

R&S[®]SMCVB-KV11

DRM Waveforms

User Manual



1179276002
Version 04

ROHDE & SCHWARZ
Make ideas real



This document describes the following software options:

- R&S®SMCVB-KV11 DRM Waveforms (1434.5370.xx)

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1179.2760.02 | Version 04 | R&S®SMCVB-KV11

Throughout this document, R&S® is indicated as R&S.

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1 Welcome to the R&S SMCVB-KV11 option

The R&S SMCVB-KV11 is a waveform library that provides waveform files in accordance with the DRM digital standard.

This user manual contains a reference description of the functionality that the waveform library provides. All functions not discussed in this manual are described in the R&S SMCV100B user manual. The latest version is available at:

www.rohde-schwarz.com/manual/SMCV100B

1.1 Key features

The R&S SMCVB-KV11 features:

- Numerous waveform files in accordance with DRM digital standard
- Efficient use with dedicated waveforms

1.2 Installation

Required options

The equipment layout for processing files of waveform libraries includes:

- R&S SMCV100B base unit, including arbitrary waveform generator (64 MSample ARB memory, 60 MHz RF bandwidth)
- Waveform library option (R&S SMCVB-KVxx)

For more information on ARB options, see chapter "Using the arbitrary waveform generator (ARB)" in the R&S SMCV100B user manual.

To register for access to the libraries

R&S SMCV100B stream and waveform libraries are available for download for registered users on the "Vector Signal Generator Customer Web" at the global Rohde & Schwarz information system (GLORIS).

1. For access, register at <https://gloris.rohde-schwarz.com>:
In the section "How to register", follow the instructions provided in the introduction video "How to register for GLORIS".
2. Register to GLORIS with the creation of a personal account.

Mr.
 Mrs.
 Ms.
 No information

First Name Last Name

Email

Country City

Company

Reason for registration
 Please tell us the reason for your registration (i.e. which product you have or what kind of information you want to get). If you already have a contact person at Rohde & Schwarz, please add the email address of your contact as well.

Password Retype Password

I accept the [Terms of Use](#) for a global Rohde & Schwarz Extranet account
 I accept the following [Marketing Permission](#)
 I want to register for e-commerce

Register Now

3. For access to the "Vector Signal Generator Customer Web", provide the following information:
- Specify that you want access to the "Vector Signal Generator Customer Web".
 - Include the material number and serial number of your device.
The label is located on the rear panel of the R&S SMCV100B.
- a) When using a new GLORIS account, fill the information in the "Reason for registration" field.

Reason for registration

Please tell us the reason for your registration (i.e. which product you have or what kind of information you want to get). If you already have a contact person at Rohde & Schwarz, please add the email address of your contact as well.

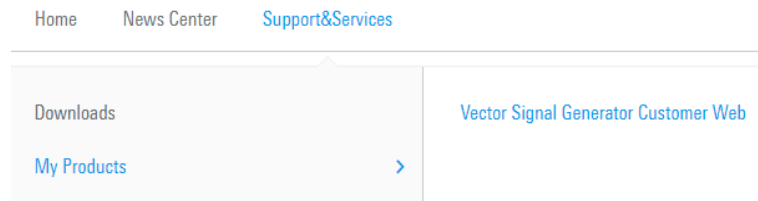
- b) When using an existing GLORIS account, click "Customer support" and fill in the information into an email.

Contact

E-Mail [Customer Support](#)

To access "Product Related Documents"

1. Log in to GLORIS.
2. In the menu bar, select "Support&Services > My Products > Vector Signal Generator Customer Web".



The "R&S SMCV100B Customer Web" page opens.

3. In the selection field "Product Selection for VSG", select "R&S®SMCV100B".

A webpage opens and displays search results for products related to the R&S SMCV100B.

Product Related Documents



To download a library file

This procedure describes how to download library files. It provides a step-by-step description for download of a stream library file. The download of waveform library files is analogous.

1. Access the "Product Related Documents" webpage as described in "[To access "Product Related Documents"](#)" on page 6.
2. In the search navigation bar, select "Firm-/Software" > "Waveform & Streams".

The search lists all information related to stream and waveform libraries of the R&S SMCV100B:

- R&S SMCVB-KSxx results relate to stream libraries.
- R&S SMCVB-KVxx results relate to waveform libraries.


