

---

**MEMORANDUM OF UNDERSTANDING  
FOR THE COOPERATIVE PRODUCTION  
OF THE  
EVOLVED SEASPARROW MISSILE**



**"ESSM PRODUCTION MOU"  
DATED 26 DECEMBER 1997**

---

MEMORANDUM OF UNDERSTANDING FOR THE  
COOPERATIVE PRODUCTION OF THE  
EVOLVED SEASPARROW MISSILE

“ESSM PRODUCTION MOU”



Certified to be a true copy of the original.

*Fred Beer* 12 Feb 1998  
Fred Beer, Navy IPO-03B1 (date)

**MEMORANDUM OF UNDERSTANDING FOR THE COOPERATIVE  
PRODUCTION OF THE EVOLVED SEASPARROW MISSILE**

AMONGST

THE MINISTER OF DEFENCE ON BEHALF OF THE DEPARTMENT OF DEFENCE OF  
AUSTRALIA

AND

THE MINISTER OF NATIONAL DEFENCE OF THE KINGDOM OF BELGIUM

AND

THE MINISTER OF NATIONAL DEFENCE OF CANADA

AND

THE MINISTER OF DEFENCE OF THE KINGDOM OF DENMARK

AND

THE FEDERAL MINISTER OF DEFENSE OF THE FEDERAL REPUBLIC OF GERMANY

AND

THE MINISTER OF DEFENCE OF GREECE

AND

THE MINISTER OF DEFENCE OF ITALY

AND

THE MINISTER OF DEFENCE OF THE KINGDOM OF THE NETHERLANDS

AND

THE MINISTER OF DEFENCE OF THE KINGDOM OF NORWAY

AND

THE MINISTER OF DEFENSE OF PORTUGAL

AND

THE MINISTER OF DEFENCE OF THE KINGDOM OF SPAIN

AND

THE MINISTER OF DEFENCE OF TURKIYE

AND

THE SECRETARY OF DEFENSE ON BEHALF OF THE DEPARTMENT OF DEFENSE OF THE  
UNITED STATES OF AMERICA

## TABLE OF CONTENTS

	<u>PAGE</u>
PREAMBLE	1
SECTION 1 -- DEFINITIONS	2
SECTION 2 -- OBJECTIVES	6
SECTION 3 -- SCOPE OF WORK	7
SECTION 4 -- MANAGEMENT (ORGANIZATION AND RESPONSIBILITY)	8
SECTION 5 -- FINANCIAL PROVISIONS	13
SECTION 6 -- CONTRACTUAL PROVISIONS	16
SECTION 7 -- WORK SHARING	18
SECTION 8 -- ESSM PRODUCTION PHASE EQUIPMENT	19
SECTION 9 -- DISCLOSURE AND USE OF ESSM PRODUCTION PHASE INFORMATION	20
SECTION 10 -- CONTROLLED UNCLASSIFIED INFORMATION	25
SECTION 11 -- VISITS TO ESTABLISHMENTS	26
SECTION 12 -- SECURITY	27
SECTION 13 -- THIRD PARTY SALES AND TRANSFERS	29
SECTION 14 -- CLAIMS AND LIABILITY	31
SECTION 15 -- ACCESSION OF NON-CONTRIBUTING PARTICIPANTS	32
SECTION 16 -- PARTICIPATION OF ADDITIONAL NATIONS	33
SECTION 17 -- CUSTOMS DUTIES, TAXES, AND SIMILAR CHARGES	34
SECTION 18 -- SETTLEMENT OF DISPUTES	35
SECTION 19 -- AMENDMENTS	36
SECTION 20 -- WITHDRAWAL, TERMINATION, ENTRY INTO EFFECT, AND DURATION	37
ANNEX A -- FINANCIAL MATTERS	43
ANNEX B -- NSPO ESSM PRODUCTION PHASE STAFFING REQUIREMENTS	64

