MEMORANDUM OF AGREEMENT
BETWEEN THE DEPARTMENT OF DEFENSE
AND THE
DEPARTMENT OF TRANSPORTATION

CIVIL USE OF THE GLOBAL POSITIONING SYSTEM

1. PURPOSE

This Memorandum of Agreement (MOA) establishes policies and procedures to ensure an effective working relationship between the Department of Defense (DoD) and the Department of Transportation (DOT) regarding civil use of the Navstar Global Positioning System (GPS).

2. BACKGROUND

The National Security Policy Directive (NSPD) titled "U.S. Space-Based Positioning, Navigation, and Timing Policy", dated December 8, 2004, supersedes previous national policy by establishing guidance and implementation actions for space-based positioning, navigation, and timing (PNT) activities. As such, agency roles and responsibilities have been updated to fulfill the objectives of the new policy. In order to fulfill the updated roles and responsibilities effectively, appropriate working relationships need to be defined and implemented between the DoD and the DOT. This Agreement provides the basis for the necessary working relationships.

This MOA updates and replaces the MOA between the Department of Defense and the Department of Transportation, titled: "Civil Use of the Global Positioning System", dated 8 Jan 93, and its four annexes: Annex 1: Department of Transportation (DOT) Representation at the GPS Joint Program Office (JPO) and the U.S. Air Force Space Command (AFSPC); Annex 2: Second Coded Civil GPS Signal; Annex 3: Information Coordination and Dissemination; and Annex 4: Implementing Unique Civil Requirements.

3. APPLICABLE DOCUMENTS

The following documents are applicable to the policies and procedures outlined in this Agreement:

- *USC Title 10 Section 2281, Global Positioning System*
- *USC Title 49 Section 106, Federal Aviation Administration*
- *National Security Policy Directive, U.S. Space-Based Positioning, Navigation, and Timing Policy, December 8, 2004*
- *Federal Radionavigation Plan (FRP), current edition*
- *Federal Radionavigation Systems (FRS), current edition*
- *GPS Standard Positioning Service (SPS) Performance Standard, current edition*
- *GPS Precise Positioning Service (PPS) Performance Standard, current edition*
- *National Space-Based Positioning, Navigation, and Timing Executive Committee Charter, current edition*
- *National Space-Based Positioning, Navigation, and Timing Coordination Office Terms of Reference, current edition*
- *National Space-Based Positioning, Navigation, and Timing Systems Engineering Forum Charter, current edition*

- *Interagency Requirements Plan, current edition*
- *Memorandum of Agreement between the 50th Space Wing GPS Operations Center, The US Coast Guard Navigation Center, and the FAA National Operations Control Center with respect to the Support to Users of the Navstar Global Positioning System, current edition*
- *GPS Security Classification Guide (SCG), 24 July 2006*

4. AUTHORITY

DoD and DOT enter into this Agreement in accordance with the U.S. Space-Based Positioning, Navigation and Timing (PNT) Policy, and pursuant to their respective statutory authorities. Nothing in this MOA supersedes the statutory authority of any constituent agency, independent agency, or Department.

5. DEPARTMENT OF DEFENSE RESPONSIBILITIES

In order to fulfill its responsibilities under this Agreement, the DoD will:

5.1 Program and budget for resources necessary to operate and maintain a constellation of GPS satellites and associated ground control network to support Joint Requirements Oversight Council (JROC) validated system requirements and GPS Performance Standards in order to fulfill statutory obligations.

5.2 Provide GPS satellite status, orbital and timing information to DOT in accordance with DoD security classification guidance for dissemination to the appropriate user communities.

5.3 Participate in Civil GPS Service Interface Committee (CGSIC) meetings conducted by DOT.

5.4 Approve and publish the GPS Standard Positioning Service (SPS) Performance Standard, in cooperation with the DOT. Non-DoD agencies will be allowed to review the document during the staffing process with final adjudication authority residing within DoD.

5.5 Notify DOT in the event GPS is not operating in accordance with the current SPS Performance Standard.

5.6 Support the National Space-Based PNT Systems Engineering Forum (NPEF) Charter by designating a DoD Co-Chair.

5.7 Provide cost, schedule, and technical estimates to DOT to support civil programming, planning, and budgeting for implementation of civil GPS capabilities. These estimates will be refined consistent with Program Objective Memorandum submissions.

5.8 Provide proposed changes and associated costs that impact civil-unique capabilities to DOT prior to implementation.

5.9 Serve as the final decision authority regarding U.S. and foreign civil use of the GPS Precise Positioning Service (PPS).

5.10 Implement funded, civil-unique requirements validated through the Interagency Requirements Plan (IRP).

5.11 Initiate coordination of all tests, demonstrations, training, and exercises, which include transmitters in the GPS SPS or PPS spectrum, with HQ FAA ATC Spectrum Engineering Services, when FAA is the Civil Aviation Authority for the affected area, at least 40 calendar days in advance of the event. If the exercise/testing event includes advanced emerging threat transmitters, initiate coordination at least 60 calendar days in advance of the event. DoD and DOT may negotiate shorter notification times for locations agreed to IAW paragraph 7.1.6.3. The Joint Staff will be the DoD focal point for coordinating these activities with HQ FAA Spectrum and Policy Management. (Note: DoD also requires DoD activities to obtain CJCS approval of tests, demonstrations, training, and exercises in the GPS frequency bands).

6. DEPARTMENT OF TRANSPORTATION RESPONSIBILITIES

In order to fulfill its responsibilities under this Agreement, the DOT will:

6.1. Represent the United States Government (USG) civil Departments' and Agencies' interests in matters regarding the use of and requirements for civil GPS services.

