WIRELESS INSTITUTE OF AUSTRALIA
PO Box 2042
Bayswater
Victoria 3153 Australia
Phone: + 61 3 9729 0400
Facsimile: + 61 3 9729 7325
nationaloffice@wia.org.au
ABN 56 004 920 745

22nd June 2014

WIA Submission to the Bureau of Meteorology Review of Space Weather Services

The Wireless Institute of Australia (the WIA) is the Australian national amateur radio society, representing approximately 15,000 Australian licensed radio amateurs. The WIA is a member of the International Amateur Radio Union (IARU – www.iaru.org), members of which represent a total of some three million radio amateurs worldwide in over 170 countries.

Amateur radio is a not-for-profit community activity, and its purpose is to advance the knowledge and experimentation in radio technologies through self-training and technical investigations. Radio amateurs have made significant technical contributions to the understanding of electromagnetic propagation, single-sideband radio, HF data communication systems, digital radio protocols and communications satellite design, among other things.

The amateur service represents a large resource of qualified and experienced radio operators and equipment dispersed throughout the community and worldwide. Amateur radio continues to play an important role in disaster communications and has a unique ability to provide radio communication independent of the telephone network or other radio services, particularly in the first few days before relief agencies are at the scene and have set up emergency telecommunication services. Recent examples of where radio amateurs provided first-response communications services include the 2004 Boxing Day Indian Ocean tsunami, Hurricane Katrina of 2005 in the USA and Typhoon Haiyan of 2103 that devastated the Philippines (see reference 1, below).

Radio amateurs communicate nationally and internationally, using a very wide range of frequencies and technologies, with a large percentage of that activity occurring on frequencies which depend on, and are affected by, variations in the ionosphere and space weather.

For many years, radio amateurs have been large and supportive consumers of space weather information provided by the Ionospheric Prediction Service. Freely available IPS information services, including sunspot, geomagnetic and maximum usable frequency data, and other information, are used by radio amateurs to plan their communications activities and to select the best available frequency to achieve reliable communications with distant stations or to take advantage of special events.

In addition, over recent years, Australian radio amateurs have employed the online information provided by IPS – particularly ionograms – to conduct unique research into ionospheric radio propagation not addressed by the scientific or communications engineering sectors (references 2 and 3).

Australian radio amateurs are very concerned that the proposed review of the IPS may affect the availability of freely available information services to private radio users, including amateur radio operators. The HF radio spectrum is unique in that it provides long distance communications systems without the need for satellite or cable infrastructure. It provides safety and comfort to those travelling and working in the most remote parts of this sparsely populated country and on the high seas.

Australian radio amateurs are very dependent on the currently available IPS information services, and will be very adversely affected if the free service is withdrawn.

Yours Sincerely

Phil Wait
President,
Wireless Institute of Australia

References

(1) **Philippines' Radio Hobbyists Give Vital Help Through Typhoon Haiyan Disaster**, at: http://www.wia.org.au/newsevents/news/2013/20131115-2/index.php

(2) **On sporadic E VHF propagation and solving a mystery about maximum usable frequencies**, by Roger Harrison VK2ZRH, Parts 1 and 2, *Amateur Radio* magazine (WIA journal), April and May 2012.

(3) **Adventures with a bistatic chirp and CW radar**, by Andrew Martin VK3OE/VK3OER, *Amateur Radio* magazine (WIA journal), December 2012.