



# **REMARKS ON THE INTERNATIONAL ACTIVITIES REGARDING GNSS SPECTRUM PROTECTION**

18<sup>th</sup> PNT Meeting Dec.7-8 ,2016,  
Redondo Beach, LA

# A DAY WITHOUT INTERFERENCE

The GPS community have become alerted about the GPS outage.

A number of International Conferences, Meetings and dedicated Workshops held in the last three years were focused on the Interference Detection and Mitigation (IDM)

ION , IAIN ,AIN , ENC AND Munich Satellite Summit, H2020 etc.

Many GPS enhancement protection Initiatives were taken by PNTAB members lead by Dr. Parkinson supported by, John Betz, Per Enge, JJ Miller, Ruth Neilan, Stormy Martin, Ken Hodge, Dana Goward the RPNT foundation to launch an extensive awareness campaign in the international meetings and conferences regarding the PTA conception.

- ▣ Although, of the strong participation of the US delegates were noticeable in the ICG meetings and its affiliated workshops, however, the participation is less in the European ENC conferences and in the IAIN Congresses . Apart from the bilateral meetings the participation US is rare elsewhere in the rest of the world.

- ▣ A weak or may be immature response is yet noted from the International Organizations, IMO, ICAO, ITU regarding GNSS Interference Detection and Mitigation or providing an additional protection for GNSS signal spectrum apart of the already long existed ITU radio regulations conventions.(1992 ).

# Measures Against Interference

(Radio Regulations) 1992 conv.)

- ▣ No. 4.5 stipulates that “the frequency assigned to a station of a given service shall be separated from the limits of the band allocated to this service in such a way that, taking account of the frequency band assigned to a station, **no harmful interference is caused to services to which frequency bands immediately adjoining are allocated**”.
- ▣ In the assignment and use of frequencies, it is necessary to take into account the fact that **safety services require special measures to ensure their freedom from harmful interference**. (No. 4.10)

- ▣ Regarding the back up system for the PNT, other than the decision by US toward the restoring of the loran C stations to trigger eloran , there are no other countries have taken tangible steps towards the full implementation of eloran.
- ▣ A limited scheme is made by GLA in UK and the study is made by S Korea, an intention is shown by Russia and merely promises are made by few other countries.
- ▣ Less International effort is developed to create awareness towards a backup system to GNSS,



- ▣ At the time we fight against the external interferences !!!!!!!! a friendly interferences may be permitted .
- ▣ If the authorized interference is welcomed !, the Domino theory may invite other friends to interfere with the rest of the GNSS signal spectrums in other places.
- ▣ The Damage caused by this type of interference could be unpredictable and may spread in different parts on the Globe

IT IS A LONG WAY  
TO HAVE A DAY  
WITHOUT  
INTERFERENCES

THANK YOU