +32 2 729 33 11
Fax: +32 2 729 90 83

- B. Technical program liaison for specific activities shall be established as indicated in the appendices to this Annex.

ARTICLE VI — ENTRY INTO FORCE AND TERMINATION

This Annex shall enter into force on the date of the last signature and shall remain in force until terminated in accordance with Article X of the MOC. Termination of this Annex shall terminate all appendices subsequently concluded by the parties pursuant to this Annex.

ARTICLE VII — AUTHORITY

The FAA and EUROCONTROL agree to the provisions of this Annex as indicated by the signatures of their duly authorised representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____

ANNEX 4 TO

MEMORANDUM OF COOPERATION NAT-I-3454

BETWEEN THE

**FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA**

AND THE

**EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)**

** Operational Harmonisation **

ARTICLE I — PURPOSE

This Annex to Memorandum of Co-operation NAT-I-3454 (the MOC) sets forth the terms and conditions under which the Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) may cooperate in operational harmonisation.

ARTICLE II — SCOPE OF WORK

- A. The work proposed under the terms of this Annex shall relate to operational harmonisation. The work may include, but is not limited to:
17. Developing ATM procedures, review of existing procedures, and analyzing the impact on changes to existing procedures;
 18. Exchanging information on ATM programs, plans and data;
 19. Exchanging traffic flow management initiatives and information;
 20. Developing criteria for the deployment and operational use of technologies, ATM information, and related performance;
 21. Developing criteria for establishing performance measures for daily and retrospective analysis of operations;
 22. Using existing models (among which those developed in Annex 1 of this MOC) to support new or modified procedures and identifying their potential impact; and
 23. Analyzing ATM operational errors and techniques, including related human factor issues, to manage and reduce errors.

- B. The parties shall produce, as necessary, new or updated ATM procedures and/or terminology; joint proposals to ICAO on procedures and terminology; criteria and performance definition for operational use of technologies; impact assessments of the new procedures or proposed changes to procedures; analysis reports on human factors issues and proposals for mitigation strategies and common human factors handling techniques; data sets to be exchanged between both parties; and, requirements for upgrades or new functions in the ATM models.

ARTICLE III — IMPLEMENTATION

- A. All work provided under this Annex shall be specified in appendices which, when signed by the duly authorized representatives of the parties, shall become part of this Annex.
- B. Each appendix will be numbered sequentially and shall contain a description of the work to be performed by the parties, the location and planned duration of the work, the personnel and other resources required to accomplish the work, and the estimated costs.

ARTICLE IV — FINANCIAL PROVISIONS

- A. Funding of work to be performed under this Annex shall be provided in accordance with Articles I.B and IV of the MOC.
- B. Unless otherwise specified in the appendices to this Annex, each party shall assume the cost of work to be done by it, including the expenses incurred by its representatives.

ARTICLE V — POINTS OF CONTACT

- A. The designated offices for the coordination and management of this Annex are:

For the FAA: The Office of International Aviation, AIA-300
800 Independence Avenue, S.W.
Washington, DC 20591, USA
Telephone: +1 202-267-3213
Fax: +1 202-267-5032

For EUROCONTROL: European ATM Systems & Convergence Business Division
SD/ESC - EUROCONTROL
Rue de la Fusée, 96
B-1130 Brussels- Belgium
Telephone: +32 2 729 33 11
Fax: +32 2 729 90 83

- B. Technical program liaison for specific activities shall be established as indicated in the appendices to this Annex.

ARTICLE VI — ENTRY INTO FORCE AND TERMINATION

This Annex shall enter into force on the date of the last signature and shall remain in force until terminated in accordance with Article X of the MOC. Termination of this Annex shall terminate all appendices subsequently concluded by the parties pursuant to this Annex.

ARTICLE VII — AUTHORITY

The FAA and EUROCONTROL agree to the provisions of this Annex as indicated by the signatures of their duly authorised representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____

ANNEX 5 TO
MEMORANDUM OF COOPERATION NAT-I-3454
BETWEEN THE
FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA
AND THE
EUROPEAN ORGANIZATION FOR THE
SAFETY OF AIR NAVIGATION (EUROCONTROL)

** Harmonizing Safety and Environmental Factors **

ARTICLE I — PURPOSE

This Annex to Memorandum of Co-operation NAT-I-3454 (the MOC) sets forth the terms and conditions under which the Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL) may cooperate in harmonizing safety and environmental factors.

ARTICLE II — SCOPE OF WORK

- A. The work proposed under the terms of this Annex shall relate to methods for addressing safety management; ATM security; and environmental factors of air traffic management (ATM) activities. The work may include, but is not limited to:
24. Exchanging information on safety, security and environment;
 25. Harmonizing methods and standards for discharging safety, security, and environmental responsibilities;
 26. Defining and analyzing safety levels, security levels and environmental impact levels;
 27. Developing common analyses and monitoring methods for safety and security; and
 28. Developing common safety management techniques and implementation plans.
- B. The parties shall produce, as necessary, comparison and evaluation reports on ATM safety management and ATM security; comparison and evaluation reports on

environmental factors; common analysis and monitoring methods/techniques respectively for safety, security and environment; common management methods/techniques respectively for ATM safety, ATM security and environment; reports on the definition of required safety level targets; reports on the definition of required environmental impact level targets; and, definition of common techniques and requirements on ATM safety management, ATM security and environmental impact.

ARTICLE III — IMPLEMENTATION

- A. All work provided under this Annex shall be specified in appendices which, when signed by the duly authorized representatives of the parties, shall become part of this Annex.
- B. Each appendix will be numbered sequentially and shall contain a description of the work to be performed by the parties, the location and planned duration of the work, the personnel and other resources required to accomplish the work, and the estimated costs.

ARTICLE IV — FINANCIAL PROVISIONS

- A. Funding of work to be performed under this Annex shall be provided in accordance with Articles I.B and IV of the MOC.
- B. Unless otherwise specified in the appendices to this Annex, each party shall assume the cost of work to be done by it, including the expenses incurred by its representatives.

ARTICLE V — POINTS OF CONTACT

- A. The designated offices for the coordination and management of this Annex are:

For the FAA: The Office of International Aviation, AIA-300
800 Independence Avenue, S.W.
Washington, DC 20591, USA
Telephone: +1 202-267-3213
Fax: +1 202-267-5032

For EUROCONTROL: European ATM Systems & Convergence Business Division
SD/ESC - EUROCONTROL
Rue de la Fusée, 96
B-1130 Brussels- Belgium
Telephone: +32 2 729 33 11
Fax: +32 2 729 90 83

- B. Technical program liaison for specific activities shall be established as indicated in the appendices to this Annex.

ARTICLE VI — ENTRY INTO FORCE AND TERMINATION

This Annex shall enter into force on the date of the last signature and shall remain in force until terminated in accordance with Article X of the MOC. Termination of this Annex shall terminate all appendices subsequently concluded by the parties pursuant to this Annex.

ARTICLE VII — AUTHORITY

The FAA and EUROCONTROL agree to the provisions of this Annex as indicated by the signatures of their duly authorised representatives.

FEDERAL AVIATION ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THE EUROPEAN ORGANIZATION
FOR THE SAFETY OF
AIR NAVIGATION (EUROCONTROL)

BY: _____
Marion C. Blakey

BY: _____
Victor M. Aguado

TITLE: Administrator

TITLE: Director General

DATE: _____

DATE: _____