## PREAMBLE

The Minister of Defence on behalf of the Department of Defence of Australia, the Minister of National Defence of Canada, the Minister of Defence of the Kingdom of Denmark, the Federal Minister of Defense of the Federal Republic of Germany, the Minister of Defence of Greece, the Minister of Defence of the Kingdom of The Netherlands, the Minister of Defence of the Kingdom of Norway, the Minister of Defence of the Kingdom of Spain, the Minister of Defence of Turkiye, and the Secretary of Defense on behalf of the Department of Defense of the United States of America hereinafter referred to as the "Contributing Participants" and the Minister of National Defence of the Kingdom of Belgium, the Minister of Defence of Italy, and the Minister of Defense of Portugal, hereinafter referred to as the "Non-contributing Participants" and collectively referred to as the "Participants"

Having a common interest in ship defense;

Recognizing that the Contributing Participants have a requirement for production of the Evolved SEASPARROW Missile (ESSM) as set forth in the ESSM Requirements Document;

Recognizing the Memorandum of Understanding (MOU) for the International Development of the NATO SEASPARROW Surface Missile System dated 10 June 1968 and the Cooperative Support MOU for the NATO SEASPARROW Surface Missile System dated 1 December 1977, and utilized for the ESSM Cooperative Engineering and Manufacturing Development Phase through an Addendum to the Memorandum of Understanding for the Cooperative Support of the NATO SEASPARROW Surface Missile System dated 16 June 1995;

Recognizing the benefits to be derived from the standardization, rationalization and interoperability of military equipment among the Participants' Navies and the benefits to be obtained from cooperative programs, and the advantages to be gained from the use of their combined national capabilities in order to produce ESSM in the most efficient and cost effective manner possible;

For the purpose of conducting the cooperative Production Phase of the Evolved SEASPARROW Missile as a NATO Project have reached the following understanding:

## SECTION 1. DEFINITIONS

1.1 The following definitions apply for the capitalized terms in this MOU:

- 1.1.1 Addendum means the Addendum to the Memorandum of Understanding for the Cooperative Support of the NATO SEASPARROW Surface Missile System Concerning the Cooperative Engineering and Manufacturing Development of the Evolved SEASPARROW Missile dated 16 June 1995.
- 1.1.2 Advanced X-band Guidance Capability means a guidance mode of ESSM that provides midcourse guidance via X-band uplink and interrupted terminal illumination identified as Sample Data Homing (SDH).
- 1.1.3 Classified Information means official information that requires protection in the interests of national security and is so designated by the application of a security classification marking.
- 1.1.4 Contract means any mutually binding, legal relationship which obligates a Contractor to furnish supplies or services and obligates one or more Contributing Participants to pay for them.
- 1.1.5 Contracting means the obtaining of supplies or services by Contract from sources outside the government organizations of the Participants. Contracting includes description (but not determination) of supplies and services required, solicitation and selection of sources, preparation and award of Contracts, and all phases of Contract administration.
- 1.1.6 Contracting Agency means the entity, within the government organization of a Participant, which has authority to enter into, administer, and / or terminate Contracts.
- 1.1.7 Contracting Officer means a person, representing a Contracting Agency of a Participant, who has the authority to enter into, administer, and / or terminate Contracts.
- 1.1.8 Contractor means any entity awarded a Contract by a Participant's Contracting Agency.
- 1.1.9 Contributing Participant means those signatories to this MOU who are sharing in the Nonrecurring Costs and Recurring Costs associated with the ESSM Production Phase.
- 1.1.10 Controlled Unclassified Information means unclassified information to which access or distribution limitations have been applied in accordance with this MOU or national laws or regulations and which is released by one Participant to another subject to the condition that it be treated "IN CONFIDENCE."

