

UN/Mongolia 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 <u>critical to</u> <u>national and global economies</u>



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 <u>many potential</u> 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 <u>crucial to protect</u> <u>GNSS spectrum at BOTH</u> <u>international and national levels.</u>
- 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 <u>national regulators that play the</u> <u>key role in finding interferers</u> 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 <u>find out</u> 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?

