



SIGNED ANNEXES A-D

BASIC EXCHANGE AND COOPERATIVE AGREEMENT

BETWEEN

THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

OF THE

DEPARTMENT OF DEFENSE

OF THE UNITED STATES

AND

THE MINISTRY OF DEFENCE

OF THE

KINGDOM OF NORWAY

CONCERNING GEOSPATIAL INFORMATION

Tuesday October 5, 2010

IMPLEMENTING ANNEX A
TO THE
BASIC EXCHANGE AND COOPERATION AGREEMENT

BETWEEN

THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
OF THE
DEPARTMENT OF DEFENSE
OF THE
UNITED STATES OF AMERICA

AND

THE MINISTRY OF DEFENCE
OF THE
KINGDOM OF NORWAY

CONCERNING
GEOSPATIAL INFORMATION

TOPOGRAPHIC PRODUCTS, DATA, PUBLICATIONS, AND RELATED
GEOSPATIAL INFORMATION MATERIALS

This Implementing Annex A Concerning Topographic Products, Data, Publications, and Related Geospatial Information Materials is referred to in Article III of the Basic Exchange and Cooperation Agreement between the National Geospatial-Intelligence Agency of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway Concerning Geospatial Information (the Agreement).

1. PURPOSE

1.1. The purpose of this Implementing Annex is to define arrangements for the exchange of digital and hardcopy topographic products, data, publications, and related geospatial information materials and the provision of co-production support services of mutual interest between the National Geospatial-Intelligence Agency (NGA) of the Department of Defense of the United States of America and the Ministry of Defense of the Kingdom of Norway. The scope of the cooperation includes production and maintenance of geospatial information data using agreed specifications, technical assistance, exchange of source materials, and exchange of data and products.

1.2. For the purpose of this Implementing Annex, the designated organizations of the Parties shall be as follows:

1.2.1. For NGA – NGA.

1.2.2. For the Ministry of Defence – the Norwegian Military Geographic Service (FMGT).

2. MATERIALS TO BE EXCHANGED OR PROVIDED

2.1. Topographic Products: Topographic products (preferably in digital format) identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by each Party to the other Party, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, on an automatic distribution basis unless otherwise agreed. Additional copies of topographic items from Appendix I, and any other relevant Appendix, of this Implementing Annex

may be provided by a Party to the other Party upon request in accordance with paragraph 2.7 of this Section.

2.2. Reproduction Materials: One (1) set of reproduction material (preferably in digital format) for any sheet of the topographic products identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by each Party to the other Party upon request, unless the providing Party has provided notice to the recipient Party of the discontinuation of such materials. Reproduction materials provided by a Party may be used by the other Party to print stock for the other Party's use without prior written authorization from the originating Party.

2.3. Publications and Related Geospatial Information Materials: Topographic publications and related geospatial information materials shall be exchanged as specified in Appendix I, and any other relevant Appendix, of this Implementing Annex, unless the providing Party has provided notice to the recipient Party of the discontinuation of such materials. Additional copies of topographic publications and related geospatial information materials identified in Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided by a Party to the other Party upon request in accordance with paragraph 2.7 of this Section.

2.4. Geographic Names Information: Geographic names information gathered by the Parties shall be exchanged as specified in Appendix I, and any other relevant Appendix, of this Implementing Annex.

2.5. Bulk Stocks: Planning and operational stocks of topographic products, data, publications, and related geospatial information materials listed in Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided, on a case-by-case basis, by the producing Party to the other Party upon request.

2.6. Digital Topographic Products: Where applicable, digital topographic products, data, publications, and related geospatial information materials transferred under the provisions of this Implementing Annex shall be exchanged in formats agreed upon by the Parties.

2.6.1. NGA shall supply one (1) copy of all releasable U.S. Government-produced geospatial information applications software, and any changes thereto, related to digital topographic products and data as outlined in Appendix I, and any other

relevant Appendix, of this Implementing Annex.

2.6.2. FMGT shall coordinate all changes to NGA-supplied geospatial information applications software with NGA.

2.7. Additional Copies: At its sole discretion, a Party may satisfy the other Party's requests for additional copies of any topographic products, data, publications, and related geospatial information materials produced by the Party, with the exception of those items subject to other bilateral agreements or other restrictions. Upon completion of any new releasable digital data for areas covered in this Implementing Annex, the originating Party shall inform the other Party.

2.8. Costs: Unless otherwise specified in this Implementing Annex, all topographical products, data, publications and related geospatial information materials shall be provided by a Party without charge.

3. USE AND RELEASE RESTRICTIONS

3.1. Each Party shall honor the copyright, trademark, use, and release restrictions on all topographic products, data, publications, and related geospatial information materials provided by the other Party in accordance with specific written guidance from the originating Party at the time the items are provided.

3.2. The topographic products, data, publications, and related geospatial information materials provided by the Parties to each other under the terms of this Implementing Annex may be used for defense or other government purposes, but shall not be used for any other purpose without the prior written consent of the originating Party.

3.3. Unless otherwise agreed by the Parties in writing, title to topographic products, data, publications, and related geospatial information materials co-produced by the Parties shall be allocated jointly to the Parties. The Parties shall take any necessary steps to give effect to this arrangement. The Parties shall agree, in writing, on the terms of use of co-produced topographic products, data, publications and related geospatial information materials.

3.4. Any specification, production information, or manufacturing know-how incidentally derived from the performance of the provisions of this Implementing Annex shall be used and fully protected in accordance with the Agreement.

3.5. If a Party is loaned or receives software from the other Party under this Implementing Annex, the receiving Party shall not reverse engineer or attempt in any manner to duplicate that software without the prior written consent of the originating Party.

3.6. If topographic products, data, publications, and related geospatial information materials are subject to privately held intellectual property rights and to limited rights of use or disclosure, such items shall be marked with a restrictive legend by the originating Party prior to their provision to the receiving Party. Such items shall not be used or disclosed in any manner that might prejudice the limitations on use or disclosure marked on them.

3.7. FMGT grants to NGA an unlimited use license on the use of FMGT provided topographic maps and related geospatial information materials that shall be used as source materials by NGA in production of hard or softcopy products for use by the government of the United States of America in accordance with Article IV (General Obligations and Responsibilities) of the Agreement. NGA grants to FMGT an unlimited use license on the use of NGA produced topographic maps and related geospatial information materials that shall be used as source materials by FMGT in production of hard or softcopy products for use by the Kingdom of Norway in accordance with Article IV (General Obligations and Responsibilities) of the Agreement.

4. SHIPMENT OF MATERIALS

4.1. All shipments of topographic products, data, publications, and related geospatial information materials by a Party to the other Party shall be accompanied by appropriate transmittal documents that list the contents of the shipment.

4.2. All topographic products, data, publications, and related geospatial information materials to be exchanged under this Implementing Annex shall be sent free of freight charges. All shipment costs shall be borne by the sending Party.

4.3. If applicable, packages shall be clearly marked with the notation "UNITED STATES/NORWAY BILATERAL GEOSPATIAL INFORMATION AGREEMENT EXCHANGE MATERIAL- NON REIMBURSABLE" and include the following Customs Declaration.

CUSTOMS DECLARATION

*The materials enclosed are exchanged between
Government Agencies under the terms of
Official Bilateral Government Arrangements*

*Contents are to be used for Government Purposes ONLY
And are not releasable for Commercial Sale*

Signed:

Official Stamp

Name:

Position:

Date: / /

4.4. Addresses used for shipments of all topographic products, data, publications, and related geospatial information materials are set forth in Appendix I of this Implementing Annex.

5. RETURN OF MATERIALS

5.1. In the event of termination of the Agreement or this Implementing Annex, all topographic products, data, publications, and related geospatial information materials that have already been exchanged, excluding topographic products, data, publications, and related geospatial information materials on loan, need not be returned and shall remain property of the holder unless otherwise agreed.

6. VALIDITY

6.1. This Implementing Annex shall enter into force on the date of the last signature and

shall remain in force in accordance with Article XIII (Amendment and Termination) of the Agreement.

Prepared in duplicate, in the English language, duly signed and exchanged between the Parties

FOR THE NATIONAL GEOSPATIAL-
INTELLIGENCE AGENCY
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

FOR THE MINISTRY
OF DEFENSE
KINGDOM OF NORWAY

Dawn R. Eilenberger
DAWN R. EILENBERGER
Director,
Office of International Affairs and Policy-
National Geospatial-Intelligence Agency

Kjetil Utne
KJETIL UTNE, Captain (N)
Director, Norwegian Military
Geographic Service

5 Oct 2010
Date

5 Oct 2010
Date

Bethesda, MD
Location

Bethesda, MD
Location

APPENDIX I
TO
IMPLEMENTING ANNEX A

EXCHANGE OF TOPOGRAPHIC PRODUCTS, DATA, PUBLICATIONS, AND
RELATED GEOSPATIAL INFORMATION MATERIALS

1. NGA shall provide the following NGA-produced topographic products, data, publications, and related geospatial information materials to FMGT if releasable. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities. Maps produced and maintained by Norway, or third parties, are not included. Digitized versions of these products shall be provided upon request if otherwise available and releasable.

1.1. Topographic Products:

1.1.1. Six (6) copies of each current and future edition of releasable topographic and/or image-based products for the following Series:

Series: N701

Series: 1106

1.1.2. The list of the specific products for paragraph 1.1.1 that NGA shall provide to FMGT is set forth in a Disclosure and Release Tool (DART) List. The agreed method of release for each of the products is identified in the DART List as either “automatic distribution,” “upon request” or “case-by-case”. NGA shall provide an updated DART list containing any changes to the listing of available products or to their releasibility to FMGT upon request, as resources permit. FMGT shall provide NGA written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

1.1.3. NGA shall provide products identified as “automatic distribution” on an automatic distribution basis. NGA intends to provide such distribution through the Defense Logistics Agency (DLA).

1.1.4. NGA shall provide products identified as “upon request” as soon as practicable after receiving a written request. NGA shall insure in advance that such products are available for release.