- 1.1.11 Cost Ceiling means the maximum amount to which a Cost Target may move without prior written approval of the Contributing Participants.
- 1.1.12 Cost Target means the NSPSC-approved planning figures for Nonrecurring Costs and Recurring Costs associated with the ESSM Production Phase.
- 1.1.13 Defense Purposes means the manufacture or other use in any part of the world by or for the armed forces of any Participant.
- 1.1.14 Designated Security Authority (DSA) means the security office approved by national authorities to be responsible for the security aspects of this MOU.
- 1.1.15 ESSM means an Evolved SEASPARROW Missile that is an All-Up-Round (AUR) which meets the requirements specified in the ESSM Requirements Documents and Revisions thereto.
- 1.1.16 ESSM Production Phase means that phase of the ESSM Program devoted to cooperative production of ESSM as defined in Section 3 (Scope of Work) of this MOU.
- 1.1.17 ESSM Production Phase Background Information means information not generated in the performance of the ESSM Production Phase.
- 1.1.18 ESSM Production Phase Equipment means any material, equipment, end item, subsystem, component, special tooling or test equipment used in the ESSM Production Phase owned by one or more Participants.
- 1.1.19 ESSM Production Phase Foreground Information means information generated in the performance of the ESSM Production Phase.
- 1.1.20 ESSM Production Phase Information means any information provided to, generated in or used in the ESSM Production Phase regardless of form or type.
- 1.1.21 ESSM Production Phase Invention means any invention or discovery formulated or made (conceived or "first actually reduced to practice") in the course of work performed under the ESSM Production Phase. The term first actually reduced to practice means the first demonstration, sufficient to establish to one skilled in the art to which the invention pertains, of the operability of an invention for its intended purpose and in its intended environment.
- 1.1.22 ESSM Program means an international, cooperative program for the development, production, and support of the ESSM.
- 1.1.23 National Costs means those costs for equipment, material, and / or services intended exclusively for the benefit of an individual Contributing Participant and solely funded by that Contributing Participant.

- 1.1.24 Non-contributing Participant means those signatories to this MOU who are not sharing the Nonrecurring Costs and Recurring Costs associated with the ESSM Production Phase.
- 1.1.25 Nonfinancial Contribution means the provision of non-monetary material or services to the ESSM Production Phase by a Contributing Participant.
- 1.1.26 Nonrecurring Costs means a one time investment cost not proportional to the number of units produced. It includes such costs as equipment relocation, plant arrangements, tooling and test equipment procurement, modifications to existing tooling and test equipment, preproduction engineering, and specialized work force training.
- 1.1.27 Participant means a Signatory to this MOU which includes both Contributing Participants and Non-contributing Participants (see Preamble).
- 1.1.28 Patent means legal protection of the right to exclude others from making, using, or selling an invention. The term refers to any and all Patents including, but not limited to, Patents of implementation, improvement, or addition, petty Patents, utility models, appearance design Patents, registered designs, and inventor certificates or like statutory protection, as well as divisions, reissues, continuations, renewals, and extensions of any of these.
- 1.1.29 Project Security Instruction means a description of the methods by which ESSM Production Phase Information and material will be classified, marked, used, transmitted, and safeguarded.
- 1.1.30 Recurring Costs means the annual production engineering / administrative support costs not directly related to the number of units produced. It includes the costs of: planning, placing, monitoring, controlling, and coordinating contracts for; using existing ESSM Production Phase Equipment for; and maintaining and validating the production of ESSM and its components, containers, and related documentation. It does not include missile acquisition costs.
- 1.1.31 Shared Costs means those costs jointly funded by the Contributing Participants.
- 1.1.32 Third Party means any person or other entity whose government or entity thereof is not a Participant.

- 1.1.33 United States (U.S.) Unique Items means those items which U.S. national disclosure policy prohibits dissemination of design and manufacturing data to the Participants. ESSM items in this category are the RIM-7P Guidance Section modified for ESSM, including all hardware, software, firmware within the modified guidance section; nonreleasable guidance software resident in the transition section; AEGIS S-band uplink / down link module, S-band-associated software and firmware resident in the transition section; and the U.S. National Security Agency Cryptographic Device and associated interface design standards located in the Warhead Compatible Telemeter that, when deployed, is installed in the transition section.
- 1.1.34 X-band Participant means a Participant in this MOU that has contributed to the ESSM Engineering and Manufacturing Development (EMD) Phase Advanced X-band Guidance Capability.

