GNSS Applications

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Training on GNSS – Course (T141-30), Organized by: GIC/AIT, S4D/CSIS and ICG, held at: GIC/AIT, Thailand from 23 – 26 JAN 2018

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GNSS Applications - 1

- Surveying, Mapping and Geodesy

- Transportation
  - Car Navigation, ITS, ADAS, V2X
  - Railway Network
  - Marine : AIS, VMS
  - Aviation : GBAS
  - UAV

- Legal and Law Enforcement
  - Fishing Zone, Crime Prevention

- Taxation / Insurance
  - Taxation based on location or distance traveled

- Vehicle Accidents / Emergency Services
  - eCall/ ERA-GLONASS / E-911

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GNSS Applications - 2

- Agriculture
  - Precise farming, Auto-Driving of Tractors
- Personal Navigation
- Location Based Applications
  - Services, Entertainment, Advertisement, Gaming, Marketing
- Warning during Disasters
- Geo-Fencing / Geo-Securities
- Robotics
  - Navigation, Actions based on Location
- Scientific Applications
- Space Weather : Scintillation, Radio Occultation, Plasma Bubble

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GNSS Applications - 3

- Telecommunication
  - Synchronize cell towers, microsecond order for CDMA
  - Network Time Protocol , millisecond order

- Power Grid
  - Phase Synchronization between grids is required for higher efficiency and avoid power failures

- Time Stamping of
  - Financial and Banking Transactions
  - Legal, Clerical, Shipping Documents

- Scientific Timing Applications
  - Time stamping of events
    - e. g. Global VLBI Observation, earthquake occurrences, arrival of neutrino in particle physics

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