The estimation of systematic errors is under debate since years within the ILRS Analysis Standing Committee (ASC). A pilot project was started to investigate an alternative approach that could improve the analysis results.

The approach of the pilot project allows the simultaneous estimation of site coordinates and range bias for each station regardless of correlation with events at the station that could have introduced systematic errors in the observations.

The first results confirmed a significant effect on the realization of the TRF, in particular on its scale.

The current status of the pilot project is presented. Future procedures for handling systematic errors will be based on the outcome and analysis of the current investigations.