



GNSS: Today and preparing for the future

Mobile Consumer Devices view

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Today: Ubiquity of Multi-GNSS

- Nearly all chipsets shipping today have included GPS+GLONASS as standard for at least 4 years
 - Present in nearly all mobile phones worldwide
- Most chipsets introduced in the last 2 years support all 4 constellation
 - BDS and Galileo are not always enabled
- All major handset customers REQUIRE GPS+GLONASS as a minimum
 - Trend is heading towards support for all 4 constellations
 - Difficult to meet urban canyon performance requirements on any single constellation
- Unlikely that MultiGNSS will ever be removed from hardware support
 - Always possible to disable in software

Future

- Multi-GNSS in all products in L1 band
 - Investigating cost/benefit/transition tradeoffs for L5
- Supporting the new Indoor E911 requirements
- User experience is best when
 - Hardware is capable of using all satellites in the sky
 - Software decides optimal search/tracking strategies in real time
 - application and context dependent
 - Network connectivity provides assistance and integrity
- Maintain support to turn off constellations when requested
 - By user, application, network or other agency

ICG Support

- Establish and maintain a single site for ALL user equipment regulations from member organizations
- Help to work to attempt to harmonize (minimize) global certifications
 - Limit Single constellation KPI (key performance indicators)
 - Reduce Legal requirements for operational modes
- Enable the maximum benefit of Mult-GNSS to reach the maximum number of users worldwide
 - In the shortest amount of time at the lowest cost