

RADIONET3

TRIPS OF WP7

RADIO ASTRONOMICAL SPECTRUM MANAGEMENT

SUBJECT	Meeting CEPT ECC WGFM 79
DATE	03-06 February, 2014
PLACE	Budapest, Hungary
PARTICIPANTS	Wim van Driel (CRAF)

BACKGROUND:

Since the mid-90's the radio astronomy community has been striving to keep its frequency band 1610.6-1613.8 MHz, used extensively for 18cm OH maser line work, free from unwanted interference from the Iridium satellite network. Having a primary allocation in this band, the European radio astronomy community has always claimed, through CRAF, the unconditional protection of its band against interference from Iridium, which merely has a secondary allocation in an adjacent band. CRAF has played a key role in these efforts, which in 1999 resulted in the Framework Agreement signed between Iridium and the ESF, the organization under which auspices CRAF operates.

Iridium has announced the launch of a new generation of satellites, and CRAF has been vigilant to ensure its regulatory protection against interference from these new satellites. Iridium has however proven reluctant to give its firm assurance that the new satellites will indeed protect the radio astronomy service. Within CEPT, the European Conference of Postal and Telecommunications Administrations, its Working Group Frequency Management (WGFM) has been actively involved in the ongoing discussions on this topic between Iridium, CRAF, and the national spectrum management authorities of its member states.

At its previous meeting in October 2013, WGFM tasked CRAF and Iridium to start technical discussions on ways and means to protect the radio astronomy service from interference by the new Iridium satellites. The CRAF-Iridium meeting took place on 28 January in Amsterdam, and CRAF reported on its outcomes at the WGFM meeting in Budapest, as requested.

HIGHLIGHTS:

CRAF reported that at the January 28 CRAF-Iridium meeting, it had provided its answers to all technical questions asked by CEPT WGFM (e.g., which European observatories use the band 1610.6-1613.8 MHz, how frequently, for how long) and responded to a proposal from Iridium that radio observatories would only be protected from interference if and when they would announce to Iridium three days in advance exactly when and where they wanted to use the radio astronomy band – a proposal which was rejected unanimously by all European radio observatories. From their side, Iridium explained it could in principle protect radio astronomy observations, but at a price in bandwidth, customer services, and hence revenues. It was mutually decided that a further CRAF-Iridium technical meeting will be held, before which CRAF will provide a typical operational scenario for the ensemble of European radio observatories, which will then be used by Iridium to model exactly when, where and how they can protect radio astronomical observations. A full report of these findings will then be submitted to the next WGFM meeting in May.

CRAF made it clear to Iridium and to concerned national spectrum management administrations that their participation in these technical discussions with Iridium in no way or means implies that it is seeking to establish a new Agreement with Iridium which would in any way curtail its right to the full and unconditional use of the band 1610.6-1613.8 MHz, where radio astronomy has a primary allocation.

Furthermore, the presence at the WGFM meeting of the CRAF chair and myself was used to have an in-depth face-to-face interview and further discussions with the new candidate CRAF Frequency Manager. Based on these, work was started towards finalizing the employment contract and obtaining the formal approval of the CRAF member institutes.

NEXT STEPS:

Further technical meeting between CRAF and Iridium, to discuss way and means to protect radio astronomical observations in the band 1610.6-1613.8 MHz, report of its findings to the next CEPT WGFM meeting in May. Etc.