You are searching for: Product: R&S®SMCV100B

All Product Documents Firm-/Software



Firmware Software Driver Waveform & Streams Archive

2452 Results available Sort by date ▼

Show options

 **SMCVB-KS10 DAB / T-DMB STREAMS**

Attachments

 SMCVB-KS10 DAB / T-DMB STREAMS  SMCVB-KS10 DAB / T-DMB STREAMS User Manual (download version)

3. Optionally, deactivate the filtering to display all waveform and stream library content.
 - a) On the left menu, select "Show options".
 - b) Click "Filtering on. Reset all filters."

Filtering on. Reset all filters.

4. Optionally, to filter for stream library content enter *KS in the search input field.


You are searching for: Product: R&S®SMCV100B

All Product Documents Firm-/Software



Firmware Software Driver Waveform & Streams Archive

142 Results available Sort by date ▼

Show options

 **SMCVB-KS10 DAB / T-DMB STREAMS**

Attachments

 SMCVB-KS10 DAB / T-DMB STREAMS  SMCVB-KS10 DAB / T-DMB STREAMS User Manual (download version)

5. In the search result list, navigate to the required library.
6. To download required library files, click the download link in the "Attachments" section of the library product page.
For example, for DAB/T-DMB streams, click the download link "R&S SMCVB-KS10 DAB / T-DMB STREAMS".

A download dialog opens to select and save files of the stream library.

To save a library file

- ▶ Save the library file to one of the following storage locations:
 - External storage device (HDD, memory stick): Use an external USB storage device to save large files or complete libraries. Connect the storage device to one of the USB 3.0 connectors on the rear panel of the R&S SMCV100B. If detected correctly, you can access the files on the R&S SMCV100B in the /usb/ directory in the file-select dialogs.

The R&S SMCV100B supports the following storage formats: ext2/ext3/ext4, FAT16/FAT32, NTFS (read-only), ISO9660, UDF

- Internal memory (SSD): Use the internal memory to save single files to the user directory `/var/user/` of the R&S SMCV100B, for example, using FTP via a LAN connection.

To load and play a waveform library file

1. Load the waveform file from its storage location:
 - External storage device (HDD, memory stick): Load the file from the `/usb/` directory.
 - Internal memory (SSD): Load the file from the user directory `/var/user/`

Note: Library files are encrypted files. Loading the library file at the R&S SMCV100B requires installation of the corresponding library option. See "[Required options](#)" on page 5.
2. To load the file at the R&S SMCV100B, select the file in the dialog "Baseband" > "ARB" > "Load Waveform".
3. To select the file, navigate to the storage location (1).
4. Select "ARB" > "State" > "On".
The R&S SMCV100B processes the waveform file.
5. In the block diagram, select "RF" > "On"
The waveform file is modulated onto the RF carrier and output at the RF 50 Ω connector.

For more information on loading waveform files, see chapter "How to create, generate and play waveform files" in the R&S SMCV100B user manual.

1.3 What's new

Compared to the previous version the documentation provides updated installation instructions to access, download and play waveform library files, see [Chapter 1.2, "Installation"](#), on page 5.

1.4 Documentation overview

This section provides an overview of the R&S SMCV100B user documentation. Unless specified otherwise, you find the documents at:

www.rohde-schwarz.com/manual/smcv100b

1.4.1 Getting started manual

Introduces the R&S SMCV100B and describes how to set up and start working with the product. Includes basic operations, typical measurement examples, and general information, e.g. safety instructions, etc. A printed version is delivered with the instrument.

1.4.2 User manuals and help

Separate manuals for the base unit and the software options are provided for download:

- Base unit manual
Contains the description of all instrument modes and functions. It also provides an introduction to remote control, a complete description of the remote control commands with programming examples, and information on maintenance, instrument interfaces and error messages. Includes the contents of the getting started manual.
- Software option manual
Contains the description of the specific functions of an option. Basic information on operating the R&S SMCV100B is not included.

The contents of the user manuals are available as help in the R&S SMCV100B. The help offers quick, context-sensitive access to the complete information for the base unit and the software options.

All user manuals are also available for download or for immediate display on the internet.

1.4.3 Service manual

Describes the performance test for checking compliance with rated specifications, firmware update, troubleshooting, adjustments, installing options and maintenance.

The service manual is available for registered users on the global Rohde & Schwarz information system (GLORIS):

<https://gloris.rohde-schwarz.com>

1.4.4 Instrument security procedures

Deals with security issues when working with the R&S SMCV100B in secure areas. It is available for download on the internet.

1.4.5 Printed safety instructions

Provides safety information in many languages. The printed document is delivered with the product.

