

## **SLR Contribution to the new Regional Navigation Satellite System of Korea**

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Korea Positioning System (KPS) is the name of new regional navigation satellite system, which will provide the Positioning, Navigation and Timing (PNT) service in Korean peninsula and beyond from 2036. The development and construction program for KPS have started in last July with the conceptual design to provide 6 PNT services including Open Service, Differential GNSS, Precise Point Positioning, Satellite Based Augmentation System, Public Safety, and Search and Rescue (SAR).

Space segment of KPS will consist of 5 satellites in the Inclined Geo-Synchronous Orbit (IGSO) and 3 satellites in the Geo-Stationary Orbit (GEO) which are all equipped with Laser-Reflected Array for SLR tracking. The first KPS satellite will be launched in 2027 and the other KPS satellites will be deployed during 2033~2035. The preliminary design of ground segment for KPS including the SLR system is similar to the other satellite navigation systems and the construction of new SLR system dedicated for KPS and GNSS satellite is considering.

In this presentation, we will give the brief introduction of KPS and the contribution of SLR in KPS including the conceptual design of LRA for KPS satellites.