



GNSS Performance Standard Template: Challenges and Way Forward

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GNSS PS Template Purpose

- Main purpose – to harmonize and unify international regulatory framework (Performance Standards mostly)
- Main tasks:
 - To develop unified GNSS PS Template suitable for all GNSS
 - To develop corresponding documents if needed
 - To harmonize these documents among ICG participants (Providers mostly)



Current Status

- GNSS PS Template is developed (based on GPS SPS ed.4 for single frequency service)
- Parameters Calculation Methods are developed and are being harmonized now
- TF activities are “frozen” now



Performance Standards Trends

- GPS SPS PS – 5th edition is being developed (for dual frequency service)
- Beidou – has PS for regional service, global service?
- GLONASS – single frequency PS was developed but later it was redone for dual frequency, it's in harmonization procedures stage now
- Galileo – PS document was developed with the use of GNSS PS Template



World trends in GNSS Regulatory Framework

- International Organization for Standardization (ISO)
 - Requirements for Performance Standards
- Eurasian Economic Union (EEU)
 - Rules and regulations for the safety use of GLONASS
- GNSS certification?
 - International Laboratory Accreditation Cooperation (ILAC) etc.

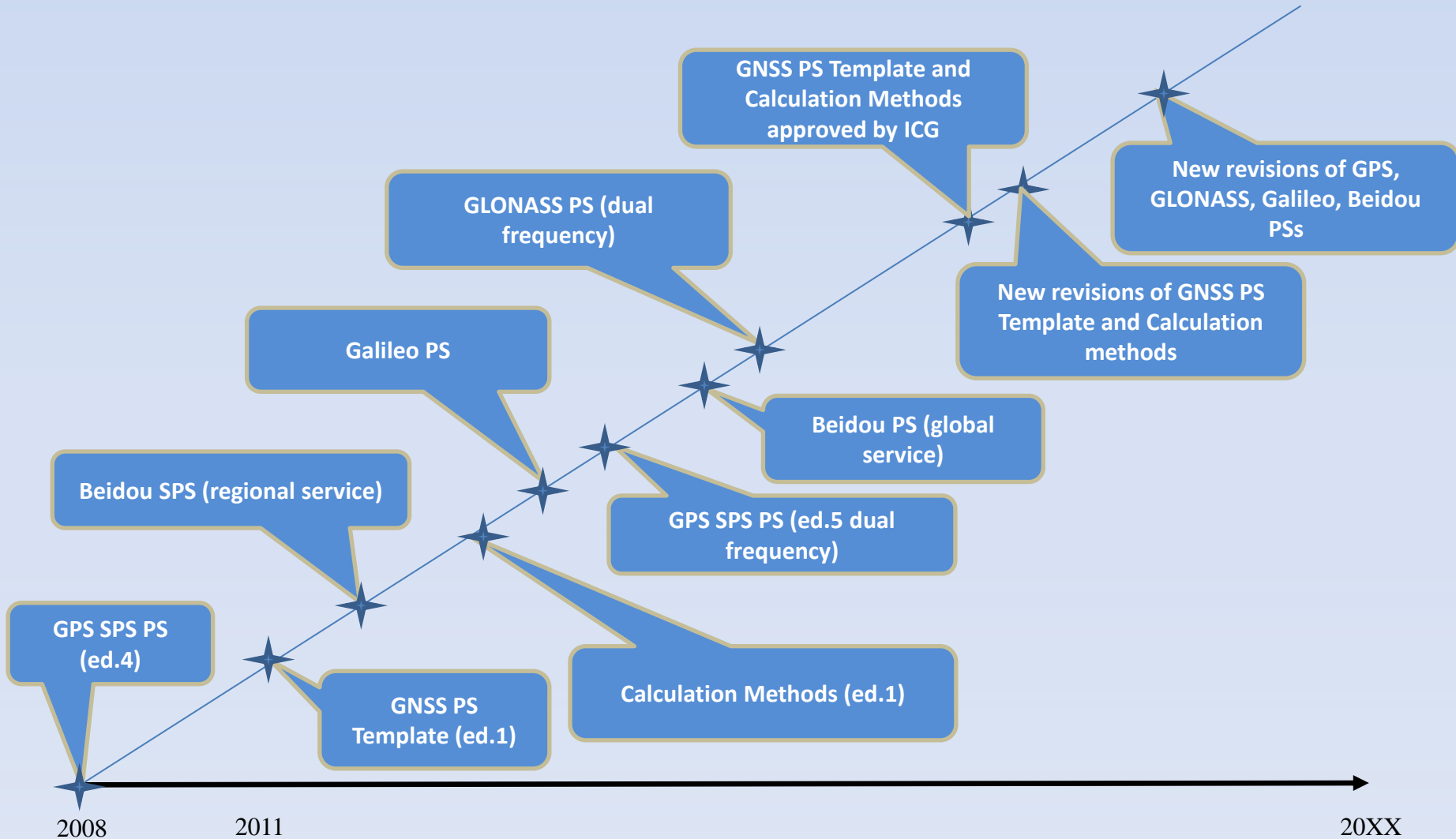


Proposals for ICG and TF activities in GNSS PS Template sphere

- Periodic updating of GNSS PS Template and Calculation Methods
 - defining and setting up the necessary timeline and form of this work (**Recommendation 1**)
- Coordination between international organizations involved in GNSS regulatory framework (GNSS Performance Standards and related issues) activities (development and harmonization mostly)
 - defining organizations involved in these activities and formalizing cooperation between them and ICG (**Recommendation 2**)
- Joint discussions on Performance Standards development problematic issues (**Recommendation 3**)
- Periodic presentations on status (new revisions, editions, Roadmaps, timelines and so on) of developing performance standards (**Recommendation 4**)
- Harmonizing and producing a current edition of GNSS PS Template and Calculation Methods as “ICG approved” documents (**Recommendation 5**)
- Adopting a roadmap for TF GNSS PS Template activities (**Recommendation 6**)



GNSS PS Template Roadmap





Way Forward

GNSS PS Template

To define and set up a necessary timeline and a form for Periodic updating of GNSS PS Template and Calculation Methods

To harmonize and to produce a current edition of GNSS PS Template and Calculation Methods as “ICG approved” documents

GNSS PSs

To held joint discussions on Performance Standards development problematic issues

To make periodic presentations on status (new revisions, editions, Roadmaps, timelines and so on) of developing performance standards

To develop and to adopt a roadmap for TF GNSS PS Template activities

Coordination between ICG and international organizations

To define organizations involved in Performance Standards related activities and to formalize cooperation between them and ICG



Recommendations

- Recommendation 1 – To define and set up a necessary timeline and a form for Periodic updating of GNSS PS Template and Calculation Methods
- Recommendation 2 – To define organizations involved in Performance Standards related activities and to formalize cooperation between them and ICG
- Recommendation 3 – To held joint discussions on Performance Standards development problematic issues
- Recommendation 4 – To make periodic presentations on status (new revisions, editions, Roadmaps, timelines and so on) of developing performance standards
- Recommendation 5 – To harmonize and to produce a current edition of GNSS PS Template and Calculation Methods as “ICG approved” documents
- Recommendation 6 – To develop and to adopt a roadmap for TF GNSS PS Template activities



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