The following document outlines a proposed format for the reporting of local tie surveys. The IERS Site Survey and Co-location Working Group 2 recommends that local survey reports be completed in the following format.

Any further suggestions regarding this report format are welcome, see http://www.iers.org/iers/about/wg/wg2/ for the contact details of the working group.

**Proposed IERS Local Tie Report Layout**

1. Site description [site name, site number, domes number, general description, name and institution carrying out the survey]

2. Instrumentation
   2.1 Tacheometers, EDMI, Theodolites
   2.1.1 Description [automatic height index, precision stated by manufacturer ...]
   2.1.2 Calibrations [frequency, additive constants, with reflector, with reflecting tape ...]
   2.1.3 Auxiliary Equipment [Barometer, thermometer ...]
   2.2 GPS units
   2.2.1 Receivers
   2.2.2 Antennas
   2.2.3 Analysis software, mode of operation
   2.3 Levelling
   2.3.1 Levelling instruments (incl. precision)
   2.3.2 Levelling rods
   2.3.3 Checks carried out before measurements [additive corrections for EDMI, calibration of levelling rods ..]
   2.4 Tripods
   2.5 Forced centering devices
   2.6 Targets, reflectors

3. Measurement setup
   3.1 Ground network
   3.1.1 Listing [matrix with old names, new names, monumentation, measurements carried out on individual points ...]
   3.1.2 Map of network
   3.2 Representation of reference points [e.g. model of indirect representation]
   3.2.1 VLBI
   3.2.2 SLR
   3.2.3 GPS
   3.2.4 DORIS
   3.2.5 GLONASS

4. Observations
   4.1 Conventional survey [distances, directions, heights of instruments and reflectors ...]
   4.2 Levelling [loops, gravimetry ...]
   4.3 GPS [including length(s) of GPS session(s) ...]
   4.4 General comments
5. Data analysis and results [including intermediate results ...]
   5.1 Terrestrial survey
      5.1.1 Analysis software
      5.1.2 Topocentric coordinates and covariance
      5.1.3 Correlation matrix
      5.1.4 Reference temperature of radio telescope [for thermal expansion]
   5.2 GPS
      5.2.1 Analysis software
      5.2.2 Results [geocentric coordinates and covariances]
   5.3 Additional parameters [e.g. axis offsets]
   5.4 Transformation
   5.5 Description of SINEX generation
   5.6 Discussion of results [Quality, residuals ...]
   5.7 Comparison with previous surveys

6. Planning aspects [Network configuration, personnel, duration, weather ...]

7. References
   7.1 Name of person responsible for observations [including contact information]
   7.2 Name of person responsible for analysis [including contact information]
   7.3 Location of observation data and results archive [including contact information]