

GPS International Cooperation

*UN/China/ESA Training Course
On the Use and Applications of GNSS*

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Global Trends

- Continued rapid expansion of GPS use around the world
- Accelerated development of new civil applications for GPS
- New space-based systems being built or planned; the number of space-based signal providers will grow from two (US and Russia) to at least six over the next 5-10 years

Maintaining and Modernizing GPS

- Newly created PNT Executive Committee is coordinating USG effort to improve capabilities of GPS and its augmentations
- US modernization program is expected to ensure GPS continues to meet growing national, homeland, and economic security, and civil requirements, as well as commercial demands and the needs of the scientific community
- GPS modernization supports US policy that GPS services exceed or are competitive with foreign civil space-based PNT services

U.S. Diplomacy

- USG international efforts to promote GPS as a principal component of the GNSS
 - Implementing GPS-Galileo cooperation agreement
 - GPS-GLONASS negotiations
 - Holding bilateral consultations with regional leaders
 - Managing satellite navigation issues in international bodies
 - Initiating user-oriented activities to promote GPS applications

GPS-Galileo Cooperation

- US-EU agreement signed in 2004 provides solid foundation for cooperation
- Action is now divided among four working groups set up by the agreement
- Technical and security issues working groups have already met
 - Planning is underway for initial meetings of working groups on trade and civil applications and on promoting next generation cooperation

GPS-Galileo Cooperation

- Access to signals from 50+ satellites, including at least one common civil signal, will improve service for all users
- Joint working groups on technical issues and enhanced cooperation will look at various ideas for making GPS and Galileo more interoperable
- US and EU are committed to working together on global navigation issues at ITU, ICAO, etc.
- A US-EU public affairs initiative to promote the combined GPS-Galileo capability is being discussed

US-Japan Cooperation

- Japan's status as a world leader in GPS applications and user equipment makes it an important partner
- Regular policy consultations and technical meetings on GPS cooperation have been held since 1998 between the US and Japan
- Recent discussions have focused on ensuring interoperability between GPS and Japan's planned QZSS navigation satellites

GPS-GLONASS Cooperation

- Negotiations of US-Russia agreement on satellite navigation cooperation have been underway since late 2005
 - Next negotiation meeting is planned for early 2007
- Several very productive technical working group meetings have been held
 - Focus is on exploring feasibility of making next generation GLONASS and GPS satellites more interoperable
 - Next working group meeting will be held in Dec. 2006

Additional Activities

- Continuing interest in GPS-related issues that arise in multilateral organizations (ITU, ICAO, IMO, NATO, etc)
- US plans to hold bilateral consultations on GPS-related issues with key regional leaders, such as India, Australia, and Brazil
- Newly created International Committee on GNSS (ICG) will help us reach broader range of countries, particularly in developing countries

International Committee on Global Navigation Satellite Systems (ICG)

- Emerged from 3rd UN Conference on the Exploration and Peaceful Uses of Outer Space July 1999
- Promote the use of GNSS and its integration into infrastructures, particularly in developing countries
- Encourage compatibility and interoperability among global and regional systems
- Membership: GNSS providers (US, EU, Russia, China, India, Japan), international organizations, and international associations
- Unique mix of providers and major user groups
 - Serve as focal point for international information exchange
- Held first successful ICG meeting in Austria Nov. 2006
 - Agreed on TOR, Work Plan and accepted U.S. proposal on establishing a GNSS Providers Forum to address common issues

Summary

- As new space-based GNSS are emerging globally, interoperability is the key to “success for all”
- Civil GPS modernization will meet growing demands and enhance its performance
- ICG will address GNSS providers and users’ concerns
- United States has a robust GPS International Cooperation with many countries via diplomacy

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