1.1.5. For products identified as “case-by-case,” the following procedures shall apply:

1.1.5.1. FMGT shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. NGA shall determine whether the product may be released, and if not, provide FMGT with the reason.

1.1.5.2. If the release is contingent on permission of a third party, NGA shall notify FMGT of the identity of the third party. FMGT shall be responsible for obtaining the third party’s written permission to release. If FMGT is unable to secure this permission, FMGT may request NGA to seek permission.

1.1.5.3. Once a product has been determined as releasable, NGA shall provide such products as soon as practicable.

1.2. Digital Topographic Products: One (1) copy of each current and future edition of digital topographic data identified below in accordance with the procedures set forth in paragraph 1.1:

1.2.1. Scanned Data in various agreed formats.

1.2.2. Vector Data in various agreed formats.

1.2.3. Elevation data in various agreed formats.

1.3. Specifications and Standards: Upon request, one (1) copy of the current NGA specifications and standards relating to the data provided in paragraphs 1.1 and 1.2.

1.4. Revisions and Updates: Upon request, one (1) copy of all revisions and updates to the NGA specifications and standards to FMGT relating to the data provided in paragraphs 1.1 and 1.2.

1.5. Reproduction Material: One (1) set of reproduction material in digital format for any NGA-produced topographic products provided under paragraph 1.1, as produced. Any reproduction materials of other NGA-produced topographic products should be requested.

1.6. Publications, Related Geospatial Information Materials and Geographic Names Data: Two (2) copies each of the following and, if available, one (1) copy on an agreed format:

1.6.1. Current and future catalogs, technical publications, instructions and specifications related to the topographic products, data, and related geospatial information material identified in Implementing Annex A.

1.6.2. Indices for all NGA products listed in the DART List.

1.6.3. The existing NGA/US Board on Geographic Names (US BGN) Gazetteer of Norway and gazetteers relevant to the topographic products specified in paragraph 1.1, or a Compact Disk containing a listing of the geographic names data from the NGA/US BGN Geographic Names Database in Geographic Information System (geospatial information) format.

2. The FMGT shall provide the following FMGT-produced topographic products, data, publications, and related geospatial information materials to NGA. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities. Digitized versions of these products shall be provided upon request if otherwise available and releasable.

2.1. Topographic Products:

2.1.1. Two (2) copies of each current and future edition of releasable topographic and/or image based products including but not limited to the following countries, automatically:

Series: M 711

Series: M 616

Series: M 517

Series: M 711 SK

2.1.2. The list of the specific products for paragraph 2.1.1 that FMGT shall provide to NGA is set forth in a document provided by FMGT (Disclosure List). The agreed method of release for each of the products is identified in the Disclosure List as either "automatic distribution," "upon request" or "case-by-case". FMGT shall provide an updated Disclosure List containing any changes to the listing of available products or to their releasibility to NGA upon request, as resources permit. NGA shall provide FMGT written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

2.1.3. FMGT shall provide products identified as "automatic distribution" on an automatic distribution basis.

2.1.4. FMGT shall provide products identified as "upon request" as soon as practicable after receiving a written request. FMGT shall insure in advance that such products are available for release.

2.1.5. For products identified as "case-by-case," the following procedures shall apply:

2.1.5.1. NGA shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. FMGT shall determine whether the product may be released, and if not, provide NGA with the reason.

2.1.5.2. If the release is contingent on permission of a third party, FMGT shall notify FMGT of the identity of the third party. NGA shall be responsible for obtaining the third party's written permission to release. If NGA is unable to secure this permission, NGA may request FMGT to seek permission.

2.1.5.3. Once a product has been determined as releasable, FMGT shall provide such products as soon as practicable.

2.2. Digital Topographic Products: One (1) copy of each current and future edition of digital topographic data identified below in accordance with the procedures set forth in paragraph 2.1:

2.2.1. Scanned Data in various agreed formats.

2.2.2. Vector Data in various agreed formats.

2.2.3. Elevation Data in various agreed formats.

2.3. Specifications and Standards: Upon request, one (1) copy of the current FMGT specifications and standards relating to the data provided in paragraphs 2.1 and 2.2 above.

2.4. Revisions and Updates: Upon request, one (1) copy of all revisions and updates to the FMGT specifications and standards to FMGT relating to the data provided in paragraphs 2.1 and 2.2.

2.5. Reproduction Material: One (1) set of reproduction material in digital format for all FMGT-produced topographic products provided under paragraphs 2.1, as produced. Any reproduction materials of other FMGT-produced topographic products should be requested.

2.6. Publications, Related Geospatial Information Materials and Geographic Names Data: Two (2) copies each of the following publications covering the sovereign territory of Norway:

2.6.1. Current and future catalogs, technical publications, instructions and specifications related to the topographic products, data, and related geospatial information material identified in Implementing Annex A, produced by FMGT in English.

2.6.2. Indices for all FMGT products listed in the Disclosure List.

2.6.3. Updated geographic names information on agreed media.

2.6.4. Listings of all FMGT publications related to cartography, geodesy, geography, toponymy, photogrammetry, and progress reports on production capabilities.

2.6.5. An official description, including graphics if available, of the international boundaries of Norway.

2.6.6. An official listing, with graphics if available, describing the administrative-territorial structure of Norway.

3. The following addresses shall be used for shipments of all topographic products, data, publications, and related geospatial information materials:

3.1. TO NGA:

3.1.1. FMGT-produced digital reproduction materials with two (2) hardcopy plots as identified in the appendices, send to:

National Geospatial-Intelligence Agency
ATTN: NJVC LLC/ NGA EDM
3838 Vogel Road, Mail Stop J-21
Arnold, MO 63010-6238
Phone: (636) 321-5330/5329
Fax: (636) 321-5161

3.1.2. Two (2) additional hardcopy plots of digital reproduction materials, send to:

National Geospatial-Intelligence Agency
ATTN: NGA Library, Mail Stop D-58
4600 Sangamore Road
Bethesda, MD 20816-5003

3.1.3. Two (2) copies in digital or hardcopy format of gazetteers, catalogs, specifications, publications, data, and related geospatial information materials, send to:

National Geospatial-Intelligence Agency
ATTN: NGA Library, Mail Stop D-58
4600 Sangamore Road
Bethesda, MD 20816-5003

3.2. TO FMGT:

3.2.1. For routine library distribution and digital products:

Norwegian Military Geographic Service (FMGT)
Oslo Mil/Akershus
N-0015 OSLO
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

3.2.2 For stock distribution:

Norwegian Defence Logistics Support Division
Base Viken, Nordkisa Storage
Skrythagen 24, 2055 Nordkisa
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

APPENDIX II
TO
IMPLEMENTING ANNEX A

CO-PRODUCTION AND EXCHANGE OF
GEOSPATIAL INFORMATION DATA

1. Purpose

1.1. The purpose of this Appendix is to establish a cooperative program for the production and exchange of geospatial information data of mutual interest between NGA and FMGT. The scope of the cooperation includes production and maintenance of geospatial information data using mutually agreed upon specifications, technical assistance, exchange of source materials, and exchange of data and products including imagery activity.

2. Materials to be Exchanged/Provided

2.1. NGA shall:

2.1.1. Provide two (2) copies each of releasable NGA-produced latest edition of VMAP 1 libraries.

2.1.2. Provide two (2) copies of each NGA-produced latest edition of SRTM Level 1, DTED Level 1, and CIB Level 5 over Norway.

2.1.3. Along with FMGT, apply the following procedures. The list of the specific products for paragraph 2.1.2 that NGA shall provide to FMGT is set forth in a Disclosure and Release Tool (DART) List. The agreed method of release for each of the products is identified in the DART List as either "automatic distribution," "upon request" or "case-by-case". NGA shall provide an updated DART list containing any changes to the listing of available products or to their releasibility to FMGT upon request, as resources permit. FMGT shall provide NGA written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

2.1.4. Provide products identified as “automatic distribution” on an automatic distribution basis. NGA intends to provide such distribution through the Defense Logistics Agency (DLA).

2.1.5. Provide products identified as “upon request” as soon as practicable after receiving a written request. NGA shall insure in advance that such products are available for release.

2.1.6. Along with FMGT, for products identified as “case-by-case,” apply the following procedures:

2.1.6.1. FMGT shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. NGA shall determine whether the product may be released, and if not, provide FMGT with the reason.

2.1.6.2. If the release is contingent on permission of a third party, NGA shall notify FMGT of the identity of the third party. FMGT shall be responsible for obtaining the third party’s written permission to release. If FMGT is unable to secure this permission, FMGT may request NGA to seek permission.

2.1.6.3. Once a product has been determined as releasable, NGA shall provide such products as soon as practicable.

2.1.7. Provide reproduction materials of map sources or vector product format (VPF) data in DIGEST C or alternative formats as mutually determined by the Parties to support FMGT production assignments.

2.1.8. Provide any source materials covering non-Norwegian territory as may be required for edge-matching or to support any maintenance production assignments accepted by FMGT.

2.2. FMGT shall:

2.2.1. Grant NGA release to any coalition Vector Map Co-production Working

Group (VACWG) member, or Multi-national Geospatial Co-production Program partnership, where FMGT is a member, for VMap1 CDs over Norway.

2.2.2. Consult with NGA regarding the specifications to be used to produce geospatial information or other vector data for NGA.

2.2.3. Provide to NGA two (2) copies each of FMGT technical publications, instructions and specifications including revisions and/or changes related to digital data and related materials.

3. Technical Support

3.1. The Parties shall exchange technical information to the maximum extent possible to promote standardization and interoperability of data between the digital production systems of each Party.

3.2. NGA shall provide on-site technical and/or production assistance, as mutually determined and required, to implement the co-production and exchange program.

3.3. FMGT shall provide NGA technical and/or production assistance representatives with administrative support as mutually determined and required during any visits to FMGT.

4. Standards and Specifications

4.1. NGA shall provide two (2) copies of the current NGA geospatial information specifications to FMGT, upon request.

4.1.1. NGA shall automatically provide two (2) copies of all revisions and updates to the applicable NGA geospatial information specifications to FMGT.

