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 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?