RESOLUTION 235 (REV.WRC-23)

Review of the spectrum use of the frequency band 470-694 MHz or parts thereof for some countries in Region 1

The World Radiocommunication Conference (Dubai, 2023),

considering

a) that the favourable propagation characteristics in the frequency bands below 1 GHz are beneficial in providing cost-effective solutions for coverage;

b) that there is a need to continually take advantage of technological developments in order to increase the efficient use of the spectrum and facilitate spectrum access;

c) that the frequency band 470-694 MHz is a harmonized band used to provide terrestrial television broadcasting services on a worldwide scale;

d) that, in many countries, there is a sovereign national obligation on the provision of broadcasting services;

e) that terrestrial broadcasting networks have a long life cycle and a stable regulatory environment is necessary to provide protection of investment and future development;

f) that there is a need for investment in the next decade in broadcasting service development within the frequency band 470-694 MHz and for the implementation of new-generation broadcasting technologies and new applications (e.g. ultra-high definition (UHD), 5G Broadcast);

g) that there are countries where terrestrial broadcasting is the only viable means of delivery of broadcasting services;

h) that there are countries with decreasing use of digital terrestrial television broadcasting (DTTB) due to the evolution, broader availability and increased use of alternative media distribution platforms;

i) that International Mobile Telecommunications (IMT) systems utilize, among others, the frequency band 614-694 MHz to provide telecommunication services in some countries;

j) that, in accordance with No. **5.296**, there are countries where applications ancillary to broadcasting and programme-making are operating under the land mobile service (LMS) on a secondary basis and will continue to operate in the frequency band 470-694 MHz or in parts of that frequency band, but that the availability of spectrum for these applications will be affected by the implementation of other applications of the mobile service;

k) that the frequency band 645-862 MHz is allocated on a primary basis to the aeronautical radionavigation service (ARNS) in the countries listed in No. **5.312**;

l) that, in some countries, parts of the frequency band are also allocated to the radiolocation service on a secondary basis, limited to the operation of wind profiler radars (No. **5.291A**);

m) that, in the African Broadcasting Area (see Nos. **5.10** to **5.13**), the frequency band 606-614 MHz is allocated to the radio astronomy service (RAS) on a primary basis (No. **5.304**), and in the rest of Region 1 the frequency band 608-614 MHz is allocated to the RAS on a secondary basis (No. **5.306**);

n) that this conference has allocated the frequency band 470-694 MHz in some countries in Region 1 to the mobile/mobile, except aeronautical mobile, services on a secondary basis by a footnote, which enables some countries to implement mobile-based applications in order to address their national needs and interests;

o) that this conference has allocated the frequency band 614-694 MHz in some countries in Region 1 to the mobile, except aeronautical mobile, service on a primary basis by a footnote, which enables some countries to implement mobile-based applications in order to address their national needs and interests;

p) that in the Russian Federation and Kazakhstan, the frequency band 625-650 MHz is used for the space operation service (space-to-Earth), under No. **4.4**,

recognizing

a) that the GE06 Agreement applies in all Region 1 countries, except Mongolia, and in Iran (Islamic Republic of), in particular for the frequency band 470-862 MHz;

b) that the GE06 Agreement contains provisions for the terrestrial broadcasting service and other primary terrestrial services, a Plan for digital television and a list of stations of other primary terrestrial services;

c) that a digital entry in the GE06 Plan may also be used for transmissions in a service other than the broadcasting service under the conditions set out in § 5.1.3 of the GE06 Agreement ;

d) that the sharing and compatibility studies carried out in preparation for this conference and previous relevant world radiocommunication conferences may need to be updated for applications already considered, in cases of significantly changed technical characteristics;

e) that there may be some changes over the coming years in the spectrum use and needs of broadcasting and mobile services;

f) that No. **5.149** urges administrations to take all practicable steps to protect the radio astronomy service from harmful interference in the frequency band 608-614 MHz;

g) the ongoing needs of the LMS with allocations on a secondary basis used for applications ancillary to broadcasting and programme-making in No. **5.296** in the frequency band 470-694 MHz, and that stations in the LMS in the countries listed in this footnote shall not cause harmful interference to other existing or planned stations, considering the need to assess the demand of these applications in various administrations,

noting

a) the ongoing development of new applications and technologies of both the broadcasting and mobile services;

b) the studies regarding spectrum use and spectrum needs of existing services within the frequency band 470-960 MHz in Region 1, in particular the spectrum requirements of the broadcasting and mobile, except aeronautical mobile, services, carried out in preparation for this conference and relevant previous world radiocommunication conferences;

c) that the ITU Radiocommunication Sector (ITU-R) is studying possible solutions for global/regional harmonization of frequency bands and tuning ranges for electronic news gathering (ENG)[1] in accordance with Resolution ITU-R 59, to facilitate services ancillary to broadcasting (SAB)/services ancillary to programme-making (SAP) operations;

d) that coexistence between applications of existing secondary services (e.g. SAB/SAP, radio astronomy and wind profiler radars) and other applications of the mobile service requires suitable sharing methods,

resolves to invite the ITU Radiocommunication Sector after this conference and in time for the 2031 world radiocommunication conference

1 to review spectrum use and needs of applications of broadcasting and mobile services, taking into account *recognizing g)*, within the frequency band 470-694 MHz or parts thereof for countries listed in No. **5.295A**;

2 based on the review referred to in *resolves to invite the ITU Radiocommunication Sector, after this conference and in time for the 2031 world radiocommunication conference* 1, to update sharing and compatibility studies for coexistence conditions and develop new studies, as appropriate, taking into account existing primary and secondary services and No. **5.295A**, and to propose technical and regulatory conditions,

encourages administrations

1 to participate actively in the studies by submitting contributions to ITU-R;

2 to consider making spectrum available for continued SAB/SAP operation, taking into account Resolution ITU-R 59;

3 to take appropriate measures for the protection of stations in the RAS (see Nos. **5.304** and **5.306**) from stations in the mobile service, in accordance with the Radio Regulations,

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[1] ENG within Resolution ITU-R 59 represents all applications ancillary to broadcasting and programme-making, such as terrestrial electronic news gathering, electronic field production, TV outside broadcast, wireless radio microphones and radio outside production and broadcast.

invites the 2031 world radiocommunication conference

to consider, based on the results of ITU-R studies:

a) possible regulatory actions, including a review of the allocation of the frequency band 614-694 MHz to the mobile service for countries listed in No. **5.295A**;

b) and then also, a possible regulatory action to protect the RAS to which the frequency band 608-614 MHz is allocated in some countries in Region 1, taking into account the outcomes of *invites the 2031 world radiocommunication conference a)* above,

further invites the ITU Radiocommunication Sector

to ensure intersectoral collaboration with the ITU Telecommunication Development Sector in the implementation of this Resolution.