4.2. FMGT shall consult with NGA regarding the current NGA geospatial information specifications for production undertaken by FMGT, including revisions of any data previously produced by FMGT or NGA, as well as regarding desired changes and/or

modifications to specifications or production procedures.

5. Program Management

5.1. The Parties shall establish a detailed production schedule and production status reporting system. Production reports shall be exchanged upon a mutually agreed upon frequency. The Parties shall consult as required to maintain program integrity and schedules, and to ensure prompt attention to technical matters affecting production.

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

**APPENDIX III
TO
IMPLEMENTING ANNEX A**

**DATA FORMATS TO BE USED IN THE EXCHANGE OF
REPRODUCTION MATERIALS**

1. In accordance with Section 2.2 of Annex A of this Agreement, NGA and FMGT shall exchange reproduction materials (preferably in a mutually agreeable print-ready digital format). Both Parties shall accept reproduction materials from each other in the following data formats:

1.1 Raster data formats will be mutually agreed by both parties as different formats become available.

2. If no reproduction materials suitable for offset printing are available, both Parties shall reproduce hardcopy materials (printed maps) by scanning qualified image data editing and four-color printing (CMYK), and to ship the following materials to the appropriate addresses identified in Section 4 of Annex A of this Agreement:

2.1 Each Party shall provide two (2) production print copies (library copies offset), preferably unfolded and in good condition (little oxidation or UV damages). Plots are unacceptable.

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

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APPENDIX IV TO IMPLEMENTING ANNEX A

Ortho-rectified Imagery Co-production

1. Co-production

In support of the Multinational Geospatial Co-production Program (MGCP), the National Geospatial-Intelligence Agency (NGA) and Norwegian Military Geographic Service (FMGT) shall co-produce orthorectified imagery for the Nordic AOR.

To accomplish this co-production, NGA and FMGT have agreed that:

- A. NGA shall make available to FMGT suitable unprocessed commercial remote sensing (CRS) to the extent possible within the Nordic AOR. Orthophoto production schedules will be dependant on CRS tasking, collection, and distribution schedules for the unprocessed source data provided by NGA. NGA will deliver the CRS to a contractor of FMGT's choosing, approved by NGA.
- B. NGA shall provide the best available ground control sources, for the areas to be co-produced, to a contractor of FMGT's choosing, approved by NGA.
- C. FMGT shall deliver a single copy of all ortho-rectified imagery produced under this agreement to NGA. The imagery will be delivered in the following format at NGA's discretion:
 - LizardsTech GeoExpress Version 7.x, MrSID Generation 3 (MSG3)

2. Quality Control

NGA may perform a standard contract review of digital remotely sensed imagery (RSI) products (orthophotos and orthomosaics) produced by FMGT. This may include an initial evaluation of the ortho rectified imagery. NGA may perform ad hoc reviews over the life of the MGCP program.

The evaluation process may occur as follows for each orthophoto delivered:

A. Validation of Ortho rectified product:

- Classification/Dissemination markings.
- Vendor copyright agreement.
- Producer code (imagery processing contractor or government agency).
- Sensor name (IKONOS, QuickBird, Orbview, ...).
- Sensor type (pushbroom, frame, synthetic aperture radar, etc)
- Image type (panchromatic, multi-spectral, SAR, etc).
- Number of bands per image.
- Image bit rate per pixel.
- Image collection date.
- Image collection parameters (azimuth, elevation, position).

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- Image resolution (GSD - ground sample distance per pixel)
- Horizontal absolute accuracy (CE90 – circular error probable @ 90% confidence level).
- Collection mode (monoscopic or stereoscopic).
- Country code of collection area.
- Image corner coordinates.
- File format specification.
- Raster coordinate system.
- Geographic coordinate system (geodetic datum and ellipsoid model).
- Image projection system.
- Raster data geocoding information.

The evaluation process will ensure all fields of the above mentioned records are filled, either by producer-derived information or information provided by NGA, to meet the specifications.

B. Analysis/Evaluation of Standard Data Statistics

NGA may generate and evaluate various standard data statistics to include:

- Radiometric bit values of no less than 8 bits per pixel (panchromatic)
- Radiometric bit values of no less than 11 bits per pixel (multi-spectral)
- Geographic coordinates for each corner of the image in degrees, minutes, and seconds
- Utilize the World Geodetic System 1984 (WGS84) coordinate system
- Correct WGS84 Ellipsoid datum
- Sensor Name (satellite)
- Sensor Type (electro-optical, radar, etc.)
- Acquisition Date
- Product Generation Date
- Producer Code (country)
- Estimated accuracy
- Elevation data source (DTED, SRTM, etc.)

In addition, NGA may evaluate ortho photo products in the following manner:

- FMGT MrSID vs. NGA derived reference points (Absolute Accuracy Assessment).
- FMGT MrSID and NGA DTED imagery drape (3-D visualization).

C. Visual Analysis

NGA may analyze and evaluate the provided ortho-rectified imagery through various COTS software for visual inspection of the Panchromatic and Multi-spectral bands:

- Radiometric Quality (tone, balance, brightness, color, saturation, feathering)
- Bit-level depth
- Resolution (ortho-rectified, mosaiced, and merged products)
- Band-to-Band registration
- Distortion of linear features
- Alignment and mismatch of linear features
- Visual anomalies
- Void areas and gaps (no data)

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In addition, visual inspections may be performed along side the original (raw / unadjusted) image whenever possible to determine the effects of imagery processing.

D. DEM matching

If SRTM data is not available, FMGT shall provide the Digital Elevation Matrix (DEM) that was used in the ortho-rectification process, along with the delivered orthophotos. If visual anomalies are detected, the DEM could provide valuable information as to how these anomalies occurred.

3. Shipment of Data:

Data Format: LizardsTech GeoExpress Version 7.x, MrSID Generation 3 (MSG3)

Media Type: DVD

Data should be shipped to:

NGA Bethesda
Mail Stop D-198 Attn: Marzio Dellagnello
4600 Sangamore Road
Bethesda, MD. 20816-5003 USA

4. Use of Data:

NGA may use the ortho-rectified imagery for, but not limited to, the following programs and products:

- Image City Maps
- Google Earth global visualization imagery layer
- 3-D Scene Visualization products
- Map revision program
- Map evaluation program
- NGA internal and external briefing products
- Imagery base for Graphical Product displays
- Military Operations support
- Coalition activity and exercises
- Overview product for Orientation Displays
- NGA Commercial Imagery Library population

5. Data Classification and Dissemination:

Data produced by Norway will be marked "UNCLASSIFIED//LIMITED DISTRIBUTION" in the appropriate fields within the data. Use of the orthophoto products shall be limited to governmental, intelligence, military, and humanitarian activities. This specifically prohibits commercial uses, resale or mass distribution.

IMPLEMENTING ANNEX B

**TO THE
BASIC EXCHANGE AND COOPERATION AGREEMENT**

BETWEEN

**THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
OF THE
DEPARTMENT OF DEFENSE
OF THE
UNITED STATES OF AMERICA**

AND

**THE MINISTRY OF DEFENCE
OF THE
KINGDOM OF NORWAY**

**CONCERNING
GEOSPATIAL INFORMATION**

**AERONAUTICAL PRODUCTS, DATA, PUBLICATIONS, AND RELATED
GEOSPATIAL INFORMATION MATERIALS**

This Implementing Annex B Concerning Aeronautical Products, Data, Publications, and Related Geospatial Information Materials is referred to in Article III of the Basic Exchange and Cooperation Agreement between the National Geospatial-Intelligence Agency of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway Concerning Geospatial Information (the Agreement).

1. PURPOSE

1.1. The purpose of this Implementing Annex is to prescribe arrangements for the exchange of digital and hardcopy aeronautical products, data, publications, and related geospatial information materials and the provision of co-production support services of mutual interest between the National Geospatial-Intelligence Agency (NGA) on behalf of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway.

1.2. For the purpose of this Implementing Annex, the designated organizations of the Parties shall be as follows:

1.2.1. For NGA – NGA.

1.2.2. For the Ministry of Defence – the Norwegian Military Geographic Service (FMGT).

2. MATERIALS TO BE EXCHANGED OR PROVIDED

2.1. Aeronautical Products: Aeronautical products (preferably in digital format) identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by a Party to the other Party, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, on an automatic distribution basis unless otherwise agreed. Additional copies of aeronautical products from Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided by the providing Party to the other Party upon request in accordance with

paragraph 2.7 of this Section.

2.2. Flight Information Publications (FLIP): FLIP as identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by a Party to the other Party, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, on an automatic distribution basis. Additional copies of FLIP and related data may be provided by the producing Party to the other Party in accordance with the terms of a Foreign Military Sales (FMS) case or equivalent process.

2.3. Reproduction Materials: One (1) set of reproduction material (preferably in digital format) for any sheet of the aeronautical products identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by each Party to the other Party upon request, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, Reproduction materials provided by a Party may be used by the other Party to print stock for the other Party's use without prior written authorization from the originating Party.

2.4. Publications and Related Geospatial Information Materials: Aeronautical publications and related geospatial information materials shall be exchanged as specified in Appendix I, and any other relevant Appendix, of this Implementing Annex. Additional copies of aeronautical publications and related geospatial information materials identified in Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided by a Party to the other Party upon request in accordance with paragraph 2.7 of this Section.

2.5. Bulk Stocks: Planning and operational stocks of aeronautical products, data, publications, and related geospatial information materials identified in Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided, on a case-by-case basis, by the originating Party to the recipient Party upon request.

2.6. Digital Aeronautical Products: Where applicable, digital aeronautical products, data, publications, and related geospatial information materials transferred under the provisions of this Implementing Annex shall adhere to voluntary consensus standards, such as Geography Mark-Up Language (GML), preferably consistent with the Aeronautical Information eXchange Model (AIXM). In most cases, digital aeronautical products, data, publications, and related geospatial information materials shall be exchanged via

magnetic or optical media.

