

Président  
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<b>CNFRS – URSI ANSWER TO PUBLIC CONSULTATION ON « A COORDINATED EU SPECTRUM APPROACH FOR SCIENTIFIC USE OF RADIO SPECTRUM »</b>
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CNFRS URSI welcomes the opportunity to respond to the public consultation on a coordinate EU Spectrum approach for scientific use of radio spectrum

The current European regulatory framework for frequency management results from a long and complex working process involving most national administrations. The existing framework can be considered as satisfactory. It is to be noticed that this framework has allowed the development of a wide range of high quality wireless applications, as well as higher sensitivity radio telescopes, thanks to the designation of harmonised frequency bands including radio astronomy.

In order to improve the present document we have suggestions

In table 1 of subsection 3.1 a A line "Ground based radars" should be added and in "active techniques", "Radar techniques are used in astronomy to map planets and some asteroids" should also added.

From technical point of view in subsection 4.5 "Benefits from radio astronomy", SKA is not operating at 1400 MHz, but "in a range between 250 MHz and 22 GHz"

In subsection 5.3 . the subsubsection " sharing in radio astronomy bands" is confusing and has to be revised. Indeed some time and in some observatories the most sensitive observations are done during early morning hours when many of the terrestrial transmitters are off the air. However this type of time sharing is not a common practice because radio-observations are effectively done days and nights. So it is not a common practice in line with this we propose to limit the present sentence to "  
Sharing scenarios have been investigated for radio astronomy operations but have only been implemented on an ad-hoc basis. "

In section 6 : we propose to add a sentence to add " RAS uses 46 frequency bands shared with others operators, under control of national administration in accordance with the R-R footnote 5.149"

According to us the section 9.7 needs to improve in order to be coherent with previous sections.

- From editorial point of view the words in bold could be written normally as it is the case in other section.
- In the first sub section we propose to add in the last sentence " This assessment should, in a proportionate manner" the compliance to the R-R by this way the sentence should be replaced by : " This assessment should, if compliant with the R-R :"
- The sentence "identify the impact of the various options on the interests of the particular groups of stakeholders;" could be replaced with : "identify the social and economical impact of the various options on the interests of stakeholders"
- To be coherent with existing rules and in line with previous comments we propose to replace the concept of "commitments/obligations in international initiatives/agreements" ( which is quite not well defined) by a concept of compliance with the R-R which is well defined. So the sentence "take into account commitments/obligations in international initiatives/agreements" by should be improved and be replaced by : "take into account commitments/obligations in international agreements in accordance with the R-R;"
- Dealing with the last sentence of the subsection "Assess the risks associated with each option" the idea is already in the topic sentence of the subsection 9.7 (eg "assess the impact of a potential decision on both scientific uses and other services"). So the sentence does not provide new idea, moreover it does not describe well defined rules and should be confusing. So we propose to remove this bullet point

In the annex 2

Technological contributions from radio astronomy : "10 K" should be changed into "4 K"

The section « trends in radio astronomy » should be improved

« Trends in radio astronomy are towards higher sensitivity, and higher frequencies » should be replaced by « at all frequencies ».

« Examples are the SKA project which seeks to build a single telescope with a square kilometre surface at 1400 MHz » is not exact the sentence should be replaced by « which seeks to build a giant interferometer of radio telescope stations, with baseline 3000 km, in a frequency range between 150 MHz and 25 GHz

Dealing with the sentence « LOFAR further opening ... ». Since LOFAR uses reduced frequency bandwidth and surface. The sentence may be replaced with « LOFAR which will be a precursor of SKA at low frequency, between 30 MHz and 250 MHz »

IN the text « The existing bands . . . signals of interest » should be improved by adding « The increased sensitivity allows exploring more remote galaxies and looking back in time towards the early universe. The signal coming from the spectral lines is then redshifted by large factors, towards more than ten times lower frequencies »

Sincerely yours,



Joël Hamelin  
Secrétaire General