# INTERNATIONAL TELECOMMUNICATION UNION



## File format for submission of HFBC requirements in accordance with Article 12 of the Radio Regulations

(Updated: 24.10.2014)

### 1. Electronic format of the text file to be used for notification of HF broadcasting

In view of the current constraints of the ITU data processing systems, the information should continue to be provided only in ISO-8859-1 (Latin-1) characters set.

#### Line 1

Item	Format	Start col.	Stop col.	Range	Examples	Note
;	A1	1	1		;	
Season	A3	3	5	Ref. table season.txt	A15	
Notifying organization	A3	7	9	Ref. table admin.txt or	AFS or	Administration or
				Ref. table <u>authoris.txt</u>	SNT	Authorized organization
Date sent	A11	11	21	DD-MMM-YYYY format	20-DEC-2014	(in English and in
						capitals)

then, one line for each requirement:

Item	Format	Start col.	Stop col.	Range	Examples	Note
Frequency/Band (kHz)	15	1	5	Ref. table <u>rngfreq.txt</u>	9895 or 6	Frequency in kHz or Band in MHz (6,7, etc.)
Start time (UTC)	I4	7	10	0000-2359	0125	
Stop time (UTC)	I4	12	15	0001-2400	0027	
Target Service Area	A30	17	46	1-85 [N], [E], [S], [W], [NE], [SE], [SW], [NW]	27, 28SW, 18-20	Caution: Some CIRAF zones are not divided into quadrants: 1-5, 17,19-26, 67,69-75
Station code	A3	48	50	Ref. table site.txt	SMG	
Power (kW)	I4	52	55	1-5 000	250	Caution: for less than 1 kW use 1
Azimuth of Maxim. Radiation	13	57	63	0-359	87	
Antenna Slew Angle	I3	65	67	>= -30, =< +30	-15	
Antenna Code	I3	69	71	Ref. table antenna.txt	211	
Days of operation	A7	73	79	1-7	56 or 1234567	Sunday=1
Start date	A6	81	86	>= Start date of the season	290315	(29 March 2015)
Stop date	A6	88	93	<= Stop date of the season	251015	(25 October 2015)
Modulation	A1	95	95	D=DSB, T=SSB -6 dB N=Digital.	D	
Antenna design frequency (kHz)	15	97	101	2 000-30 000	7200	If blank or zero operating freq. is assumed
Language (o)	A10	103	112	Ref. table <u>language.txt</u>	EngFre	
Administration Code	A3	114	116	Ref. table <u>admin.txt</u>	USA	
Broadcaster Code(r)	A3	118	120	Ref. table <u>broadcas.txt</u>	TWR	
Frequency Manager Organ. Code (r)	A3	122	124	Ref. table <u>fmorg.txt</u>	FCC	If blank, identical to Administration code.

Identification (br)	15	126	130			BR or coordination group generated.
Old data (br)	I1	132	132	1 if no info is received	1	BR generated, output file only.
Alternate. Frequency 1/ Alternate. Band 1 (o)	15	134	138	Ref. table <u>rngfreq.txt</u>	6150	Frequency in kHz or band in MHz (6,7, etc.)
Alternate. Frequency 2/ Alternate. Band 2 (o)	15	140	144	Ref. table <u>rngfreq.txt</u>	9	Frequency in kHz or band in MHz (6,7, etc.)
Alternate. Frequency 3/ Alternate. Band 3 (o)	15	146	150	Ref. table <u>rngfreq.txt</u>	11	Frequency in kHz or band in MHz (6,7, etc.)
Notes (o)	A7	152	158			

<sup>(</sup>r) Recommended

Format: Ix (x-digit Integer); Ax (x-ASCII character string)

Start col. - First column position of the item; Stop col. - Last column position of the item.

#### 2. Description of data items

#### Administration code (3-character string)

Mandatory, a three-letter administration code in accordance with the ITU's designation. An up-to-date reference <u>list</u> is included with the HFBC software package.

#### Alternate frequencies/bands (5-digit integer)

Optional. Up to three alternate frequencies/bands can be notified. If notified, the Bureau will carry out necessary analysis to select the most suitable frequency amongst the indicated frequencies. For SSB operation, the nominal carrier frequency has to be notified.

#### Antenna code (up to 3-digit integer)

Mandatory, a unique code representing transmitting antenna of specific technical parameters.

A list including antenna codes and antenna definitions, based on ITU-R BS 705, is maintained by the Bureau. A new antenna code can be added upon request of administrations or organizations authorized to notify. An up-to-date reference list is included with the HF software package.

For new antenna systems, please use the code 991 and provide a complete description in a separate file.

#### Antenna design frequency (up to 5-digit integer)

Mandatory, design frequency will be in kHz, within the range between 2 000 kHz and 30 000 kHz. The use of symbol 0 or blank means that the antenna is designed for the operating frequency.

