

International Telecommunication Union

**ITU-R**  
Radiocommunication Sector of ITU

**Recommendation ITU-R BS.2107-1**  
(12/2022)

**Use of International Radio for Disaster  
Relief frequencies for emergency  
broadcasts in the High Frequency bands**

**BS Series**  
**Broadcasting service (sound)**

## Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

## Policy on Intellectual Property Right (IPR)

ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

### Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
<b>BO</b>	Satellite delivery
<b>BR</b>	Recording for production, archival and play-out; film for television
<b>BS</b>	<b>Broadcasting service (sound)</b>
<b>BT</b>	Broadcasting service (television)
<b>F</b>	Fixed service
<b>M</b>	Mobile, radiodetermination, amateur and related satellite services
<b>P</b>	Radiowave propagation
<b>RA</b>	Radio astronomy
<b>RS</b>	Remote sensing systems
<b>S</b>	Fixed-satellite service
<b>SA</b>	Space applications and meteorology
<b>SF</b>	Frequency sharing and coordination between fixed-satellite and fixed service systems
<b>SM</b>	Spectrum management
<b>SNG</b>	Satellite news gathering
<b>TF</b>	Time signals and frequency standards emissions
<b>V</b>	Vocabulary and related subjects

*Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.*

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## RECOMMENDATION ITU-R BS.2107-1

**Use of International Radio for Disaster Relief frequencies for emergency broadcasts in the High Frequency bands**

(Question ITU-R 118-1/6)

(2017-2022)

**Scope**

This Recommendation defines the International Radio for Disaster Relief (IRDR) frequencies that may be used for High Frequency (HF) emergency broadcasts.

**Keywords**

Broadcasting for public warning, disaster management, disaster relief, emergency broadcasts, HF, HFCC, High Frequency, International Radio for Disaster Relief, IRDR, short wave

The ITU Radiocommunication Assembly,

*considering*

- a) that *considering a)* of Resolution **647 (Rev.WRC-15)** – Radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters, states natural disasters have underscored the importance of utilizing effective measures to mitigate their effects, including prediction, detection and alerting through the coordinated and effective use of radio-frequency spectrum;
- b) that *considering a)* of Resolution ITU-R 55 – ITU-R studies of disaster prediction, detection, mitigation and relief, states the importance of radiocommunication systems in assisting disaster management through techniques for early warning, prevention, mitigation and relief;
- c) that according to Article **12** of the Radio Regulations, individual frequency channels for high frequency (HF) broadcasting are not assigned, but are internationally coordinated in the High Frequency bands allocated to the Broadcasting Service;
- d) that section 8 of Report ITU-R BT.2299 – Broadcasting for public warning, disaster mitigation and relief, describes the role of international broadcasting for disaster relief;
- e) that the International Radio for Disaster Relief (IRDR) project has been conceived by the HFCC – International Broadcasting Delivery Association, in cooperation with the Arab States Broadcasting Union and the Asia-Pacific Broadcasting Union;
- f) that there are ten international HF (shortwave) broadcasting bands and one IRDR frequency channel has been identified in each band, which the global coordination community will reserve for disaster mitigation broadcasting,

*noting*

- a) that a clear IRDR frequency channel (also clear of any other broadcast  $\pm 5$  kHz) is required in order to implement emergency broadcasts in the High Frequency (HF) bands;
- b) that the frequency channel in *noting a)* needs to be available for 24 hours per day, 365 days per year;
- c) that IRDR frequencies are intended to be used for transmission during disasters caused by natural, environmental and technological hazards and warnings of impending events;

- d) the use of any IRDR frequency is based on the “first come/first served” principle;
- e) that IRDR frequency requirements shall be uploaded to the HFCC global database as a part of the standard requirement file, together with other entries of the Frequency Management Organization (FMO);
- f) that the organizations own FMO code shall be indicated in the corresponding column. A code “RDR” may be used in the Broadcaster field;
- g) that IRDR frequencies should include “IRDR” in the “Notes” field of the requirement file;
- h) that upon reception of an IRDR requirement a specific circular message is distributed to the general address [hfcc@itu.int](mailto:hfcc@itu.int);
- i) that a separate list of the IRDR requirements is published in both the Members and Public areas of the HFCC web site,

*recommends*

that the IRDR frequencies listed in Annex 1 should be reserved for 24 hours per day, 365 days per year for emergency broadcasts in the High Frequency (HF) bands.

NOTE – The IRDR frequencies listed in Annex 1 are not designated as emergency broadcasting frequencies in Article 5 of the Radio Regulations.

## Annex 1

### IRDR frequencies for emergency broadcasts in the High Frequency (HF) bands

Band (MHz)	IRDR frequency (kHz) <sup>1</sup>
6	5 910
7	7 400
9	9 430
11	11 840
13	13 620
15	15 650
17	17 500
19	18 950
21	21 840
26	26 010

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<sup>1</sup> The frequency channel adjacent to these frequencies should also be clear ( $\pm 5$  kHz).

## **Bibliography**

Resolution **647 (Rev.WRC-15)** – Radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters

Resolution ITU-R 55 – ITU-R studies of disaster prediction, detection, mitigation and relief

Question ITU-R 118-1/6 – Broadcasting means for public warning, disaster mitigation and relief

Report ITU-R BT.2299 – Broadcasting for public warning, disaster mitigation and relief

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