2.6.1. NGA shall supply one (1) copy of all releasable U.S. Government-produced geospatial information applications software, and any changes thereto, related to digital aeronautical products and data as outlined in Appendix I, and any other relevant Appendix, of this Implementing Annex.

2.6.2. FMGT shall coordinate all changes to NGA-supplied geospatial information applications software with NGA.

2.7. Additional Copies: At its sole discretion, a Party may satisfy the other Party's requests for additional copies of any aeronautical products, data, publications, and related geospatial information materials produced by the Party, with the exception of those items subject to other bilateral agreements or other restrictions. Upon completion of any new releasable digital data for areas covered in this Implementing Annex, the originating Party shall inform the other Party.

2.8. Costs: Unless otherwise specified in this Implementing Annex, all aeronautical products, data, publications and related geospatial information materials shall be provided by a Party without charge.

3. USE AND RELEASE RESTRICTIONS

3.1. The aeronautical products, data, publications and related geospatial information materials exchanged under this Implementing Annex may be used for defense and other governmental purposes only. The aeronautical products, data, publications and related materials exchanged under this Implementing Annex shall not be used by the Parties for any commercial purposes or transferred to any Third Party (including States) for commercial purposes.

3.2. The aeronautical products, data, publications and related geospatial information materials exchanged under this Implementing Annex that are subject to copyright protection in the originating Party may be made available to other States for purpose of safety of aviation on the condition that the receiving State is made aware that the

materials are copyright protected and that the materials are appropriately annotated that they are subject to copyright by the originating Party.

3.3. Unless otherwise agreed by the Parties in writing, title to aeronautical products, data, publication, and related geospatial information materials co-produced by the Parties shall be allocated jointly to the Parties. The Parties shall take any necessary steps to give effect to this arrangement. The Parties shall agree, in writing, on the terms of use of co-produced aeronautical products, data, publications, and related geospatial information materials.

3.4. Any specification, production information, or manufacturing know-how derived from performance under the provisions of this Implementing Annex shall be used and fully protected in accordance with the Agreement.

3.5. If a Party is loaned or receives software from the other Party under this Implementing Annex, the recipient Party shall not reverse engineer or attempt in any manner to duplicate that software without the prior written consent of the originating Party.

3.6. If aeronautical products, data, publications, or related geospatial information materials are subject to copyright or other privately held intellectual property rights and to limited rights of use or disclosure, such items shall be marked with a restrictive legend by the originating Party prior to their provision to the receiving Party. Such items shall not be used or disclosed in any manner that might prejudice the limitations on use or disclosure marked on them.

3.7. FMGT grants to NGA an unlimited use license on Norway produced aeronautical charts and related geospatial information materials that shall be used as source materials by NGA in production of hard or softcopy products for use by the government of the United States of America in accordance with Article IV (General Obligations and Responsibilities) of the Agreement. NGA grants to FMGT an unlimited use license on NGA produced aeronautical charts and related geospatial information materials that shall be used as source materials by FMGT in production of hard or softcopy products for use by the government of Norway in accordance with Article IV (General Obligations and Responsibilities) of the Agreement.

4. SHIPMENT OF MATERIALS

4.1. All shipments of aeronautical products, data, publications, and related geospatial information materials by a Party to the other Party shall be accompanied by appropriate transmittal documents that list the contents of the shipment.

4.2. All aeronautical products, data, publications, and related geospatial information materials to be exchanged under this Implementing Annex shall be sent free of freight charges. All shipment costs shall be borne by the sending Party.

4.3. If applicable, packages shall be clearly marked with the notation "UNITED STATES/NORWAY BILATERAL GEOSPATIAL INFORMATION AGREEMENT EXCHANGE MATERIAL- NON REIMBURSABLE" and include the following Customs Declaration.

<i>CUSTOMS DECLARATION</i>	
<i>The materials enclosed are exchanged between Government Agencies under the terms of Official Bilateral Government Arrangements</i>	
<i>Contents are to be used for Government Purposes ONLY And are not releasable for Commercial Sale</i>	
Signed:	<u>Official Stamp</u>
Name:	
Position:	
Date: / /	

4.4. Addresses used for shipments of aeronautical products, data, publications, and related geospatial information materials are set forth in Appendices I and II of this Implementing Annex.

5. RETURN OF MATERIAL

5.1. In the event of termination of the Agreement or this Implementing Annex, all aeronautical products, data, publications, and related geospatial information materials that have already been exchanged, excluding aeronautical products, data, publications, and related geospatial information materials on loan, need not be returned and shall remain with the holder unless otherwise agreed. Any additional reproduction, distribution, etc. of the material shall require authorization of the rights holder.

7. VALIDITY

7.1. This Implementing Annex shall enter into force on the date of the last signature and shall remain in force in accordance with Article XIII (Amendment and Termination) of the Agreement.

Prepared in duplicate, in the English language, duly signed and exchanged between the Parties

FOR THE NATIONAL GEOSPATIAL-
INTELLIGENCE AGENCY
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

FOR THE MINISTRY
OF DEFENSE
KINGDOM OF NORWAY



DAWN R. EILENBERGER
Director,
Office of International Affairs and Policy-
National Geospatial-Intelligence Agency



KJETIL UTNE, Captain (N)
Director, Norwegian Military
Geographic Service



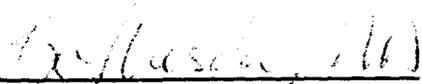
Date



Date



Location



Location

APPENDIX I
TO
IMPLEMENTING ANNEX B

**EXCHANGE OF AERONAUTICAL PRODUCTS, DATA, PUBLICATIONS, AND
RELATED GEOSPATIAL INFORMATION MATERIALS**

1. NGA shall provide the following NGA-produced aeronautical products, data, publications, and related geospatial information materials to FMGT. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities. Charts produced and maintained by the FMGT, or third party countries, are not included. Digitized versions (e.g. CDRG) of these products shall be provided upon request if otherwise available and releasable.

1.1. Aeronautical Products: Six (6) copies of each current and future edition of the aeronautical products identified below, automatically to each addressee listed in paragraph 3.2.:

1.1.1. Joint Operations Graphics (JOG), 1:250,000 scale

Series 1501A

1.1.2. Tactical Pilotage Charts (TPC), 1:500,000 scale

1.1.3. Operational Navigation Charts (ONC), 1:1,000,000 scale

1.1.4. Jet Navigation Charts (JNC) 1:2,000,000 scale

1.1.5. Global Navigation Charts (GNC), 1:5,000,000 scale

1.1.6. The list of the specific products for paragraph 1.1. that NGA shall provide to FMGT is set forth in a Disclosure and Release Tool (DART) List. The agreed method of release for each of the products is identified in the DART List as either “automatic distribution,” “upon request” or “case-by-case”. NGA shall provide an updated DART list containing any changes to the listing of available products or to their releasibility to FMGT upon request, as resources permit. FMGT shall provide NGA written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

1.1.7. NGA shall provide products identified as “automatic distribution” on an automatic distribution basis. NGA intends to provide such distribution through the Defense Logistics Agency (DLA).

1.1.8. NGA shall provide products identified as “upon request” as soon as practicable after receiving a written request. NGA shall insure in advance that such products are available for release.

1.1.9. For products identified as “case-by-case,” the following procedures shall apply:

1.1.9.1. FMGT shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. NGA shall determine whether the product may be released, and if not, provide FMGT with the reason.

1.1.9.2. If the release is contingent on permission of a third party, NGA shall notify FMGT of the identity of the third party. FMGT shall be responsible for obtaining the third party’s written permission to release. If FMGT is unable to secure this permission, FMGT may request NGA to seek permission.

1.1.9.3. Once a product has been determined as releasable, NGA shall provide such products as soon as practicable.

1.2. Reproduction Material: One (1) set of reproduction material (preferably in digital format) for any NGA-produced aeronautical products provided under paragraph 1.1. above, upon request.

1.3. Publications and related geospatial information materials:

1.3.1. Two (2) copies of Catalog of Maps, Charts and Related Products (CATCDLIMDIS), technical publications, instructions and specifications related to the aeronautical products, data, and related geospatial information material identified in Implementing Annex B to each addressee.

1.3.2. Web-based "Chart Updating Manual" (WebCHUM) digital updates accessed via the SCIP portal.

1.3.3. Two (2) copies of NGA Catalog Part 1 Aeronautical Charts and Flight Information Publications and Related Documents.

1.4. Digital Data Online: NGA aeronautical digital datasets and products can be accessed through the Defense Security Cooperation Agency's (DSCA) Security Cooperation Information Portal (SCIP) at <https://www.scportal.us/>.

1.4.1. Access to SCIP requires user registration to receive an activated token. (The token is a commercial secure identification system that provides pin codes that can change by the minute.) Token registration instructions may be downloaded from the SCIP website. A maximum of two (2) tokens may be provided.

1.4.2. Further guidance and assistance with the registration process is available from the NGA point of contact. Once the registration is complete, the tokens will be activated for the designated holders.

2. FMGT shall provide the following produced aeronautical products, data, publications, and related geospatial information materials to NGA. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities.

2.1. Aeronautical Products: Five (5) copies of each current and future edition of the aeronautical products identified below, automatically, in the appropriate quantities indicated for each addressee. One (1) copy will be shipped to Addresses #1 and #2, two (2) copies will be shipped to Address #3, and one (1) copy of each item will be shipped to Address #4 listed in paragraph 3.1.:

2.1.2. Aeronautical Chart Svalbard (FLSB), 1:250,000 scale

2.1.3. M517 Series Aeronautical Charts, 1:250,000 scale

2.1.4. Low Flying Charts (LFC), 1:500,000 scale

2.1.5. Maritime Aeronautical Chart (FLMA), 1:1,000,000

2.1.6. Aeronautical Chart Amendment Document-Norway (CHAD-NOR) and related supplements in either printed format or on CD/DVD media.

