



Directorate-General
for Energy
and Transport

GNSS Performance



EUROPEAN
COMMISSION



● Publishing GNSS Performance (1/4)

- It is natural for any kind of service provider to assess, document and publish its service performance
- In the case of GNSS, publication of minimum performance :
 - » Is required for use of GNSS services (even open services) in support of SoL communities (ref to SARPs for GPS and GLONASS OS by ICAO or recognition file for adoption of a satellite constellation as part of IMO WWRNS)
 - » Is likely to be the basis for SLA in case of commercial service delivery
 - » Is a key to adoption by mass market and other open service applications

● Publishing GNSS Performance (2/4)

- EC has plans to prepare Service Definition Document (defining system performance) to accompany the entry into operation of the different services offered gradually by the European GNSS elements
- EC supports the documentation and publication of **open service** GNSS system performance

● Publishing GNSS Performance (3/4)

- GNSS Performance can be characterized and published in a wide range of manner
- The way a given service provider will decide to communicate on its service performance will depend on:
 - » What flexibility he wants to offer to users
 - » What guarantee (if any) he is willing to provide
 - » How the system has been specified and therefore qualified
- Information on system performance will evolve over time:
 - » Simulation and system qualification data at entry into service
 - » Product Service History data as more experience is gained over the lifetime of the system
- Good example is GPS that is significantly evolved in the way performance are characterized and publicized

● Publishing GNSS Performance (4/4)

- EC view is that a work plan should be put in place in the context of UN-ICG taking into account the following aspects:
 - Definition of typical parameters shall be conducted jointly. However, parameters used to characterize a system **cannot be uniquely defined and binding** for service providers. **Latitude** shall be given for alternate way of communicating on performance
 - The notion of **performance « commitment » should be avoided** since the nature of such « commitment » may be very diverse depending on the services and the service providers (legal commitment vs political commitment vs commercial commitment...)
 - Publication of GNSS performance by given service providers will follow the pace of system deployment and entry into service. There should be **no binding date** for such publication.
- Schedule to carry out such a workplan will be **much longer than currently** proposed
- Publication of public Signal In Space ICDs is an important aspect to be addressed first
 - At this stage not all providers did publish their OS SIS ICD
 - Without signals no services can be provided