## SECTION 2. OBJECTIVES

- 2.1 The objectives of the Participants in the ESSM Production Phase are to:
  - 2.1.1 Cooperatively produce a new and improved version of the SEASPARROW Missile that will provide effective intercept of high speed maneuvering anti-ship cruise missiles at greater intercept ranges. The ESSM is to be based on the principle of a single, common missile for all systems and launchers. All guidance modes are to be resident in the common missile with provisions (space, weight, and power) for insertion of an S-band transceiver in the common transition section for AEGIS midcourse guidance applications. ESSM guidance modes are to include conventional Home-all-the-Way (HAW) semiactive guidance, Launch on Search (LOS) or delayed illumination guidance, Advanced X-band Guidance Capability, and S-band uplink (command acceleration) guidance. The ESSM will be capable of being fired by all existing NATO SEASPARROW Surface Missile Systems, the MK 29 Guided Missile Launching System, and the MK 48 Guided Missile Vertical Launching System. In addition, the ESSM will permit operation within a MK 41 Vertical Launch System (quad pack) configuration.
  - 2.1.2 Share the work undertaken among the Contributing Participants.
- 2.2 The ESSM will remain under the configuration control of the NSPSC throughout the ESSM Program. The Participants will preserve or enhance the overall effectiveness of the ESSM Advanced X-band Guidance Capability in future ESSM baselines, as determined by the NSPSC and as funded by the X-band Participants, upon fair and reasonable terms and conditions as determined by the X-band Participants and by the United States Department of Defense (U.S. DoD) prior to the start of follow-on development activities.

### SECTION 3. SCOPE OF WORK

- 3.1 The cooperative program carried out under this MOU covers the following activities:
  - 3.1.1 Production of the ESSM, which meets the requirements set forth in the Requirements Document Revision 5 and revisions thereto, along with its subsystems, components, containers, related special production and intermediate maintenance level tooling and test equipment, technical data, and computer programs.
  - 3.1.2 Configuration management of those items stated in paragraph 3.1.1.
  - 3.1.3 Development and initial production of life cycle elements including, but not limited to, spare parts, test equipment, technical data, training, and technical support for ESSM.
  - 3.1.4 Planning for and establishment of depot level repair and refurbishment facilities, including canister encan / decan capability and initial repair parts inventory levels.
- 3.2 Each Contributing Participant will take possession at point of origin of all items produced for its exclusive use, and all further shipment and storage will be a national responsibility. Any cost incurred, related thereto, will be a National Cost.

## SECTION 4. MANAGEMENT (ORGANIZATION AND RESPONSIBILITY)

- 4.1 For the benefit of the Participants, the ESSM Production Phase will be directed by the NATO SEASPARROW Project Steering Committee (NSPSC) and administered by the NATO SEASPARROW Project Office (NSPO).
  - 4.1.1 These organizations were established by the Memorandum of Understanding for the International Development of the NATO SEASPARROW Surface Missile System dated 10 June 1968 (Development MOU), reestablished by the Memorandum of Understanding for the Cooperative Support of the NATO SEASPARROW Surface Missile System dated 1 December 1977 (Support MOU), and utilized for the Engineering and Manufacturing Development (EMD) Phase of the ESSM Program as set forth in the Addendum.
  - 4.1.2 This MOU assigns additional responsibilities to the NSPSC and the NSPO Project Manager (PM), who will perform these additional responsibilities on a cooperative basis with their responsibilities under the cited Support MOU and its Addendum.
- 4.2 Executive oversight of the ESSM Production Phase will be exercised by the NSPSC. Each member of the NSPSC will be responsible for the necessary coordination with appropriate authorities of his own country. The NSPSC will oversee the ESSM Production Phase in accordance with the principles and procedures set forth herein. Decisions on the following topics will be made by unanimous vote of the NSPSC.
  - 4.2.1 Approval of revisions to Annex A and Annex B within the Cost Ceilings.
  - 4.2.2 Approval of the annual budget for ESSM Production Phase Shared Costs and any revisions thereof.
  - 4.2.3 Questions concerning the allocation of costs between ESSM Production Phase Shared Costs and National Costs.
  - 4.2.4 Questions concerning the allocation of NSPO operating costs.
  - 4.2.5 Approval of the ESSM Production Phase reports.
- 4.3 All other decisions related solely to the ESSM Production Phase will be made by a majority vote of the NSPSC members, all votes being equally weighted. The chairman or the vice-chairman, in the absence of the chairman, will have one additional vote solely for the purpose of resolving any tied vote of the NSPSC. Any NSPSC member representing a Non-contributing Participant will not dissent to the wishes of all the representatives of Contributing Participants in the case of decisions requiring unanimous voting nor to the majority of the representatives of the Contributing Participants in the case of decisions