2.1.7. The list of the specific products for paragraph 2.1. that FMGT shall provide to NGA is set forth in a document provided by FMGT (Disclosure List). The agreed method of release for each of the products is identified in the Disclosure List as either "automatic distribution," "upon request" or "case-by-case". FMGT shall provide an updated Disclosure List containing any changes to the listing of available products or to their releasibility to NGA upon request, as resources permit. NGA shall provide FMGT written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

2.1.8. FMGT shall provide products identified as "automatic distribution" on an automatic distribution basis.

2.1.9. FMGT shall provide products identified as "upon request" as soon as practicable after receiving a written request. FMGT shall insure in advance that such products are available for release.

2.1.10. For products identified as "case-by-case," the following procedures shall apply:

2.1.10.1. NGA shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. FMGT shall determine whether the product may be released, and if not, provide NGA with the reason.

2.1.10.2. If the release is contingent on permission of a third party, FMGT shall notify FMGT of the identity of the third party. NGA shall be responsible for obtaining the third party's written permission to release. If

NGA is unable to secure this permission, NGA may request FMGT to seek permission.

2.1.10.3. Once a product has been determined as releasable, FMGT shall provide such products as soon as practicable.

2.2. Reproduction Material: One (1) set of reproduction material (preferably in digital format) for all FMGT produced aeronautical products provided under paragraph 2.1. above, upon request. Whenever such reproduction material is provided, two (2) hard copies of the product shall be provided as well.

2.3. Publications and related geospatial information materials:

2.3.1. One (1) copy each of current and future catalogs, technical publications, instructions and specifications related to the aeronautical products, data, publications and related geospatial information materials produced by FMGT to each addressee.

3. Shipping Instructions. The following addresses shall be used for shipments of all aeronautical products, data, publications, and related geospatial information materials provided under this Appendix:

3.1. TO NGA:

3.1.1. FMGT-produced aeronautical products, data, publications, and related geospatial information materials (copies, reproduction material, catalogs, specifications, publications, etc.) send to:

Address # 1 (One [1] copy)

NGA Aeronautical Services Office
Mail Stop L-27
3838 Vogel Road
Arnold, MO 63010-6238
Telephone: +1 (314) 676-9012
FAX: +1 (314) 676-3044

Address # 2 (One [1] copy)

NGA Aeronautical Office Europe

Building 564
66877 Flugplatz Ramstein
Germany
Telephone: +49 (011) 6371-71912
FAX: +49 (011) 6371-71913

Address # 3 (Two [2] copies)

National Geospatial-Intelligence Agency
St. Louis Research Center/Mail Stop L-37
3838 Vogel Road
Arnold, MO 63010-6238
Telephone: +1 (314) 676-6015
FAX: +1 (314) 676-7501

3.1.2. Please send one (1) copy, a softcopy version if available, of FMGT produced Aeronautical Charts to the following address:

Address # 4 (One [1] copy)

National Geospatial-Intelligence Agency
CADRG/Mail Stop L-109
3838 Vogel Road
Arnold, MO 63010-6238
Telephone: +1 (314) 676-1174

3.2. To the FMGT:

For routine library distribution and digital products:

Norwegian Military Geographic Service (FMGT)
Oslo Mil/Akershus
N-0015 OSLO
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

For stock distribution:

Norwegian Defence Logistics Support Division
Base Viken, Nordkisa Storage
Skrythagen 24, 2055 Nordkisa
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

APPENDIX II
TO
IMPLEMENTING ANNEX B

EXCHANGE OF FLIGHT INFORMATION PUBLICATIONS (FLIP), DATA,
AND RELATED
GEOSPATIAL INFORMATION AND SERVICES MATERIALS

1. NGA shall provide one (1) copy of the following NGA-produced FLIP products, publications and related geospatial information materials to FMGT in digital format on an automatic distribution basis unless otherwise agreed. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities.

1.1. Digital

1.1.1. Digital Airfield Flight Information Files (DAFIF) on CD/DVD

1.1.2. Digital Vertical Obstruction Files (DVOF) data over Norway, upon request.

2. The Norwegian Military Geographic Service (FMGT) shall automatically provide three (3) copies of the Ministry of Defense -produced products, data, publications and related geospatial information materials to NGA. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities.

2.1. FMGT shall automatically provide or fund subscriptions for three (3) copies of Norwegian Ministry of Defense-produced or obtained products (and digital equivalents where available), data, publications, and related geospatial information materials, including military Aeronautical Information Publications (AIP), airfield surveys and diagrams, obstruction charts and data, engineering data on movement areas, ground support facilities and airfield infrastructure:

2.1.1. Obstruction charts and data

2.1.2. Aeronautical charts, diagrams and related materials

2.1.3. Military Notices to Airmen, daily and monthly summaries

2.1.4. CENOR FLIPs

2.1.4. The list of the specific products for paragraph 2.1. that FMGT shall provide to NGA is set forth in a document provided by FMGT (Disclosure List). The agreed method of release for each of the products is identified in the Disclosure List as either "automatic distribution," "upon request" or "case-by-case". FMGT shall provide an updated Disclosure List containing any changes to the listing of available products or to their releasibility to NGA upon request, as resources permit. NGA shall provide FMGT written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

2.1.5. FMGT shall provide products identified as "automatic distribution" on an automatic distribution basis.

2.1.6. FMGT shall provide products identified as "upon request" as soon as practicable after receiving a written request. FMGT shall insure in advance that such products are available for release.

2.1.7. For products identified as "case-by-case," the following procedures shall apply:

2.1.7.1. NGA shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. FMGT shall determine whether the product may be released, and if not, provide NGA with the reason.

2.1.7.2. If the release is contingent on permission of a third party, FMGT shall notify FMGT of the identity of the third party. NGA shall be responsible for obtaining the third party's written permission to release. If NGA is unable to secure this permission, NGA may request FMGT to seek permission.

2.1.7.3. Once a product has been determined as releasable, FMGT shall provide such products as soon as practicable.

2.2. NORWEGIAN AERONAUTICAL INFORMATION PUBLICATIONS (AIPs):

FMGT shall automatically provide or fund subscriptions for three (3) copies of the Avinor-published Norway civilian Aeronautical Information Publication, with amending service, to NGA. Current editions shall be provided initially, if required. Thereafter, new editions or applicable amendments shall be provided in like quantities.

- 2.2.1. Aeronautical Information Publication, Volumes I and II (AIP)
- 2.2.2. AIP Amendments, AIRAC and non-AIRAC
- 2.2.3. AIP Supplements, AIRAC and non-AIRAC
- 2.2.4. Aeronautical Information Circulars (AIC), Series A, B, I & N
- 2.2.5. Monthly NOTAM Summaries, All Series

3. Shipping Instructions. The following addresses shall be used for shipments of all FLIP products, data, publications, and related geospatial information materials provided under this Appendix:

3.1. TO NGA:

3.1.1. Copies of Norwegian-produced civil AIP and military products, data, publication, and related geospatial information material identified in paragraph 2. of this Appendix, in the appropriate quantities indicated for each addressee, send to the addresses below. Two (2) copies will be shipped to Address #1, and one (1) copy of each item will be shipped to Address #2, below:

Address # 1

NGA Aeronautical Services Office
Mail Stop L-27
3838 Vogel Road
Arnold, MO 63010-6238

Telephone: +1 (314) 676-9012
FAX: +1 (314) 676-3044
Email: flip@nga.mil

Address # 2

NGA Aeronautical Office Europe
Building 564
66877 Flugplatz Ramstein
Germany

Telephone: +49 (011) 6371-71912
FAX: +49 (011) 6371-71913
Email: nga.europe@ramstein.af.mil

3.2. TO THE FMGT:

3.2.1. Copies of NGA-produced FLIP products, data, publications, and related geospatial information materials, and requests for bulk and additional stock as identified in Appendices, send to

Inspectorate of Flying
N-1590 Rygge Flystasjon
Norway

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

**APPENDIX III
TO
IMPLEMENTING ANNEX B**

**REQUESTS FOR AERONAUTICAL PRODUCTS, DATA, PUBLICATIONS,
AND RELATED GEOSPATIAL INFORMATION AND SERVICES MATERIALS**

1. At the sole discretion of NGA, NGA may satisfy FMGT requests for bulk or additional stock of any NGA-produced aeronautical products, data, publications, and related geospatial information materials, with the exception of those items subject to other bilateral agreements or other restrictions.

1.1. Requests for bulk or additional stock should be addressed to:

National Geospatial-Intelligence Agency
Office of International Affairs and Policy
Attn: Norway Desk Officer
Mail Stop N-75
1200 First Street, SE
Washington, DC 20303-0002
USA
Telephone: +1-202-284-3464
FAX: +1-202-284-3712

2. At the sole discretion of FMGT, FMGT may satisfy NGA requests for copies of any Norway-produced aeronautical products, data, publications, and related geospatial information materials, with the exception of those items subject to other bilateral agreements or other restrictions.

2.1. Requests for bulk or additional stock should be addressed to:

Norwegian Defence Logistics Support Division
Base Viken, Nordkisa Storage
Skrythagen 24, 2055 Nordkisa
NORWAY

Mark the shipment/custom declaration with: Mil 97/5183

3. Distribution of the items exchanged upon request shall be as specified in paragraph 3 (Shipping Instructions) of Appendixes I and II of this Implementing Annex.

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

**IMPLEMENTING ANNEX C
TO THE**

BASIC EXCHANGE AND COOPERATION AGREEMENT

BETWEEN

**THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
OF THE
DEPARTMENT OF DEFENSE
OF THE
UNITED STATES OF AMERICA**

AND

**THE MINISTRY OF DEFENCE
OF THE
KINGDOM OF NORWAY**

**CONCERNING
GEOSPATIAL INFORMATION**

**NAUTICAL PRODUCTS, DATA, PUBLICATIONS AND RELATED
GEOSPATIAL INFORMATION MATERIALS**

This Implementing Annex C Concerning Nautical Products, Data, Publications and Related Geospatial Information Materials is referred to in Article III of the Basic Exchange and Cooperation Agreement between the National Geospatial Intelligence Agency of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway Concerning Geospatial Information (the Agreement).

