The Manager

Spectrum Management Outlook and Strategy Section

Spectrum Allocations Branch

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**ACMA Consultation :** [**IFC 19/2019**](https://www.acma.gov.au/theACMA/proposed-area-wide-apparatus-licence) – **Proposed Area-wide Apparatus License.**

Dear Manager,

CSIRO welcomes the opportunity to comment on the ACMA consultation IFC 19/2019 and in particular on the associated consultation paper titled “*Proposed Area-wide Apparatus Licence”.*

CSIRO Astronomy and Space Science (CASS) are responsible for the management and operation of the Canberra Deep Space Communication Complex (CDSCC) under a government to government treaty between Australia and the USA as well as a Cooperating Agency Agreement between CSIRO and NASA. CSIRO is also now responsible to manage the operations of the European Space Agency (ESA) space research activities in Australia, including the operation of the Space Research Services (SRS) earth station at New Norcia in W.A. under the provisions of a long-standing Treaty between the Australian government and ESA. CDSCC and New Norcia are both integral and vital parts of the respective global networks represented as NASA’s Deep Space Network (DSN) and ESA’s tracking network (ESTRACK), respectively. Each provide ongoing and invaluable contributions to international space exploration. They both comprise substantial earth station assets developed over 50 years of cooperation including very large antennas at the CDSCC facility and ESA’s New Norcia facility, enabling tracking of dozens of international Near-Earth and Deep-Space missions representing spacecraft assets in excess of $35 Billion dollars.

CSIRO’s interest in this IFC is as a result of our management of these ground facilities in Australia and the need to utilise frequencies in a number of bands, including in this instance the extremely important 25.5 – 27.0 GHz band, (allocated to SPACE RESEARCH (space-to-Earth) on a primary basis) which has been flagged in this discussion paper for possible use by various localized broadband services, under the terms of this licensing proposal authorised through the proposed new Radiocommunications Licence type (Area-Wide Licence – AWL). It provides some comfort to note in the paper that “The ACMA will consult prior to deciding to issue licences of the AWL type in a new frequency band. As noted in the recent consultation, [*Draft spectrum reallocation recommendation for the 26 GHz band in cities and regional centres*](https://www.acma.gov.au/theACMA/draft-spectrum-reallocation-recommendation-for-the-26-ghz-band), the ACMA is considering the use of AWL to authorise access for wireless broadband services in some parts of the 26 GHz band.”

Concerning the ACMA’s invitation to comment, it is noted that the discussion paper appears focused toward prospective AWL operators of localized broadband systems. Notwithstanding, CSIRO (as a current licensee and operator) would like to offer some comments from the perspective of current apparatus licensees in this 26 GHz band (and long term future operator in this band) to assist ACMA’s appreciation of the critical strategic importance of this band to the space science service operations. From this perspective, CSIRO requests ACMA incorporate appropriate safeguards to assure the continued interference-free use of this 26 GHz SRS band for the technically demanding and increasingly challenging space science service missions, undertaken under the partnership arrangement between the CSIRO and these international space agencies.

Accordingly, CSIRO offers the following very brief comments on the questions to which inputs have been sought by the ACMA:

1. **Do you think the proposed characteristics of the AWL type will support your current or intended network deployments?** Are there any kinds of deployments that you believe the AWL type should support and currently does not?  *Not applicable -* *no comments.*
2. **Which bands and/or geographic areas do you believe would be conducive to the use of an AWL?** *Not applicable - no comments.*
3. **What technical and other matters do you believe the ACMA should consider in deciding to use AWL licensing in a particular band?** *CSIRO requests the ACMA to ensure that the protection criteria currently enforced to make possible the vital space research work conducted at both CSIRO/CDSCC and ESA/New Norcia is preserved, with legislation framed to ensure appropriate geographical and emission constraints are applied to prevent an undermining of current protection criteria. The provision of the constraints to assure the preservation of protection criteria defined in the ITU-R Radio Regulations and within applicable RALI’s should, in this case, continue to strictly apply to any considered AWL licensee.  
   It is noted that IFC 14/2019 "Draft spectrum reallocation recommendation for the 26 GHz band” already acknowledged that whereas the 25.1–27 GHz—spectrum licensing is for wide-area wireless broadband in cities and regional centres (referred to as defined areas in this paper) and apparatus licensing (potentially using a new spectrum-space apparatus licence type now referred to as AWL) is for wireless broadband elsewhere, existing SRS earth stations in the range 25.5–27 GHz will be able to continue to operate with proposed licence conditions included on new wireless broadband licences to ensure coexistence.  
   However, given that AWLs will not require coordination of devices prior to issue of the licence and will generally not require registration of devices prior to the device being operated, CSIRO is concerned about how the SRS protection will be enforced.*
4. **Do you have any other comments on the AWL concept?** *No further comments at this stage.*

Thank you for the opportunity to consider and comment on the ACMA IFC 19/2019.

Yours Sincerely,



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