requiring majority vote, unless the decision clearly interferes with or adds costs to programs under the cognizance of the NSPSC other than the ESSM Program.

- 4.4 In the event that the NSPSC is unable to reach a timely decision on an issue related to the ESSM Production Phase, each member will, without delay, refer the issue to their appropriate national authorities for resolution. In the meantime, approved ESSM Production Phase activities will continue to be implemented while the issue is being resolved by higher authorities.
- 4.5 The NSPSC responsibilities under this MOU include:
  - 4.5.1 Carrying out the provisions of the MOU and ensuring adherence to the principles of Annex C of the Addendum.
  - 4.5.2 Approving financial schedules prepared by the NSPO Project Manager (PM) and reviewing the financial status of the ESSM Production Phase to ensure compliance with the provisions of Section 5 (Financial Provisions) and Annex A (Financial Matters) of this MOU.
  - 4.5.3 Determining the range and depth of ESSM Production Phase Information to be released to Non-contributing Participants in accordance with Section 9 (Disclosure and Use of ESSM Production Phase Information), ensuring that Non-contributing Participants will be kept apprised of information regarding ESSM Production Phase matters that might generate interference with other programs under cognizance of the NSPSC and changes in EMD Phase documents, technical briefings, and summarized test results required for studies and planning of ESSM integration with NATO SEASPARROW systems.
  - 4.5.4 Resolving issues brought forth by the NSPO PM.
  - 4.5.5 Approving Contracting strategies and, prior to the award of any Contract to satisfy requirements of the Contributing Participants for the production of ESSM or components thereof, reviewing and endorsing proposed Contracts. The NSPSC may waive the requirement to review and endorse a proposed Contract.
  - 4.5.6 Reviewing and forwarding to the Participants for approval, recommended amendments to this MOU in accordance with Section 19 (Amendments).
  - 4.5.7 Approving plans to manage and control the transfer of ESSM Production Phase Equipment provided by any Participant to support the execution of the ESSM Production Phase in accordance with Section 8 (ESSM Production Phase Equipment).
  - 4.5.8 Approving plans for the disposal of cooperatively acquired ESSM Production Phase Equipment.

