

ILRS Network and Engineering Working Group

Chairman: Georg Kirchner Co-Chairman: Matt Wilkinson

Meeting

Monday 5th November 2012, International Technical Laser Workshop, Frascati.

Summary

Leap second experiences

Randy Ricklefs spoke about station feedback on recent experiences of the leap second on 30th June/1st July. Most stations more or less implemented the change correctly, although some problems were experienced.

The CPF predictions contain a flag to indicate where a leap second was and was not applied. If used correctly by all parties, this should avoid all leap second problems.

He concluded that communication up to the leap second change could be better in the future and that stations and prediction providers should work to fully implement the CPF flag to ensure it works as intended.

Station configuration issues

Randy reported that stations could make better use of the 'System Change File' (SCH) and 'System Configuration File' (SCI) ([see here](#)). Many stations do not have a SCH file on CDDIS and only 7 stations have their file in order. Stations are to judge what warrants inclusion in these files, although Randy suggested information on detectors and electronics is more important than the changing of cables and PCs.

Randy sort the advice of the working group on whether the SCH and SCI file system should continue or whether there was an easier way of collecting this data and making it available.

Analysts can spend a lot of time trying to find out what went on at a station at a particular time and it was suggested that they look to the ILRS to make this information easily available. Also analysts may want the data in a timely manner.

Georg described the 'History File' that is updated locally at the Graz station when any system change is made. Other stations have similar systems using paper log books. The process needs to be quick and easy for stations, otherwise they might not always find time to do it.

A regular email to stations was proposed that reads along the lines of 'Did you make any changes to

your system and do you need to update your log file?'

It was suggested that the working group authorise Randy to consider the way forward and return with a proposal for the best way to organise this.

Envisat tracking proposal

Envisat failed earlier in 2012. It was not possible to re-establish communication and control and ILRS support ended.

Georg showed some results of recent tracking of Envisat at Graz which showed intermittent returns which could be interpreted as the satellite tumbling. Georg suggested that the ILRS could provide support to the mission operators in the form of information on the satellite orientation and spin period or more precise laser derived orbits (the retro-reflector array is the only component still working!). This could help inform any future decisions to bring Envisat down.

This would require normal point and full rate data from stations willing to resume tracking. It was questioned if this was worth ILRS time and whether ESA was really interested. It would be useful to have a letter to the ILRS that stated this was a worthwhile activity. Georg will send an email out to stations to ask them to volunteer if they can spare the time.