1. PURPOSE

1.1. The purpose of this Implementing Annex is to prescribe arrangements for the exchange of digital and hardcopy nautical (including hydrographic) products, data, publications, and related geospatial information materials and the provision of co-production support services of mutual interest between the National Geospatial-Intelligence Agency (NGA) on behalf of the Department of Defense of the United States of America and Ministry of Defence of the Kingdom of Norway.

1.2. For the purpose of this Implementing Annex, the designated organizations of the Parties shall be as follows:

1.2.1. For NGA – NGA.

1.2.2. For the Ministry of Defence – the Norwegian Military Geographic Service (FMGT).

2. MATERIALS/SERVICES TO BE EXCHANGED OR PROVIDED

2.1. Nautical Products: Nautical products (preferably in digital format) identified in Appendix I, and any other relevant Appendix of this Implementing Annex, shall be provided by a Party to the other Party, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, on an automatic distribution basis unless otherwise agreed.

Additional copies of nautical products from Appendix I, and any other relevant Appendix of this Implementing Annex, may be provided by a Party to the other Party upon request in accordance with paragraph 2.6. of this Section.

2.2. Reproduction Materials: One (1) set of reproduction material (preferably in digital format) for any sheet of the nautical products identified in Appendix I, and any other relevant Appendix of this Implementing Annex, shall be provided by each Party to the other Party upon request, unless the providing Party has provided notice to the recipient Party of the discontinuation of such materials. Reproduction materials provided by the originating Party may be used by the recipient

Party to print stock for the recipient Party's use without prior written authorization from the originating Party.

2.3. Publications and Related Geospatial Information Materials: Nautical publications and related geospatial information materials shall be exchanged as specified in Appendix I, and any other relevant Appendix of this Implementing Annex, unless the providing Party has provided notice to the recipient Party of the discontinuation of such materials. Additional copies of nautical publications and related geospatial information materials identified in Appendix I, and any other relevant Appendix of this Implementing Annex, may be provided by a Party to the other Party upon request in accordance with paragraph 2.6. of this Section.

2.4. Bulk Stocks: Planning and operational stocks of nautical products, data, publications, and related geospatial information materials listed in Appendix I, and any other relevant Appendix of this Implementing Annex, may be provided, on a case-by-case basis, by the originating Party to the recipient Party upon request.

2.5. Digital Nautical Products: Where applicable, digital nautical products, data, publications, and related geospatial information materials transferred under the provisions of this Implementing Annex shall be exchanged in formats agreed by the Parties.

2.5.1. NGA shall supply one (1) copy of all releasable U.S. Government-produced geospatial information applications software, and any changes thereto, related to digital nautical products and data as outlined in the Appendix I, and any other relevant Appendix of this Implementing Annex.

2.5.2. FMGT shall coordinate all changes to NGA supplied-geospatial information applications software with NGA.

2.6. Additional Copies: At its sole discretion, a Party may satisfy the other Party's requests for additional copies of any nautical products, data, publications, and related geospatial information materials produced by the Party, with the exception of those items subject to other bilateral agreements or other restrictions. Upon completion of any new releasable digital data for areas covered in this Implementing Annex, the originating Party shall inform the recipient Party.

2.7. Costs: Unless otherwise specified in this Implementing Annex, all nautical products, data, publications, and related geospatial information materials shall be provided by a Party without charge.

3. USE AND RELEASE RESTRICTIONS

3.1. Each Party shall respect the copyright, use, and release restrictions on all nautical products, data, publications, and related geospatial information materials provided by the other Party in accordance with specific written guidance from the originating Party at the time the items are provided.

3.2. The nautical products, data, publications, and related geospatial information materials provided by the Parties to each other under the terms of this Implementing Annex may be used for defense or other governmental purposes, but shall not be used for any other purpose without the prior written consent of the originating Party.

3.3. Unless otherwise agreed by the Parties in writing, title to nautical products, data, publications, and related geospatial information materials co-produced by the Parties shall be allocated jointly to the Parties. The Parties shall take any necessary steps to give effect to this arrangement. The Parties shall agree, in writing, on the terms of use of co-produced nautical products, data, publications, and related geospatial information materials.

3.4. Any specification, production information, or manufacturing know-how incidentally derived from performance under the provisions of this Implementing Annex shall be used and fully protected in accordance with the Agreement.

3.5. If a Party is loaned or otherwise receives software from the other Party under this Implementing Annex, the recipient Party shall not reverse engineer or attempt in any manner to duplicate that software without the prior written consent of the originating Party.

3.6. If nautical products, data, publications, and related geospatial information materials are subject to copyright or other privately held intellectual property rights and to limited rights of use or disclosure, such items shall be marked with a restrictive legend by the originating Party prior to their provision to the recipient Party. Such items shall not be used or disclosed by the recipient Party in any manner that might prejudice the limitations on use or disclosure marked on them.

3.7. FMGT grants to NGA an unlimited use license on Norweigan-produced nautical charts and related geospatial information materials that shall be used as source materials by NGA in production of hard or softcopy products for use by the government of the United States of America in accordance with Article IV (General Obligations and Responsibilities) of the Agreement. NGA grants to FMGT an unlimited use license on NGA-produced nautical charts and related geospatial information materials that shall be used as source materials by FMGT in production of hard or softcopy products for use by the government of Norway in accordance with Article IV (General Obligations and Responsibilities) of the Agreement.

4. SHIPMENT OF MATERIALS

4.1. All shipment of nautical products, data, publications, and related geospatial information materials by a Party to the other Party shall be accompanied by appropriate transmittal documents that list the contents of the shipment. Transmittal documents for classified shipments shall be prepared in accordance with Article VI (Classified Information) of the Agreement.

4.2. All nautical products, data, publications, and related geospatial information materials to be exchanged under this Implementing Annex shall be sent free of freight charges. All shipment costs shall be borne by the sending Party.

4.3. If applicable, packages shall be clearly marked with the notation "UNITED STATES/NORWAY BILATERAL GEOSPATIAL INFORMATION AGREEMENT EXCHANGE MATERIAL - NON-REIMBURSABLE" and include the following Customs Declaration.

<i>CUSTOMS DECLARATION</i>	
<i>The materials enclosed are exchanged between Government Agencies under the terms of Official Bilateral Government Arrangements</i>	
<i>Contents are to be used for Governmental Purposes ONLY And are not releasable for Commercial Use</i>	
Signed:	<u>Official Stamp</u>
Name:	
Position:	
Date: / /	

4.4. Addresses used for shipments of nautical products, data, publications, and related geospatial information materials are set forth in Appendices I and II of this Implementing Annex.

5. RETURN OF MATERIALS

5.1. In the event of termination of the Agreement or this Implementing Annex, all nautical products, data, publications, and related geospatial information materials that have already been exchanged, excluding nautical products, data, publications, and related geospatial information materials on loan, need not be returned and shall remain with the holder unless otherwise agreed. Any additional reproduction, distribution, etc., of the materials shall require authorization of the rights holder.

6. VALIDITY

6.1. This Implementing Annex shall enter into force on the date of the last signature and shall remain in force in accordance with Article XIII (Amendment and Termination) of the Agreement.

Prepared in duplicate, in the English language, duly signed and exchanged between the Parties.

FOR THE NATIONAL GEOSPATIAL
INTELLIGENCE AGENCY
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

FOR THE MINISTRY OF
DEFENSE
KINGDOM OF NORWAY

[Handwritten Signature]
DAWN R. EILENBERGER
Director,
Office of International Affairs and Policy-
National Geospatial-Intelligence Agency

[Handwritten Signature]
KJETIL UTNE, Captain (N)
Director, Norwegian Military
Geographic Service

3 Oct 2011
Date

3 Oct 2011
Date

[Handwritten Location]
Location

[Handwritten Location]
Location

APPENDIX I
TO
IMPLEMENTING ANNEX C

**EXCHANGE OF NAUTICAL PRODUCTS, DATA, PUBLICATIONS, AND RELATED
GEOSPATIAL INFORMATION MATERIALS**

1. NGA shall provide, where releasable, the following NGA produced nautical charts and associated products, data, publications, and related geospatial information materials to FMGT, including electronic access to such data sets as are available on the internet.

1.1. Nautical Charts and Associated Products (hardcopy): Four (4) copies of each current and future edition of releasable nautical products in regions 1, 2, 3, 8, and 9 plus sub-regions 43, 51, 57, and 61 as listed in the NGA Catalog of Mapping, Charting and Related Products, Part 2 - Volume 1, (CATP2V01U) Hydrographic Products.

1.2. Publication and related geospatial information materials: All publications and related data files are available via the www, with their updates, including List of Lights, Manuals, Tables, Catalogs, Notice to Mariners, and Sailing Directions. In addition, two (2) copies of each of the following:

1.2.1. Indices for all NGA products listed in the DART List.

1.3. Digital Nautical Charts (DNC): Two (2) copies of DNCs on CD-ROM, plus new editions and updates as they are produced, consistent with applicable release restrictions for Norwegian Government use only. CD ROMs will be provided only until such time as the US Navy ceases to require DNC on CD ROM, after which the opportunity for electronic access will be provided. In particular, DNC is provided for Norwegian Government vessels exempt from the Safety of Life at Sea (SOLAS) Convention. In addition, available VDU (Vector Product Format Digital Updates) files will be made available from the internet.

1.4. World Vector Shoreline Plus (WVS+): Two (2) copies of WVS+. This data is available on the NGA website and is trademarked by NGA, noted with an "R" in a circle on CD-ROM.

1.5. NGA's Harbor View of Norwegian ports: Two (2) copies on CD-ROM.

1.6. The list of the specific products for paragraphs 1.1 – 1.5 that NGA shall provide to FMGT is set forth in a Disclosure and Release Tool (DART) List. The agreed method of release for each of the products is identified in the DART List as either "automatic distribution," "upon request" or "case-by-case". NGA shall provide an updated DART list containing any changes to the listing of available products or to their releasability to FMGT upon request, as resources permit. FMGT shall provide NGA written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

1.6.1. NGA shall provide products identified as "automatic distribution" on an automatic distribution basis. NGA intends to provide such distribution through the Defense Logistics Agency (DLA).