1.4.6 Specifications and product brochures

The specifications document, also known as the data sheet, contains the technical specifications of the R&S SMCV100B. It also lists the firmware applications and their order numbers, and optional accessories.

The brochure provides an overview of the instrument and deals with the specific characteristics.

See www.rohde-schwarz.com/brochure-datasheet/smcv100b

1.4.7 Calibration certificate

The document is available on <https://gloris.rohde-schwarz.com/calcert>. You need the device ID of your instrument, which you can find on a label on the rear panel.

1.4.8 Release notes and open source acknowledgment

The release notes list new features, improvements and known issues of the current software version, and describe the software installation.

The software uses several valuable open source software packages. An open source acknowledgment document provides verbatim license texts of the used open source software.

www.rohde-schwarz.com/firmware/smcv100b

1.4.9 Application notes, application cards, white papers, etc.

These documents deal with special applications or background information on particular topics.

For some application sheets, see also:

www.rohde-schwarz.com/application/smcv100b

1.4.10 Videos

Find various videos on Rohde & Schwarz products and test and measurement topics on YouTube: <https://www.youtube.com/@RohdeundSchwarz>

2 Available waveform files

This chapter contains the description of the available waveform files.

2.1 Artificial folder

The files in this folder are for source-coding test purposes with artificial files for demonstration purposes:

- Artificial signal files containing music (AAC), maybe combined with speech (CELP or HVXC) or PRBS data for source-coding test purposes with artificial files containing different audio codecs.
- Artificial signal files containing speech only (CELP or HVXC) to demonstrate the different source decoders and text message application.

Naming conventions

The main broadcasting parameters are coded in the file name:

- <transmission mode>
Characters 'A', 'B', 'C' or 'D' depending on the mode.
- <bandwidth>
Signal bandwidth in kHz as two digits.
- <modulation of MSC cells>
– '16' for 16QAM
– '64' for 64QAM
- <interleaver length>
– 's' for short interleaving
– 'l' for long interleaving
- <number of code rate>
– Number out of '0', '1', '2' and '3' for 64QAM
– Number out of '0' and '1' for 16QAM
- <audio codec>
Name of the used source coder.
- <value>dBFS
Scaled to a mean signal level of -<value> dBFS

Example for naming conventions: A04_64s1_aac_12dBFS.wv

Transmission mode: A

Bandwidth: 4 kHz

Modulation of MSC cells: 64QAM

Interleaver length: short

Number of code rate: 1

Audio codec: AAC

Signal level: -12 dB full scale

2.1.1 A transmission mode

2.1.1.1 A04_64s1_aac_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-1: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-2: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC	
Audio mode	Mono	
Audio sampling	12.0 kHz	

Table 2-3: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame

Data length part B	500 bytes/frame	59 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.1.2 A09_64s1_aac_sbr_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-4: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-5: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC+SBR	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC with SBR	
Audio mode	Mono	
Audio sampling	24.0 kHz	

Table 2-6: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	84 bytes/frame	0 bytes/frame

Data length part B	1036 bytes/frame	40 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.1.3 A18_64s1_aac_sbr_celp_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-7: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-8: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	15	255
Service type	Audio + data	Data	Audio
Audio stream ID	0		2
Data stream ID	1	1	
Program type	10		29
Application ID		0	
Service label	Audio AAC+SBR	Data PRBS	Speech CELP
Language	7		5
Language code	ger		eng
Country code	de		gb
Audio codec	AAC with SBR		CELP
Audio mode	Parametric stereo		Parametric stereo
Audio sampling	24.0 kHz		8.0 kHz

Table 2-9: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	204 bytes/frame	0 bytes/frame	110 bytes/frame

Data length part B	1332 bytes/frame	357 bytes/frame	385 bytes/frame
Text message	FhG PC-BASED\nSOFT-WARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.1.1.4 A20_64I3_4audio_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-10: Main broadcasting parameters

Transmission mode	A
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-11: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	45054	45055	4097	4098
Service type	Audio	Audio	Audio	Audio
Audio stream ID	3	2	1	0
Data stream ID				
Program type	15	0	1	9
Application ID				
Service label	Audio AAC+SBR	Audio AAC	Speech CELP	Speech HVXC
Language	7	15	15	3
Language code	ger		ina	cpe
Country code	de		va	gs
Audio codec	AAC with SBR	AAC	CELP	HVXC with SBR
Audio mode	Mono	Mono	Parametric stereo	Stereo
Audio sampling	24.0 kHz	12.0 kHz	8.0 kHz	8.0 kHz

