

RADIONET3

TRIPS OF WP7

RADIO ASTRONOMICAL SPECTRUM MANAGEMENT

SUBJECT	Meeting of ITU-R Working Party 7D (radio astronomy)
DATE	1-7 October, 2014
PLACE	Geneva, Switzerland
PARTICIPANTS	Wim van Driel (CRAF)

BACKGROUND:

The Radiocommunication Sector of the International Telecommunication Union (ITU-R) plays a vital role in the global management of the radio-frequency spectrum, a limited natural resource which is increasingly in demand from a large and growing number of radio spectrum users. Its mission is to ensure the rational, equitable, efficient and economical use of the radio spectrum by all users, and to carry out studies and approve Recommendations and Reports on radiocommunication matters.

ITU-R Working Party 7D is tasked with matters pertaining to the protection of the radio astronomy service. It meets on average twice a year. CRAF is a so-called Sector Member of the ITU, which gives it the right to submit input documents on issues of concern to the European radio astronomy community to ITU fora. It has always played a very active role in Working Party 7D.

HIGHLIGHTS:

At this meeting of Working Party 7D, work was focused on the numerous agenda items of the 2015 World Radiocommunication Conference (WRC-15) which are of concern to the radio astronomy service, as well as on the creation and maintenance of various ITU-R Recommendations and Reports.

Car radars in the 76-81 GHz range: WRC-15 will decide on a new allocation for the operation of anti-collision car radars, which can interfere with mm-wave radio astronomy observations if they are too close. Compatibility studies carried out by WP7D have resulted in a new ITU-R Report which contains exclusion zone radii around radio telescopes within which these radars may not operate.

Protection of radio telescope receivers in the band 10.6-10.7 GHz from satellite radars: WRC-15 will decide on a new allocation for powerful remote sensing satellite radars operating around 9.6 GHz which can interfere with radio astronomy observations and even cause receiver burn-out in case of main beam coupling. Work was finished on a new ITU-R Recommendation on this issue.

Revision of Recommendation ITU-R RA.1513 on acceptable levels of data loss: work was finished on the long-standing issue of radio astronomy data loss due to radar pulses, and a new ITU-R Report drafted on the monitoring of data loss due to interference from satellites, an important tool in determining which satellites do not comply with the regulatory protection criteria for radio astronomy measurements.

NEXT STEPS:

The next meeting of Working Party 7D will be in May 2015. This will be the last meeting at which new radio frequency allocations to be decided at the 2015 World Radiocommunication Conference can be discussed



in this world-wide forum dedicated to the protection of the radio astronomy service. CRAF members will continue their active participation in WP7D, both in its own right, and as representatives of national spectrum regulation administrations.