

TOR

The combination of space geodetic solutions is critically reliant on the availability of local tie vectors, which are the relative positions of the reference points of co-located space geodetic instruments determined by some survey technique. Tie vectors enter the combination of space geodetic solutions effectively as a fifth technique and are not only necessary for rigorous terrestrial reference frame realization but also serve to highlight the presence of technique- and/or site-specific biases.

With the ultimate objective of improving the accuracy of tie vectors as well as the consistency of space geodetic solutions, the Working Group (WG) will provide an authoritative source of surveying methodology advice, promote technical discussion, provide a forum for the evaluation of existing and new procedures and analysis strategies, and support the exchange of relevant information across GGOS and between the IAG technique services. The WG will also support new survey activities with advice and advocate for re-survey where necessary.

Goals and objectives

Research:

- Revise existing local tie procedures
- Revise existing tie vector estimation processes
- Develop and define new methods

Coordination:

- Liaise with IERS combination centres
- Liaise with IAG technique services
- Direct research towards the investigation of technique specific systematic effects

Outreach:

- Remotely support local tie operations and tie vector estimation
- Spread the know-how
- Set guidelines