1.6.2. NGA shall provide products identified as "upon request" as soon as practicable after receiving a written request. NGA shall insure in advance that such products are available for release.

1.6.3. For products identified as "case-by-case," the following procedures shall apply:

1.6.3.1. FMGT shall submit a written request for the product identifying the product, the reason for requesting it, and the urgency of the request. NGA shall determine whether the product may be released, and if not, provide FMGT with the reason.

1.6.3.2. If the release is contingent on permission of a third party, NGA shall notify FMGT of the identity of the third party. FMGT shall be responsible for obtaining the third party's written permission to release. If FMGT is unable to secure this permission, FMGT may request NGA to seek permission.

1.6.3.3. Once a product has been determined as releasable, NGA shall provide such products as soon as practicable.

2. The FMGT shall provide, where releasable, the following Norwegian produced nautical charts and associated products, data, publications and related geospatial information materials to NGA, including electronic access to such data sets as are available on the internet.

2.1. Nautical Charts and Associated Products: Four (4) copies of each current and future edition of releasable nautical products produced by the Norwegian Hydrographic Service (NHS) upon request.

2.2. Reproduction Material: Upon request, one (1) copy of digital print files for all NHS produced nautical charts and associated products provided under paragraph 2.1. above.

2.3. Publications and related geospatial information materials: Four (4) copies of each current and future edition navigational publication produced by NHS, automatically, including the following:

2.2.1 Notice to Mariners

2.2.2. Tide Tables for the Norwegian Coast and Svalbard

2.2.3. Norwegian Sailing Directions

2.4. Electronic Nautical Chart (ENC) data: FMGT shall will provide two (2) copies of each ENC data produced on CD-ROM by NHS to NGA and two (2) copies of each related ENC update upon request. The ENCs are for planning purposes only, NOT for navigation. In addition, FMGT shall, upon request, provide (through NHS) ENC licenses for navigation for U.S. naval vessels in Norwegian waters.

2.5. Survey Data: FMGT shall provide [through NHS] copies of survey data in Norwegian waters required only for US Naval operations. US Embassy DAO must coordinate request to obtain this survey data.

2.6. Tidal Data: FMGT shall provide [through NHS] tidal data collected in Norwegian waters.

2.7. The list of the specific products for paragraphs 2.1 – 2.6 that FMGT shall provide to NGA is set forth in a document provided by FMGT (Disclosure List). The agreed method of release for each of the products is identified in the Disclosure List as either “automatic distribution,” “upon request” or “case-by-case”. FMGT shall provide an updated Disclosure List containing any changes to the listing of available products or to their releasibility to NGA upon request, as resources permit. NGA shall provide FMGT written notice of any changes in the products it desires to receive or in the method of release. The Parties shall agree on the changes in writing.

2.7.1. FMGT shall provide products indentified as “automatic distribution” on an automatic distribution basis.

2.7.2. FMGT shall provide products indentified as “upon request” as soon as practicable after receiving a written request. FMGT shall insure in advance that such products are available for release.

2.7.3. For products indentified as “case-by-case,” the following procedures shall apply:

2.7.3.1. NGA shall submit a written request for the product indentifying the product, the reason for requesting it, and the urgency of the request. FMGT shall determine whether the product may be released, and if not, provide NGA with the reason.

2.7.3.2. If the release is contingent on permission of a third party, FMGT shall notify FMGT of the identity of the third party. NGA shall be responsible for obtaining the third party’s written permission to release. If NGA is unable to secure this permission, NGA may request FMGT to seek permission.

2.7.3.3. Once a product has been determined as releasable, FMGT shall provide such products as soon as practicable.

3. Shipping Instructions The following addresses shall be used for shipments of all nautical products, data, publications, and related geospatial information materials.

3.1. TO NGA:

3.1.1. Norwegian Safety of Navigation Materials (Notices to Mariners, Light Lists, Tide Tables, Sailing Direction, etc.), nautical products, data, publications, and related geospatial information materials (library copies, reproduction materials, gazetteers, catalogs, specifications, publications, etc.) send to:

National Geospatial-Intelligence Agency
ATTN: PVWC/Mail Stop D-58
4600 Sangamore Road
Bethesda, MD 20816-5003
Phone: (301) 227-4510
Fax: (301) 227-4211
Email: HYDROSOURCE@nga.mil (all source)

3.1.2. Norwegian Safety of Navigation Materials: Radio Navigational Warnings send to:

National Geospatial-Intelligence Agency
ATTN: PVM/Mail Stop D-44
4600 Sangamore Road
Bethesda, MD 20816-5003
MESSAGE: NGA NAVSAFETY BETHESDA, MD
Phone: (301) 227-3147
Fax: (301) 227-3731
Email: Navsafety@nga.mil

3.1.3. Requests for bulk and additional stock of NGA nautical products, data, publications, and related geospatial information materials send to:

National Geospatial-Intelligence Agency
ATTN: PVWC/Mail Stop D-58
4600 Sangamore Road
Bethesda, MD 20816-5003
Phone: (301) 227-4510
Fax: (301) 227-4211
Email: HYDROSOURCE@nga.mil (all source)

3.2. TO FMGT:

6.2.1. For routine library distribution and digital products:

Norwegian Military Geographic Service (FMGT)
Oslo Mil/Akershus
N-0015 OSLO
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

6.2.2. For stock distribution:

Norwegian Defence Logistics Support Division
Base Viken, Nordkisa Storage
Skrythagen 24, 2055 Nordkisa
NORWAY
Mark the shipment/custom declaration with: Mil 97/5183

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

**APPENDIX II
TO
IMPLEMENTING ANNEX C**

**HARDCOPY CHART TRANSITION STRATEGY AND TERMINATING NGA PUBLIC
SALES FOR NORWEGIAN WATERS**

1. NGA and FMGT recognize that they have a common desire to provide for the safe and effective operation of their defence forces and government customers and to develop a long-term, close-working relationship in this matter. In particular, they now recognize that there would be mutual benefit if NGA adopted into its chart series certain FMGT produced charts.
 - 1.1. Adoption will take place over a timeframe sufficient to allow for the transfer of digital print files by FMGT, printing and distribution by NGA, cancellation of existing NGA coverage, and the announcement of each new chart in the NGA Notice to Mariners.
2. NGA will add the new NGA chart number, stock number, national stock number, and bar code. Any other change to the adopted chart is to be agreed with FMGT.
3. FMGT will supply the digital print file for the adopted charts in a format to be agreed and fully corrected for Notice to Mariners at the time of delivery. The digital print files will not be distributed to third parties, except for NGA contractors who similarly will be restricted from third party release.
4. FMGT will provide NGA an advance notification of upcoming affected FMGT new editions.
5. NGA will only supply the adopted charts to U.S. defence forces and government agencies (including their contractors for the purpose of fulfilling the contracts) and will not sell or make them available for public or commercial release, thereby terminating NGA public sales for Norwegian waters.
6. Adopted charts will be maintained up to date according to the guidance and procedures set

out by national policy and prudent safe navigation practices. The FMGT will supply to NGA all FMGT Notice to Mariners and other relevant updating information via normal reporting and dissemination channels. NGA may choose to be selective of which FMGT Notice to Mariners to use but will ensure that its version of an adopted chart will be kept up to date for those items relevant to its customers and commensurate with the safety of navigation and the protection of the environment. Liability for selection rests with NGA.

7. NGA and FMGT have, therefore, jointly decided that:

7.1. NGA will adopt and re-print FMGT charts to replace existing NGA coverage of Norwegian waters. NGA will pass to the FMGT the cross reference list of charts to be requested. Additional geographic areas will be mutually agreed.

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:

IMPLEMENTING ANNEX D

**TO THE
BASIC EXCHANGE AND COOPERATION AGREEMENT**

BETWEEN

**THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
OF THE
DEPARTMENT OF DEFENSE
OF THE
UNITED STATES OF AMERICA.**

AND

**THE MINISTRY OF DEFENCE
OF THE
KINGDOM OF NORWAY**

**CONCERNING
GEOSPATIAL - INFORMATION**

**TECHNICAL ASSISTANCE AND TRAINING
AND GEODETIC AND GEOPHYSICAL DATA AND PUBLICATIONS**

This Implementing Annex D Concerning Technical Assistance and Training and Geodetic and Geophysical Data and Publications is referred to in Article III of the Basic Exchange and Cooperation Agreement between the National Geospatial-Intelligence Agency of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway Concerning Geospatial-Information (the Agreement).

1. PURPOSE

1.1. The purpose of this Implementing Annex is to define arrangements for the provision of technical assistance and training to facilitate mutually beneficial production of Geospatial Information products, data, publications, and related materials and the exchange of digital and hardcopy geodetic and geophysical products, data, publications, and related geospatial information materials between the National Geospatial-Intelligence Agency (NGA) of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway.

1.2. For the purpose of this Implementing Annex, the designated organizations of the Parties shall be as follows:

1.2.1. For NGA - NGA.

1.2.2. For the Ministry of Defence – the Norwegian Military Geographic Service (FMGT).

2. TECHNICAL ASSISTANCE AND TRAINING

2.1. To ensure conformance and interoperability of geospatial information products, data, publications, and related materials, the Parties shall make available or provide the services set forth in this Implementing Annex.

2.2. NGA may perform, upon request, an assessment of the FMGT's technology with full cooperation of the FMGT and provide the FMGT with a written assessment of technology and any recommendations regarding training needs.

2.3. Upon the agreement of the Parties, NGA and FMGT shall exchange technical and training services on an agreed schedule.

2.4. Technical assistance visits may be made in support of geospatial information production processes, system architecture, engineering, and management as agreed by the Parties.