6.2 Represent the USG civil Departments and Agencies in reviewing the GPS SPS Performance Standard.

6.3 Develop/sponsor requirements for civil-unique capabilities from USG civil Departments and Agencies.

6.4 Ensure civil funding is available to meet requirements for civil-unique capabilities, validated through the IRP.

6.5 Inform the DoD regarding the development and implementation by the civil agencies of augmentations to the basic GPS that achieve or enhance uses of the system in support of civil applications.

6.6 Participate in Air Force GPS contract negotiations as required to ensure agreement with cost, schedule, and technical basis for implementation of civil-unique GPS capabilities.

6.7 Provide funding to the GPS Wing for the development and fielding of new civil-unique capabilities.

6.8 Provide for civil representation at Headquarters AFSPC, 50th Space Wing, and GPS Wing.

6.8.1 The senior civil representative at Headquarters AFSPC will be designated as the Liaison for civil applications.

6.8.2 The senior civil representative at the GPS Wing will be designated the Acquisition Liaison for civil applications.

6.8.3 The duties of the Civil Liaison and the Acquisition Liaison (and any supporting liaison staff) will be jointly developed in signed job descriptions by the DoD and DOT points of contact.

6.9 Support the NPEF Charter by designating a civil Co-Chair.

6.10 Review and provide the civil position, as the basis for negotiation, on any issues or problems arising from proposed changes requested by DoD to civil-unique capabilities (reference section 5.8).

6.11 Represent civil agencies at the DoD requirements validation events for the GPS program in accordance with the IRP.

6.12 Respond to DoD proposals to test, demonstrate, train, or exercise in the GPS SPS or PPS spectrum within 30 calendar days from receipt of notification and supporting analytical information. DoD and DOT may negotiate shorter notification times for locations agreed to IAW paragraph 7.1.6.3. HQ FAA ATC Spectrum Engineering Services will be the DOT's single focal point for coordinating these activities with the Joint Staff. DOT/Research and Innovative Technology Administration will coordinate between the FAA and other civil government agencies to assess the impact for non-aviation civil applications.

7. JOINT RESPONSIBILITIES

7.1 Both Departments will collaborate and cooperate within existing processes to:

7.1.1 Control the operation of GPS augmentations in a national emergency.

7.1.2 Participate in the IRP process for new civil/national GPS PNT requirements.

7.1.3 Achieve agreement on civil capabilities implemented in GPS Interface Control Documents and/or GPS Interface Specifications.

7.1.4 Promote international acceptance for civil use of GPS and its augmentations and military use of GPS PPS in civil airspace.

7.1.5 Establish a program monitoring and technical oversight process for implementation of civil-unique capabilities.

7.1.6 Use existing and, when appropriate, develop new guidelines to facilitate coordination of Navigation Warfare testing, training, demonstration, and exercises.

7.1.6.1 Use mutually acceptable engineering tools for assessing potential impacts to GPS SPS and PPS users. These tools will also be used to explore the possibility of reducing the advance notification time for coordinating tests, demonstrations, training, and exercises involving GPS interference.

7.1.6.2 Identify possible levels at which interference may be experienced by GPS receivers. These levels will help in modeling the potential effects of a test, demonstration, training, or exercise.

7.1.6.3 Pursue the possibility of identifying mutually acceptable geographic locations and times where predetermined test, demonstration, training or exercise effects on GPS SPS and PPS users will be allowed with limited notification (i.e., shorter lead time). Other locations may still be authorized for tests, demonstrations, training, and exercises using coordination procedures described in paragraph 5.11.

7.2 DoD and DOT will provide reasonable and adequate funding for the National Coordination Office (NCO) for Space-Based Positioning, Navigation and Timing (PNT), based on an annual

budget approved by the co-chairs of the U.S. Space-Based PNT Executive Committee (EXCOM). The NCO annual budget costs will be apportioned 75 percent to DoD and 25 percent to DOT.

8. SUPPLEMENTAL AGREEMENTS

This Agreement is intended to establish an overall framework for cooperative efforts between the DoD and DOT regarding civil use of GPS. Individual agreements between components of DoD and operating elements of the civil agencies represented by DOT will be executed by annex to this Agreement to delineate more specific agreements between organizations, as required.

9. POINTS OF CONTACT

Both agencies shall designate a single point of contact to coordinate on each policy, programmatic, and operational issue requiring supplemental agreement. Unless otherwise designated, the Under Secretary for Transportation Policy will be the overall point of contact for supplemental policy, programmatic and operational matters for the DOT. For the Department of Defense, unless otherwise designated, the Assistant Secretary of Defense for Networks and Information Integration will be the overall point of contact for policy and operational matters for the DoD.

10. AMENDMENT AND TERMINATION

As the need arises, DoD and DOT will continue to review their respective legal authorities, core competencies, and capabilities to identify specific areas of common interest in which the Parties to this MOA may benefit from specific designation of roles and responsibilities in accordance with the principles set forth in this MOA.

Provisions of pre-existing MOAs between components of DoD and components of DOT, where in conflict with this MOA, are superseded by this MOA. DoD and DOT can review pre-existing agreements to determine whether to amend, continue or revoke.

This Agreement will be reviewed annually by DoD and DOT to determine the need for modifications or amendments. This Agreement may be amended by mutual agreement of DoD and DOT or terminated by either party. Notice of intent to terminate must be provided to the other party in writing 120 days prior to the termination date and must take notice of U.S. international commitments (i.e., International Civil Aviation Organization and International Maritime Organization commitments). This agreement will terminate on 31 December 2015 unless terminated sooner or extended by the mutual action of the signatories.

11. EFFECTIVE DATE

This Agreement is effective when signed by both Departments.

Thomas J Barrett	John England
Deputy Secretary of Transportation	Deputy Secretary of Defense
3 November 2008	9 Oct '08
Date	Date