



Global Positioning System Status

**ICG WG-A Meeting
Olsztyn, Poland**

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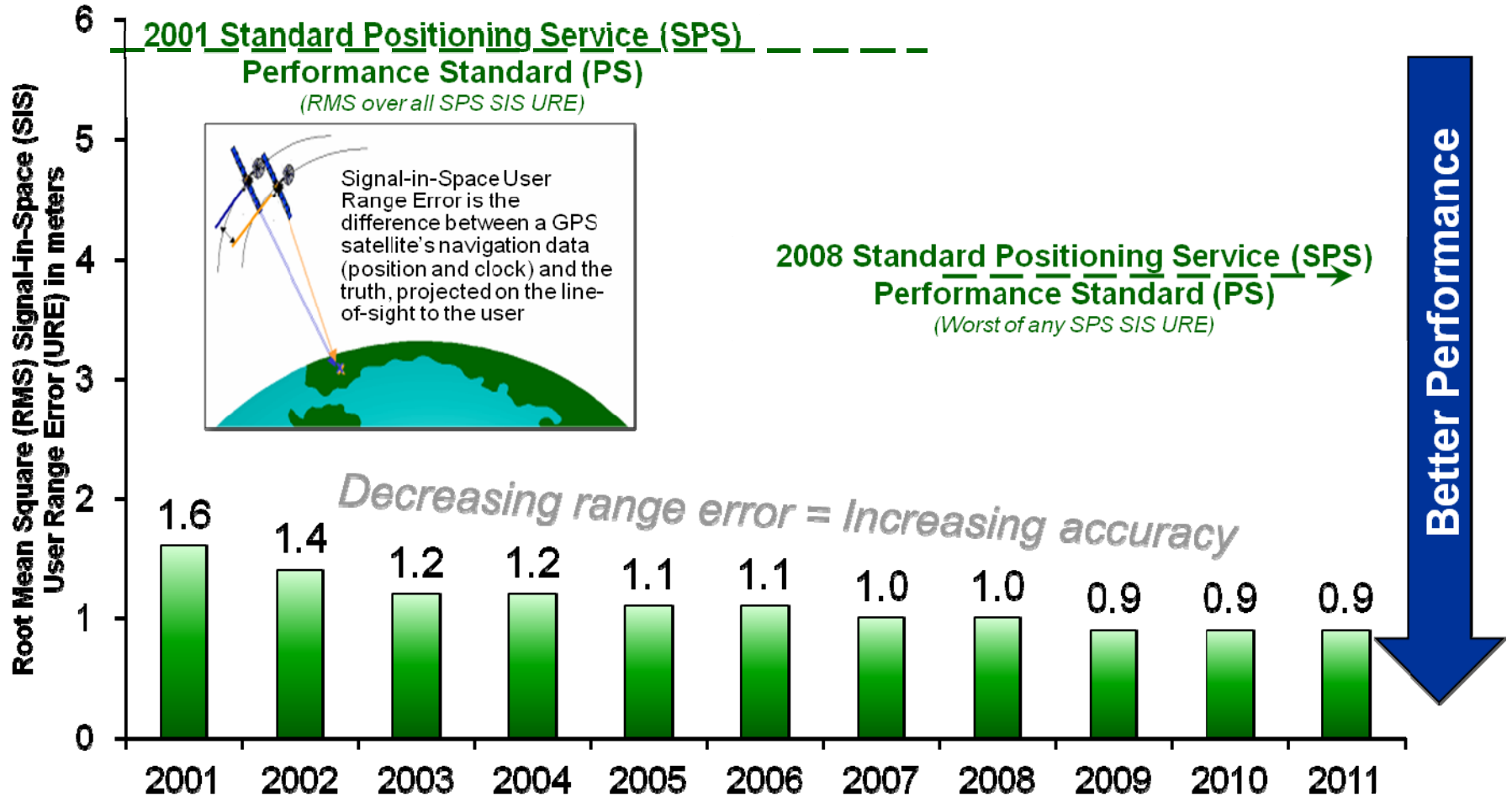
GPS Constellation