2.5. Based on the availability of resources, NGA may offer tuition-free formal training at the National Geospatial-Intelligence College (NGC) National Geospatial Intelligence School (NGS), Ft. Belvoir, Virginia, U.S.A. to support the variety of geospatial information production processes. Transportation and per diem costs shall be borne by FMGT unless otherwise agreed. All instruction by the NGS shall be in the English language and the prerequisite concerning the English Comprehension Level for a course shall be met. A course listing for the current and upcoming calendar year shall be provided by NGA upon request. Applicants for training shall comply with all security, physical, and other requirements.

2.5.1. Mobile Training Teams (MTTs) for some courses may also be provided by NGA tuition-free and may be taught as available and agreed. A listing of possible MTTs shall be provided by NGA upon request. Costs and expenses for MTTs shall be paid by the FMGT.

2.6. FMGT may offer similar training as available. Course information shall be provided by the FMGT upon request.

3. MATERIALS TO BE EXCHANGED OR PROVIDED

3.1. Geodetic and Geophysical Products and Data: Geodetic and geophysical products and data, including gravity and magnetic data, accomplished by governmental or civilian organizations or activities, including indexes and final computations, identified in Appendix I, and any other relevant Appendix, of this Implementing Annex shall be provided by each Party to the other Party, unless the providing Party has provided notice to the recipient Party of the discontinuation of such products, upon request unless otherwise agreed. Additional copies of geodetic and geophysical products and data from Appendix I, and any other relevant Appendix, of this Implementing Annex may be provided by a Party to the other Party upon request in accordance with paragraph 3.2 of this Section.

3.2. Additional Copies: At its sole discretion, a Party may satisfy the other Party's requests for

additional copies of geodetic and geophysical products, data, publications, and related geospatial information materials produced by the Party, with the exception of those items subject to other bilateral agreements and other restrictions. Upon completion of any new releasable digital data covered in this Implementing Annex, the originating Party shall inform the other Party.

3.3. Costs: Unless otherwise specified in this Implementing Annex, all geodetic and geophysical products, data, publications and related geospatial information materials shall be provided by a Party without charge.

3.4. Other Arrangements: In addition to paragraph 3.1 of this Annex, a Party may also provide geodetic and geophysical equipment and other equipment identified as necessary for executing the Agreement to the other Party in accordance with the terms of a separate "Loan Agreement."

4. USE AND RELEASE RESTRICTIONS

4.1. Each Party shall respect the copyright, use and release restrictions on all geodetic and geophysical products, data, publications and related geospatial information materials provided by the other Party in accordance with specific written guidance from the originating Party at the time the items are provided.

4.2. The geodetic and geophysical products, data, publications and related geospatial information materials provided by the Parties to each other under the terms of this Implementing Annex may be used for defense or other government purposes but shall not be used for any other purpose without the prior written consent of the originating Party.

4.3. Unless otherwise agreed by the Parties in writing, title to geodetic and geophysical products, data, publications and related geospatial information materials co-produced by the Parties shall be allocated jointly to the Parties. The Parties shall take any necessary steps to give effect to this arrangement. The Parties shall agree, in writing, on the terms of use of co-produced geodetic and geophysical products, data, publications and related geospatial information materials.

4.4. Any specification, production information, or manufacturing know-how incidentally derived from performance of the provisions of this Implementing Annex shall be used and fully protected in accordance with the Agreement.

4.5. If a Party is loaned or otherwise receives software from the other Party under this Implementing Annex, the receiving Party shall not reverse engineer or attempt in any manner to duplicate that software without the prior written consent of the originating Party.

4.6. If geodetic and geophysical products, data, publications and related geospatial information materials are subject to copyright or other privately held intellectual property rights and to limited rights of use or disclosure, such items shall be marked with a restrictive legend by the originating Party prior to their provision to the receiving Party. Such items shall not be used or disclosed in any manner that might prejudice the limitations on use or disclosure marked on them.

5. SHIPMENT OF MATERIALS

5.1. All shipments of geodetic and geophysical data, publications and related geospatial information materials by a Party to the other Party shall be accompanied by appropriate transmittal documents that list the contents of the shipment.

5.2. All geodetic and geophysical data, publications, and related geospatial information materials to be exchanged under this Implementing Annex shall be sent free of freight charges. All shipment costs shall be borne by the sending Party.

5.3. If applicable, packages shall be clearly marked with the notation "UNITED STATES/NORWAY BILATERAL GEOSPATIAL INFORMATION AGREEMENT EXCHANGE MATERIAL- NON REIMBURSABLE" and include the following Customs Declaration.

CUSTOMS DECLARATION

*The materials enclosed are exchanged between
Government Agencies under the terms of
Official Bilateral Government Arrangements*

*Contents are to be used for Government Purposes ONLY
And are not releasable for Commercial Sale*

Signed:

Official Stamp

Name:

Position:

Date: / /

5.4. All addresses used for all shipments of geodetic and geophysical data, publications and related geospatial information materials and all other activities under this Implementing Annex are set forth in Appendix I, and any other relevant Appendix, of this Implementing Annex.

6. RETURN OF MATERIALS

6.1. In the event of termination of the Agreement or this Implementing Annex, all geodetic and geophysical products, data, publications, and related geospatial information materials that have already been exchanged, excluding geodetic and geophysical products, data, publications, and related geospatial information materials on loan, need not be returned and shall remain with the holder unless otherwise agreed. Any additional reproduction, distribution, etc., of the materials shall require authorization of the rights holder.

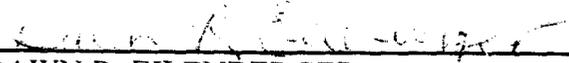
7. VALIDITY

7.1. This Implementing Annex shall enter into force on the date of the last signature and shall remain in force in accordance with Article XIII (Amendment and Termination) of the Agreement.

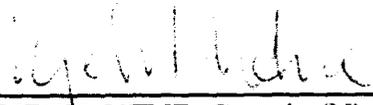
Prepared in duplicate, in the English language, duly signed and exchanged between the Parties

FOR THE NATIONAL GEOSPATIAL-
INTELLIGENCE AGENCY
DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

FOR THE MINISTRY
OF DEFENSE
KINGDOM OF NORWAY



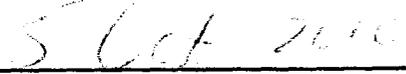
DAWN R. EILENBERGER
Director,
Office of International Affairs and Policy-
National Geospatial-Intelligence Agency



KJETIL UTNE, Captain (N)
Director, Norwegian Military
Geographic Service



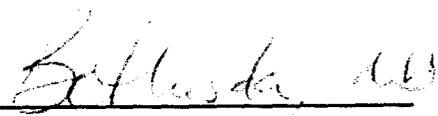
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**APPENDIX I
TO
IMPLEMENTING ANNEX D**

**EXCHANGE OF GEODETIC AND GEOPHYSICAL DATA, PUBLICATIONS AND
RELATED GEOSPATIAL INFORMATION AND SERVICES MATERIALS**

1. NGA shall, upon request, provide each of the following in hard copy, magnetic tape, CD-ROM, or other available media, as appropriate, to the Norwegian Military Geographic Service (FMGT):
 - 1.1. Precise Global Positioning System (GPS) ephemerides.
 - 1.2. Geodetic point positioning data, to include satellite derived positional data and Gravity Deflection of the Verticals of releasable areas.
 - 1.3. Releasable Marine Gravity Data for selected geographic regions of interest in open ocean waters.
 - 1.4. Publications and related Geospatial Information materials.
2. FMGT shall, upon request, provide each of the following in hard copy, magnetic tape, CD-ROM, or other available media, as appropriate and agreed upon, to NGA:
 - 2.1. Geodetic point positioning data, to include satellite derived positional data and GPS/leveling data over the sovereign territory of Norway.
 - 2.2. Land and Marine Gravity Data to include free-air gravity anomalies with associated elevations, gravity disturbances, absolute and reference gravity observations, altimetry and elevation data over the sovereign territory and the territorial waters of Norway.
 - 2.3. Publications and related geospatial information materials.
3. The following addresses shall be used for shipments of all geodetic and geophysical products, data, publications, and related geospatial information materials.

3.1. TO NGA:

3.1.1. FMGT requests and coordination related to technical assistance and training provided under this Implementing Annex send to:

National Geospatial-Intelligence Agency
Office of International Affairs and Policy
Attn: Norway Desk Officer
Mail Stop N-75
1200 First Street, SE
Washington, DC 20303-0002
USA
Telephone: +1-202-284-3464
FAX: +1-202-284-3712

3.1.2. FMGT-produced geodetic and geophysical data, publications, and related geospatial information materials, send to:

NGA
SN, Mail Stop: L-41
C/o Mr. Steve Kenyon
3838 Vogel Rd.
Arnold, MO 63010-6238
Tel: 314-676-0808
E-mail: Steve.C.Kenyon@nga.mil

3.2. TO FMGT:

Norwegian Military Geographic Service (FMGT)
Oslo Mil/Akershus
N-0015 OSLO
NORWAY
Attn: Oyvind Martinsen
Tel: +47 23 09 23 80
E-mail: oyvind.martinsen@fmgt.mil.no

Approved by the Parties and Superseding All Previous Versions

Date:

Initials:



NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

4600 Sangamore Road
Bethesda, Maryland 20816-5003

CERTIFICATION OF AUTHENTICITY

I HEREBY CERTIFY that the attached documents are true copies in the English language, of the original executed international agreement identified below, and maintained as an official record within the Office of International Affairs and Policy, National Geospatial-Intelligence Agency:

Implementing Annexes A, B, C and D to the Basic Exchange and Cooperation Agreement between the National Geospatial-Intelligence Agency of the Department of Defense of the United States of America and the Ministry of Defence of the Kingdom of Norway concerning Geospatial Information, signed by Dawn E. Eilenberger, Director, Office of International Affairs and Policy, National Geospatial-Intelligence Agency.

A handwritten signature in black ink, appearing to read "Bernard L. Seward, Jr.", written over a horizontal line.

Bernard L. Seward, Jr.
Assistant General Counsel

A handwritten date "10/28/2010" written in black ink over a horizontal line.

Date