Table 2-12: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	110 bytes/frame	101 bytes/frame	0 bytes/frame

Data length part B	288 bytes/frame	385 bytes/frame	499 bytes/frame	1120 bytes/frame
Text message	-----10-----20--- -----30-----40----- --50-----60----- 70-----80-----90 -----100-----110-- -----120	Test for web address:\nhttp:// www.google.de/	Test for special \ncharact- ers:\n>äöüÄÖÜß\$ €&%@#&S< \n>âÁéÉíî{([[]]}< \n>µ ²³ ½¼¼½»«<<	hG PC-BASED \nSOFTWARE RADIO\hTest Showcase\nETSI TS 201 980 v2.1.1 (2003-12)\n\nFhG 05.2005

2.1.1.5 A20_64I3_aac_sbr_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-13: Main broadcasting parameters

Transmission mode	A
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-14: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC+SBR	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC with SBR	
Audio mode	Stereo	
Audio sampling	24.0 kHz	

Table 2-15: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	404 bytes/frame	0 bytes/frame
Data length part B	3052 bytes/frame	13 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.2 B transmission mode

2.1.2.1 B04_1610_hvxc_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-16: Main broadcasting parameters

Transmission mode	B
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-17: Service parameters

Parameter	Service #0
Service ID	45054
Service type	Audio
Audio stream ID	0
Data stream ID	
Program type	10
Application ID	
Service label	Speech
Language	7
Language code	ger
Country code	de
Audio codec	HVXC

Audio mode	Mono
Audio sampling	8.0 kHz

Table 2-18: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	233 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Show-case\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004

2.1.2.2 B05_6411_aac_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-19: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-20: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC	

Audio mode	Mono	
Audio sampling	12.0 kHz	

Table 2-21: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	448 bytes/frame	44 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\hTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.2.3 B10_6411_aac_sbr_12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-22: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-23: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC+SBR	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC with SBR	

Audio mode	Mono	
Audio sampling	24.0 kHz	

Table 2-24: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	84 bytes/frame	0 bytes/frame
Data length part B	796 bytes/frame	147 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\hTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.2.4 B10_6411_celp_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-25: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-26: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	45055	15
Service type	Audio + data	Audio	Data
Audio stream ID	0	1	
Data stream ID	2		2
Program type	10	29	
Application ID			0
Service label	Speech CELP0	Speech CELP1	Data PRBS
Language	7	5	
Language code	ger	eng	
Country code	de	gb	
Audio codec	CELP	CELP	

Audio mode	Mono	Parametric stereo	
Audio sampling	8.0 kHz	8.0 kHz	

Table 2-27: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	90 bytes/frame	110 bytes/frame	0 bytes/frame
Data length part B	385 bytes/frame	385 bytes/frame	34 bytes/frame
Text message	FhG PC-BASED\nSOFT-WARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.1.2.5 B10_6411_celp_sbr_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-28: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-29: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	45055	15
Service type	Audio + data	Audio	Data
Audio stream ID	0	1	
Data stream ID	2		2
Program type	10	29	
Application ID			0
Service label	Speech CELP0	Speech CELP1	Data PRBS
Language	7	5	
Language code	ger	eng	
Country code	de	gb	
Audio codec	CELP	CELP	

Audio mode	Mono	Parametric stereo	
Audio sampling	8.0 kHz	8.0 kHz	

Table 2-30: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	90 bytes/frame	110 bytes/frame	0 bytes/frame
Data length part B	385 bytes/frame	385 bytes/frame	34 bytes/frame
Text message	FhG PC-BASED\nSOFT-WARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.1.2.6 B10_6411_hvxc_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-31: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-32: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	45054	45055	255	256
Service type	Audio	Audio	Audio	Audio
Audio stream ID	0	1	2	3
Data stream ID				
Program type	10	29	1	9
Application ID				
Service label	Speech HVXC0	Speech HVXC1	Speech HVXC2	Speech HVXC3
Language	7	5	6	14
Language code	ger	eng	fre	spa
Country code	de	gb	fr	es
Audio codec	HVXC	HVXC	HVXC	HVXC

Audio mode	Mono	Parametric stereo	Stereo	Mono
Audio sampling	8.0 kHz	8.0 kHz	8.0 kHz	8.0 kHz

Table 2-33: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	0 bytes/frame	0 bytes/frame
Data length part B	100 bytes/frame	120 bytes/frame	200 bytes/frame	233 bytes/frame
Text message	FhG PC-BASED \nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004			