- 4.5.9 Maintaining oversight of the security aspects of the ESSM Production Phase, including reviewing and updating the EMD Phase Project Security Instruction (PSI), as required, and obtaining approval from the appropriate Designated Security Authority of a PSI prior to the transfer of Classified Information.
  - 4.5.10 Reviewing and forwarding recommendations to the Contributing Participants concerning requests for Third Party sales or transfer of ESSM in accordance with Section 13 (Third Party Sales and Transfers).
  - 4.5.11 Forwarding recommendations for levies and the procedures for assessing and distributing levies to the Contributing Participants in accordance with Section 13 (Third Party Sales and Transfers).
  - 4.5.12 Upon request of a Non-contributing Participant, recommending provisions to all Participants for accession of the Non-contributing Participant to Contributing Participant status.
  - 4.5.13 Providing recommendations to the Participants for the addition of new Participants in accordance with Section 16 (Participation of Additional Nations).
  - 4.5.14 Ensuring compliance with work share requirements as set forth in Section 7 (Work Sharing).
  - 4.5.15 Approving requests for development and production of test equipment, technical support and related services, as requested by Contributing Participants or the NSPO PM for conduct of the ESSM Production Phase.
  - 4.5.16 Approving changes to Annex B (NSPO ESSM Production Phase Staffing Requirements) after consideration of changes recommended by the NSPO PM.
- 4.6 The NSPSC will have overall authority over the NSPO PM who will be designated by the U.S. The NSPO PM will have primary responsibility and authority for ESSM Production Phase execution in accordance with this MOU and will be accountable to the NSPSC for effective implementation, efficient management, and direction of the ESSM Production Phase.
- 4.7 In recognition of the additional responsibilities that the NSPO PM will assume under the ESSM Production Phase, the Contributing Participants authorize the staffing of additional ESSM Production Phase positions as set forth in Annex B (NSPO ESSM Production Phase Staffing Requirements). Positions will be full-time positions resident in the NSPO. They will be filled by personnel from the Contributing Participants, and their cost included in the annual Recurring Cost shared budget. Such costs will include salary at the equivalent U.S. pay scale and equivalent U.S. expenses of cooperative travel as approved by the NSPO PM. Participants will be compensated or have their Recurring Cost share adjusted to account for the provision of such staff under arrangements developed by the NSPO PM and approved by the NSPSC. All other staff costs incurred by a Participant in providing

such staff will be borne solely by that Participant. Personnel assigned to such Production Phase positions will not be given additional national responsibilities. The NSPSC may approve changes to Annex B (NSPO ESSM Production Phase Staffing Requirements) after considering recommendations made by the NSPO PM.

4.8 The NSPO PM responsibilities under this MOU include:

- 4.8.1. Managing the procurement, technical support, and financial aspects of the ESSM Production Phase in accordance with the provisions of this MOU.
- 4.8.2. Preparing for NSPSC approval, annual financial schedules in accordance with Section 5 (Financial Provisions) and Annex A (Financial Matters) of this MOU.
- 4.8.3. Consolidating individual Contributing Participant procurement requirements, preparing procurement requests, and providing administrative and technical support to the Contracting Agency in the placing of Contracts for material, supplies, and services under this MOU.
- 4.8.4. Referring issues to the NSPSC which cannot be resolved within the NSPO.
- 4.8.5. Recommending amendments to this MOU and its Annexes to the NSPSC.
- 4.8.6. Preparing and implementing plans approved by the NSPSC to manage and control the transfer of ESSM Production Phase Equipment provided by any Participant to support the execution of the ESSM Production Phase in accordance with Section 8 (ESSM Production Phase Equipment).
- 4.8.7. Preparing and implementing plans approved by the NSPSC for the disposal of cooperatively acquired ESSM Production Phase Equipment.
- 4.8.8. Developing and forwarding to the NSPSC, within three months after the effective date of this MOU, a Project Security Instruction for the ESSM Production Phase and updates to that instruction, as necessary.
- 4.8.9. Forwarding recommendations to the NSPSC for the change of status of Non-contributing Participants in accordance with Section 15 (Accession of Non-contributing Participants) and for the addition of new Participants in accordance with Section 16 (Participation of Additional Nations) of this MOU.
- 4.8.10. Providing technical and procurement support for related equipment, services, and supplies, as requested by the Participants and as approved by the NSPSC.
- 4.8.11. Providing an ESSM Production Phase status report at each NSPSC meeting, including the actual work share expended and committed, and the work share planned for commitment to industry and Government organizations of each Contributing Participant.

4.8.12 Providing a final report upon completion or termination of this MOU in accordance with Section 20 (Withdrawal, Termination, Entry into Effect, and Duration) of the ESSM Production Phase.