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| **WORLD WEATHER WATCH****COMMISSION FOR BASIC SYSTEMS** |  |
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| **Steering Group on Radio Frequency Coordination (SG-RFC)****Boulder, Colorado. USA. 11-13 March 2014.** | **Document SG-RFC/2014-1-12** |
|  | **02 March 2014** |
|  | **English only** |
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|  | **Restricted access required? (Y/N)[[1]](#footnote-1)\*** | **N** |  |
| STEERING GROUP ON RADIO FREQUENCY COORDINATION (SG-RFC) |
| **chair sg-rfc** |
| SG-RFC Cooperation with the Group on Earth Observations (GEO) |

**Introduction**

As Point of Contact for GEO IN-01–C4, Radio Frequency Protection, I received several requests to support Dr. Brian D. Killough (brian.d.killough@nasa.gov), the coordinator of the GEO IN-01 (Earth Observing Systems)[[2]](#footnote-2), providing a number of updates to the Task Status Report for the presentation in several GEO events, including technical and high-level meetings.

GEO is involved in a wide range of activities and the radio frequency issues are addressed by WMO, as a contribution to GEOSS through GEOSS Task IN-01-C4. During the recent GEO-X Plenary, held in Geneva in January 2014, radio frequency was introduced to the main agenda, when the European Commission raised ESA concerns about the quality of data from Sentinel satellites, using 5.4 GHz band. The issue is that some GEO Member States have expressed their willingness to free the 5.4 GHz for the use by Radio LANs. If allowed, this unlicensed use would, according to studies, dramatically deteriorate the quality of the Sentinel observation data. It was reiterated that the Earth Observation communities oppose this modification in the allocation of the radiofrequency which would also affect other radar satellites using the same band.

While in Geneva, in February 2014, the Chair of SG-RFC met with the Director of GEO Secretariat, Dr. Barbara Ryan, and concerned staff to address the issue raised during the GEO-X Plenary. More detailed explanation was provided on how SG-RFC worked, the participation in different ITU-R groups, and the current status of the WMO Preliminary Positions on WRC-15 Agenda. The GEO Secretariat was informed about the coming SG-RFC meeting in Boulder and was invited to participate. Dr Ryan reaffirmed the reliance of GEO on SG-RFC on radio frequency protection issues.

The Director GEO Secretariat, in consultation with the Chair of SG-RFC and the WMO Secretariat, sent a letter to GEO Principals addressing the radiofrequency issue. The letter recalled the importance the Earth Observations Plenary (GEO-X) participants attached to protecting radio-frequencies in the 5 GHz range for Earth observation. It emphasized that as parts of this band have already been allocated for wireless network (RLAN) use, the only remaining sub-band for Earth observation (5350-5470 MHz) was now at risk of being lost. It was also recalled that such loss would have strong, negative impacts on several Earth observation missions, and most urgently on the Sentinel-1 mission of the Copernicus Programme, for which the first satellite is about to be launched.

  The letter explained the process for ensuring radio-frequency protection, indicating that the next World Radiocommunication Conference (WRC-15) will be held in November 2015 and that a number of preparatory meetings were being held covering specific issues, including the 5 GHz one.

  The letter further stressed the role of the WMO Steering Group on Radio-Frequency Coordination (SG-RFC), providing an existing coordination opportunity for the Earth observation community, including support to the GEOSS Task on Radio Frequency Protection.  It mentioned the meeting in Boulder and the follow up GEO activities that will include sharing of the outcomes with all GEO Principals, including the WMO position paper, and any other relevant documents. Principals will be requested to be actively involved with the national telecommunication administrations in order to both protect the concerned frequency range, as well as resolve any other relevant issues well in advance of WRC-15.

**Action (by SG-RFC) Proposed** *(for example, note the information, study the matter, etc.)*

For information

**Draft Text for Inclusion in the SG-RFC Meeting Reports or Other Documents** *(indicate the appropriate document)*

To be prepared after meeting discussion

1. \* If restricted access is selected the WMO Document will only be accessible to the WMO WIKI registered users. [↑](#footnote-ref-1)
2. GEOSS Task IN-01-C4 Radio Frequency Protection - <http://earthobservations.org/ts.php?id=134> [↑](#footnote-ref-2)