

## RESOLUTION ITU-R 59-2

### **Studies on availability of frequency bands for worldwide and/or regional harmonization and conditions for their use by terrestrial electronic news gathering systems**

(2012-2015-2019)

The ITU Radiocommunication Assembly,

*considering*

- a)* that the use of terrestrial portable and transportable radio equipment by services ancillary to broadcasting and programme making (SAB/SAP) including electronic field production, TV outside broadcast, wireless microphones and outside production and broadcast, commonly described as electronic news gathering (ENG), currently operating in bands allocated to the fixed, mobile and broadcasting services<sup>1</sup>, has become an important element in the comprehensive coverage of a wide range of internationally noteworthy events, including natural disasters as well as in content production;
- b)* that Report ITU-R BT.2069 provides a conclusion that the existing spectrum used for ENG is insufficient to meet anticipated demands;
- c)* that a large portion of ENG production tools, such as radio microphones, have traditionally operated in geographically vacant TV channels;
- d)* that parts of these bands are being repurposed by many administrations from terrestrial TV to mobile broadband, resulting in loss of availability of many channels for ENG and other associated operations;
- e)* that administrations, based on national circumstances, may consider the transition of a large portion of ENG operations to alternate suitable spectrum;
- f)* that some level of worldwide and/or regional harmonization is an important issue which needs to be addressed;
- g)* that harmonization would facilitate ENG link operation, particularly at events requiring cross-border coverage, such as natural disasters;
- h)* that the use of digital technology has provided an opportunity for more efficient spectrum usage that could assist ENG in meeting a growth in demand for spectrum for these systems;
- i)* that modular design and miniaturization of terrestrial ENG systems have increased the portability of such equipment and have thus increased the trend towards cross-border operation of ENG equipment;
- j)* that relevant ITU-R Recommendations and Reports have assisted administrations in addressing ENG operations in their spectrum planning;

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<sup>1</sup> Within some administrations, ENG applications are assigned within bands other than those allocated to the fixed and mobile services, for example in bands allocated to the broadcasting services.

- k) that Report ITU-R BT.2338 provides a description of services ancillary to broadcasting/services ancillary to programme-making spectrum use in Region 1 and the implication of a co-primary allocation for the mobile service in the frequency band 694-790 MHz;
- l) that Report ITU-R BT.2344 provides information on technical parameters, operational characteristics and deployment scenarios of SAB/SAP as utilized in broadcasting;
- m) that Recommendation ITU-R BT.1868 describes user requirements for the specifications, design, and testing of systems for the transmission of television signals through contribution, primary distribution and SNG networks;
- n) that Recommendation ITU-R BT.1871 deals with user requirements for wireless microphones with typical system parameters and operational requirements for analogue and digital wireless microphones, which may be used by administrations and broadcasters when planning tuning ranges within the frequency bands allocated to broadcasting, fixed and mobile service;
- o) that Recommendation ITU-R BT.1872 deals with user requirements for broadcast auxiliary services (BAS). It contains typical operational requirements for digital TVOB, ENG/SNG and EFP, which may be used by administrations when planning usage of their fixed and mobile TVOB, ENG and EFP applications,

*noting*

- a) that worldwide/regional harmonization of frequency bands or tuning ranges<sup>2</sup> for use by terrestrial ENG systems would be beneficial in meeting their operational requirements internationally;
- b) that when an international newsworthy event occurs, broadcasters and/or ENG operators often have little or no lead time in which to prepare for deployment;
- c) that prior identification of potential frequency availability in individual administrations within which equipment might be able to operate may ease the frequency assignment process, especially during international newsworthy events that draw broadcast audiences regionally and/or globally,

*noting further*

that it is in the interest of administrations and their broadcasting community to have access to updated information for ENG use,

*recognizing*

- a) that access to a globally harmonized spectrum is highly desirable to facilitate the rapid deployment and operation of ENG systems from one country to another;
- b) that the dynamic nature of the use of ENG is driven by scheduled and unscheduled events such as breaking news, emergencies and disasters;
- c) that news gathering and electronic production typically take place in an environment where several television broadcasters/organizations/networks attempt to cover the same event,

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<sup>2</sup> The term “tuning range” for ENG means a range of frequencies over which radio equipment is envisaged to be capable of operating; within this tuning range, the use in any one country of radio equipment from another country will be limited to the range of frequencies identified nationally in that one country for ENG, and will be operated in accordance with the related national conditions and requirements.

creating a demand for multiple ENG links which results in an increased demand for access to spectrum in suitable frequency bands;

- d) that, in some countries, ENG is utilized as part of an administration's telecommunication/information and communication technology (ICT) systems in the service of management in emergency and disaster situations for early warning, prevention, mitigation and relief;
- e) that Recommendation ITU-R M.1824 provides system characteristics for television outside broadcast, ENG and electronic field production (EFP) in the mobile service for use in sharing studies;
- f) that Recommendation ITU-R F.1777 provides system characteristics of television outside broadcast, electronic news gathering and electronic field production in the fixed service for use in sharing studies;
- g) that Report ITU-R BT.2069 provides spectrum usage and operational characteristics of terrestrial ENG, television outside broadcast (TVOB) and EFP systems;
- h) that Recommendation ITU-R M.1637 addresses issues to be considered in order to facilitate the global circulation of radiocommunication equipment to be used in emergency and disaster relief situations,

*resolves*

1 to carry out studies regarding possible solutions for global/regional harmonization of frequency bands and tuning ranges for ENG use, focused on bands already allocated, on a primary or secondary basis, to the fixed, mobile or broadcasting services, taking into account:

- that some frequency bands have more favourable properties suitable for ENG use;
- available technologies to maximize efficient and flexible use of spectrum;
- system characteristics and operational practices which facilitate the implementation of these solutions;

2 to develop ITU-R Recommendations and/or ITU-R Reports based on the aforementioned studies, as appropriate,

*further resolves*

1 to encourage administrations to develop relevant information concerning their national ENG use (e.g. a list of frequency bands available for ENG, spectrum management practices, technical and operational requirements, and spectrum authorization points of contact, as appropriate...) for use by foreign entities during worldwide newsworthy events;

2 to encourage administrations to consider, for harmonization purposes, frequency bands/tuning ranges used for ENG by other administrations,

*invites*

the membership to actively participate in the studies by providing contributions to ITU-R,

*instructs the Director of the Radiocommunication Bureau*

1 to develop a publicly accessible webpage to consolidate links to administration lists of ENG information (such as related lists or charts of permitted frequency bands developed by the applicable Study Groups) as requested in *further resolves* 1;

2 to invite the administrations of Member States to ensure that the information provided is kept up to date by submitting any modifications to the information referred to above on an ongoing basis.