- **Very robust constellation**
 - 31 space vehicles (SVs) currently in operation
 - 10 GPS IIA
 - 12 GPS IIR
 - 7 GPS IIR-M
 - 2 GPS IIF
 - 3 additional satellites in residual status
- **Next GPS IIF Launch scheduled for Oct 2012**





Standard Positioning Service (SPS) Signal in Space Performance





GPS Modernization Program



Increasing System Capabilities ♦ Increasing User Benefit

Block IIA/IIR

Basic GPS

- Standard Service
 - Single frequency (L1)
 - Coarse acquisition (C/A) code navigation
- Precise Service
 - Y-Code (L1Y & L2Y)
 - Y-Code navigation

Block IIR-M, IIF

IIR-M: IIA/IIR capabilities plus

- 2nd civil signal (L2C)
- M-Code (L1M & L2M)

IIF: IIR-M capability plus

- 3rd civil signal (L5)
- 2 Rb + 1 Cs Clocks
- 12 year design life

Block III

- Backward compatibility
- 4th civil signal (L1C)
- 4x better User Range Error than IIF
- Increased availability
- Increased integrity
- 15 year design life



Public Interface Specifications

- **Next public Interface Control Working Group**
 - 5-6 Sep 2012 in El Segundo, CA
- **Current versions of the public GPS Signal-in-Space (SIS) and user support Interface Specifications:**
 - IS-GPS-200 – L1 (P(Y) , C/A), L2 (P(Y), L2C)
 - IS-GPS-705 – L5
 - IS-GPS-800 – L1C
 - IS-GPS-870 – OCX Data Transfer
- **These and other key IS/ICD documents available at:**
 - <http://www.navcen.uscg.gov/index.php?pageName=gpsReferenceInfo/>
 - <http://www.gps.gov/technical/icwg/>



Summary

- GPS has continuously met its commitments to all users
- Modernization of all GPS Segments is on track
- Striving to continually improve navigation and timing services while maintaining backward compatibility with legacy equipment
- GPS is committed to open and transparent cooperation with the international GNSS community

The screenshot shows the GPS.gov website with a navigation menu including HOME, WHAT'S NEW, SYSTEMS, APPLICATIONS, POLICY & FUNDING, MULTIMEDIA, and SUPPORT. A search bar is located in the top right corner. The main content area features a large banner with the text "Bienvenidos Welcome أهلا وسهلا Bienvenue 歡迎光臨" and an illustration of people holding hands around a globe. Below the banner, there is a section for "Multilingual Content" with links for Español, Français, 中文, and عربي. The Español section includes links for "Página Principal", "El Sistema de Posicionamiento Global", "Ampliaciones al SPG", and "Aplicaciones del SPG". The Français section includes links for "Accueil", "Le Système de Positionnement Mondial", "Compléments GPS", and "Applications du GPS". The 中文 section includes links for "首页", "全球定位系统", "GPS的增强系统", and "GPS的应用". The عربي section includes links for "الصفحة الرئيسية", "نظام التموضع العالمي", "إضافات إلى نظام التموضع العالمي", and "تطبيقات النظام". To the right of the multilingual content, there is a section for "GPS Cooperation with Other Nations" listing countries like Australia, China, Europe, India, Japan, Russia, and international organizations. Below this, there are images of "GPS Outreach Handouts" and a section titled "U.S. Policy on Global GPS Access". At the bottom, there is a section for "International GPS User Support" with the U.S. Coast Guard Navigation Center logo and text stating that NAVCEN is the designated point of contact for GPS user support to civilians outside the United States.

Maintaining And Improving GPS Services For All Users Is Job #1

GLOBAL POSITIONING SYSTEMS DIRECTORATE

Questions?

