ICG/REC/2023

Recommendation for Committee Decision

Prepared by: **Working Group S**

Date of Submission: 19 October 2023

Issue Title: Recommended Survey into GNSS Time Offset for Receiver Manufacturers

Background/Brief Description of the Issue:

Multi-GNSS Users' demand for high accuracy positioning, navigation, and timing services based on multi-GNSS fusion is raising more requirements for receiver manufacturers. Subject to the requirements, multi-GNSS receiver manufacturers should consider realizing interoperability between GNSS system time scales based on high accuracy GNSS-to-GNSS time offsets, and then support PNT fusion among systems. A more direct dialogue with multi-GNSS receiver manufacturers is needed with the view to determine receiver GNSS-to-GNSS time offset estimation in different visibility conditions and the required accuracy of broadcast time offset parameters.

Discussion/Analyses:

To implement a dialogue with multi-GNSS receiver manufacturers it's necessary to conduct a survey on time offset accuracy requirements for multi-GNSS receivers. However, it seems difficult to engage a lot of manufacturers globally to attend a workshop on timing interoperability in-person because of complicated logistics and schedule as well as enormous cost. Therefore, it's suggested that GNSS providers carry out a survey domestically in a large scale and submit a report or summary to the ICG based on survey results, to push forward the improvement of GNSS time interoperability.

Recommendation of Committee Action:

1. GNSS providers are encouraged to reach out to domestic receiver manufacturers (industry) to get feedback on multi-GNSS time interoperability requirements through a common list of questions and criteria developed by the WG.

2. Timing experts from Working Group S, in coordination with Working Groups B and D, should organize a meeting or workshop to discuss the results of the receiver manufacturers' feedback.

Members Consensus Reached_____x_____; **No Consensus Reached**_____

Chairperson Signature:_____ **Date:** _____