

COMPETITORS AND PARTNERS

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Building the Foundation

- GPS has established satellite navigation technology as a global utility in public and commercial infrastructures
- GPS and satellite navigation would have been limited to a largely military technology had it not been for:
 - US Government policies encouraging civilian use of GPS and making GPS available to all civilian users worldwide at no charge;
 - Entrepreneurship, creativity, investment and risk taking of US and international business.

Partnership is Born

- For GPS and satellite navigation to grow, government/industry dialogue is necessary
- United States GPS Industry Council formed in 1991 to serve as an “information resource” to government policy makers, media and the public, not only in the US, but internationally
- Members include major US industry leaders in all aspects of GPS – Boeing, Lockheed Martin, Trimble, NovAtel, Garmin etc., as well as corresponding relationships with numbers of smaller and specialized firms in other industries.
- Served as model for other industry associations such as Japan GPS Council, Galileo Industries, and groups in China, India, Korea and Europe
- Maintains active dialogue with related industries, US government, foreign government agencies, international organizations and others

We Don't Make Policy...we make it better

- USGIC has contributed to every major policy initiative in GPS and satellite navigation since 1991
- Major role in drafting US and international export control guidelines
- US National Academies' policy studies
- US Presidential Decision Directive (1996)
- Deactivation of Selective Availability
- Implementation and design of new civil signals (L5 and L2C)
- Initiated efforts at protection of GPS spectrum at WRC-97
- Significant contributor to international outreach efforts to ITU member countries for spectrum protection efforts
- Active member of CGSIC
- US Presidential Policy Statement on PNT (2004)
- Etc., etc. etc.

Nobody Knows Everything

- Governments are good at overall policy objectives, international relations, public safety, national infrastructure
- Militaries know security issues, threat assessments
- Industry knows applications, markets, technology development and costs

What Can US Industry Offer ?

- **BTDT**: Knowledge and capabilities in all aspects of satnav from satellite building, signal development, ground control segment integration, receiver design, applications development, provision of satnav-based services, etc....
- *No* help whatsoever in solving the Gordian Knot of global politics or unraveling the mysteries of national budgets
- Market knowledge, user and application experience *...we know who is using what and where; valuable information and filling in blanks for national leaders !*
- First to experience and Identify market and unintended regulatory barriers
- Lead source of knowledge on technical problems of interference or integration with other technologies -- *when it doesn't work we're the first to know and offer solutions*
- Entrepreneurship, investment, global vision Experience in promoting truly global development of technology while at the same time balancing security risks. Ensures growth of global commercial and civilian markets without endangering civilian interests.

GPS *and...*

- Eat better, live cleaner – machine integration, crop yield mapping, environmental data improve efficiency and reduce pesticide use in agriculture
- Superman's x-ray vision – GIS mapping of utility lines + virtual reality create new capabilities in construction and urban planning
- Don't leave home without it - emerging array of location based services/telematics
- Can't stay home without it – emergency dispatch; invisible timing applications in communications, utility distribution.

Building Future Success

- US policy: modernized GPS is sufficient to meet all projected user requirements
- Global Reality: nobody knows everything – enhancements and augmentations desired/required to meet specific regional or sectoral needs
- US industry welcomes augmentations and supplements to GPS as long as they do not compromise the security mission, interfere with current GPS signals, and are provided with open technical standards and non-discriminatory market opportunities
- Need to coordinate policies and opportunities to promote expanding markets for GPS and satnav on an equitable and accessible basis in established and developing economies

Things My Parents Taught Me

- Play nicely with others

Interoperable, Compatible, Open Markets

- Satnav systems (GPS, QZSS, GALILEO) should and can operate together to benefit all users
- Hippocrates – “First, do no harm.”
- Ensure technical interoperability and compatibility
- Open, non-proprietary standards
- No restrictive regulatory mandates
- No discriminatory trade barriers
- Market driven progress

Things My Parents Taught Me

- Look both ways

Balancing Business and Security

- GPS and all satnav systems are “dual-use” by nature – cannot completely separate military/security implications from civilian/commercial
- Essential to plan international coordination in advance for times of crisis/conflict
- Commercial advancements can challenge military/security interests: when does “interference suppression” for commercial products become “anti-jam” capability for military ?
- Dialogue is essential – internationally, as well as between civil, commercial and national security communities.

Things My Parents Taught Me

- Always tell the truth

The Truth

- Satnav is an established global utility of proven value
- GPS exists today, works, is reliable, is improving and is FREE
- GPS provides a solid foundation on which to build new applications, augmentations, and supplements to meet expanding regional/global demands
- New ideas and satnav systems can enhance the overall utility and benefit of GPS and satnav in general, but only if they are operated in an open, non-discriminatory manner
- Spectrum is a shared resource among GPS, QZSS, GALILEO, GLONASS and all satnav systems. Spectrum protection and policy coordination are critical for continued health of global satnav industry.
- International collaboration and coordination across industry-government-user lines is essential

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