UN/Nepal Workshop on GNSS Applications

GNSS Spectrum Protection and IDM
Take-aways
GNSS Usage

• There are an almost unlimited number of different GNSS applications

• It is generally agreed that GNSS is extremely important and critical to national and global economies
GNSS Vulnerability

• GNSS signals are extremely weak in comparison to typical terrestrial radio services

• Therefore, GNSS signal reception vulnerable to interference from those terrestrial services
GNSS Threats

- There are many potential interference sources that can degrade GNSS performance and prevent GNSS usage
- GNSS Jammers are currently the single biggest threat to GNSS reception
GNSS Spectrum Protection

• Starts with good foundations, the ITU; but it is crucial to protect GNSS spectrum at BOTH international and national levels.

• Compatibility analysis is essential before introducing new systems and/or changing regulations and allocations – especially near GNSS frequency bands.
Interference Detection

- The ITU provides the regulatory framework (Radio Regulations), but it is national regulators that play the key role in finding interferers to GNSS.

- Robust enforcement of national/international regulations is vital to limit impacts to GNSS.
Your Role

• We encourage you to go back to your national regulators and find out how they are protecting GNSS
• Do they realize the vulnerability of GNSS reception?
• Do they appreciate the economic impact of GNSS loss?
• Are they doing enough to protect GNSS spectrum?