The Transponder SC is the costliest SC of the ILRS because of the expensive space segment. Current projects are:

- Occultation measurements using LRO
- Time Transfer: T2L2 on Jason 2 and the upcoming ACES on the ISS
- T2L2 has mastered the non-common view time transfer between China and Europe (although the USO was not originally expected to deliver on such an expectation)
- ACES is awaiting the launch and the laser safety clearance
- Follow on projects like an optical clock in space are in the planning stage with a launch date around 2023
- China is planning for time transfer on their own space station