#### Antenna slew angle (up to 2-digit integer)

Antenna slew angle is the difference between the azimuth of maximum radiation and the physical orientation of the antenna. If a slewed antenna is in use, the slew angle must be notified. The value notified must be in the range -30 to 30. Default value is 0.

<sup>(</sup>o) Optional

<sup>(</sup>br) BR generated

#### **Azimuth of maximum radiation (up to 3-digit integer)**

Mandatory. If the transmitting antenna is directional, the value for the azimuth of maximum radiation must be notified. This must be in the range 0 to 359 degrees (from True North). If the antenna is non-directional, 0 shall be notified.

#### **Broadcaster code (3-character string)**

Recommended. An up-to-date reference <u>list</u> containing codes, names and contact information of broadcasting organizations is included with the HFBC software package.

#### Days of operation (up to 7-character string)

Mandatory. Each day is indicated by a number where 1 indicates Sunday and 7 indicates Saturday.

#### Frequency/band (5-digit integer)

Mandatory. The frequency or Band on which this requirement is intended to operate. The value, expressed in kHz shall be an integer multiple of 5 kHz and within the frequency <u>bands</u> below.

For SSB usage, the nominal carrier frequency is to be notified.

Available bands [kHz]
5 900-5 950**
5 950-6 200
7 200-7 300 *
7 300-7 400 **
7 400-7 450 *
9 400-9 500**
9 500-9 900
11 600-11 650**
11 650-12 050
12 050-12 100**
13 570-13 600**
13 600-13 800
13 800-13 870**
15 100-15 600
15 600-15 800**
17 480-17 550**
17 550-17 900
18 900-19 020**
21 450-21 850
25 670-26 100

<sup>\*</sup> Regions 1 and 3 only.

<sup>\*\*</sup> Administrations are encouraged to use these bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of No. 5.134 and Resolution 517 (Rev.WRC-07).

#### Frequency management organization (3-character string)

Recommended. An organization authorized by the administration to carry out the planning of its broadcast requirements on its behalf. An up-to-date reference <u>list</u> containing codes, names and contact information of the organizations is included with the HFBC software package.

#### Language (10-character string)

Optional. The field is included to facilitate identification of requirements that may be the sources of interference. An up-to-date reference <u>list</u> is included with the HFBC software package.

#### **Modulation (1-character string)**

Mandatory. D for DSB, T for SSB with 6 dB carrier reduction and N for digital DRM system. Any other modulation system which is recommended by the ITU-R for use by HFBC shall be identified by a suitable letter code, to be determined by the Bureau when required.

#### **Notifying organization (3-character string)**

Mandatory. An <u>administration</u> or an <u>organization authorized</u> by an administration to notify its broadcast requirements on its behalf. An up-to-date reference list is included with the HFBC software package.

#### Site code (3-character string)

Mandatory. Unique code representing transmitting site.

A list including site code, site name, its geographical coordinates is maintained by the Bureau. A new site can be added upon request of administrations or organizations authorized to notify. An upto-date reference <u>list</u> is included with the HFBC software package.

For new transmission sites, please use the codes SP1 to SP9, and provide the site name, geographical coordinates and proposed code(s) in a separate file.

#### **Start date (6-character string)**

Mandatory. The start date may not be earlier than the start of the schedule <u>period</u>. The start date may not be the same as the stop date for a requirement.

#### **Start time (4-digit integer)**

Mandatory. A valid start time for this requirement must be notified using the 24-hour UTC system.

The value shall be between 0000 and 2359 included and may not be the same as the stop time.

#### **Stop date (6-character string)**

Mandatory. The stop date may not be later than the end of the schedule <u>period</u>. The stop date may not be the same as the start date for the same requirement.

#### **Stop time (4-digit integer)**

Mandatory. A valid stop time for this requirement must be notified using the 24-hour UTC system.

The value shall be between 0001 and 2400 included and may not be the same as the start time.

#### Target service area (30-character string)

Mandatory. A set of CIRAF Zones/Quadrants must be notified representing the target area to be served.

A Zone number on its own may be used or it may be followed by N, E, S, W, NE, SE, SW, NW (in capitals) to indicate a Quadrant. More than one Zone or Zone/Quadrant may be notified, provided that they are separated by a comma.

The following CIRAF zones are not divided into quadrants: 1-5, 17, 19-26, 67 and 69-75.

Maps showing the CIRAF zones and quadrants are included with the HFBC software package.

#### Transmitter power in kW (up to 4-digit integer)

Mandatory. The power of the transmitter in kW must be notified. The value notified must be an integer in the range 1 to 5 000 (kW).

For DSB transmitters the carrier power is to be given; for SSB transmitters the peak envelope power is to be used.