2.1.2.7 B10_6411_hvxc_sbr_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-34: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-35: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	45054	45055	255	256
Service type	Audio	Audio	Audio	Audio
Audio stream ID	0	1	2	3
Data stream ID				
Program type	10	29	1	9
Application ID				
Service label	Speech HVXC0	Speech HVXC1	Speech HVXC2	Speech HVXC3
Language	7	5	6	14
Language code	ger	eng	fre	spa
Country code	de	gb	fr	es

Audio codec	HVXC with SBR	HVXC with SBR	HVXC with SBR	HVXC with SBR
Audio mode	Mono	Parametric stereo	Stereo	Mono
Audio sampling	8.0 kHz	8.0 kHz	8.0 kHz	8.0 kHz

Table 2-36: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	0 bytes/frame	0 bytes/frame
Data length part B	139 bytes/frame	215 bytes/frame	288 bytes/frame	328 bytes/frame
Text message	FhG PC-BASED \nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004			
Input file	L:\drm_data\music \aac_402\mix__Fr 139_uep0_sbr1_Sr 8000_Mode0.HVX C		L:\drm_data\music \aac_402\mix__Fr 288_uep0_sbr1_Sr 8000_Mode2.HVX C	

2.1.2.8 B20_6411_aac_sbr_celp_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-37: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-38: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	15	255
Service type	Audio + data	Data	Audio
Audio stream ID	0		2
Data stream ID	1	1	
Program type	10		29

Application ID		0	
Service label	Audio AAC+SBR	Data PRBS	Speech CELP
Language	7		5
Language code	ger		eng
Country code	de		gb
Audio codec	AAC with SBR		CELP
Audio mode	Parametric stereo		Parametric stereo
Audio sampling	24.0 kHz		8.0 kHz

Table 2-39: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	204 bytes/frame	0 bytes/frame	110 bytes/frame
Data length part B	1332 bytes/frame	47 bytes/frame	385 bytes/frame
Text message	FhG PC-BASED\nSOFT-WARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		
Input file		_prbs_s	

2.1.3 C transmission mode

2.1.3.1 C10_6411_aac_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-40: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-41: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15

Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC	
Audio mode	Mono	
Audio sampling	12.0 kHz	

Table 2-42: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	101 bytes/frame	0 bytes/frame
Data length part B	499 bytes/frame	202 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.3.2 C20_6411_aac_sbr_hvxc_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-43: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-44: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	15	255
Service type	Audio + data	Data	Audio

Audio stream ID	0		2
Data stream ID	1	1	
Program type	10		29
Application ID		0	
Service label	Audio AAC+SBR	Data PRBS	Speech HVXC
Language	7		5
Language code	ger		eng
Country code	de		gb
Audio codec	AAC with SBR		HVXC
Audio mode	Mono		Stereo
Audio sampling	24.0 kHz		8.0 kHz

Table 2-45: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	84 bytes/frame	0 bytes/frame	0 bytes/frame
Data length part B	1036 bytes/frame	396 bytes/frame	200 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.1.4 D transmission mode

2.1.4.1 D10_6411_aac_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-46: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-47: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC	
Audio mode	Mono	
Audio sampling	12.0 kHz	

Table 2-48: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	500 bytes/frame	44 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\hTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.1.4.2 D20_6411_aac_sbr_hvxc_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-49: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-50: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	15	255
Service type	Audio + data	Data	Audio
Audio stream ID	0		2
Data stream ID	1	1	
Program type	10		29
Application ID		0	
Service label	Audio AAC+SBR	Data PRBS	Speech HVXC
Language	7		5
Language code	ger		eng
Country code	de		gb
Audio codec	AAC with SBR		HVXC
Audio mode	Mono		Stereo
Audio sampling	24.0 kHz		8.0 kHz

Table 2-51: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	84 bytes/frame	0 bytes/frame	0 bytes/frame
Data length part B	796 bytes/frame	69 bytes/frame	200 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.2 Test folder

The files in this folder are for function test and performance measurement purposes:

- Different settings of broadcast parameters to cover nearly all combinations of broadcast parameters.
- Different settings of broadcast parameters to be charged with the influence of noise and channel estimation.

Most data content is synchronous PRBS.

The content of nearly all these files is one stream/service of synchronous PRBS except some specials in the A10, B05 and B10 folders.

Naming conventions

The main broadcasting parameters are coded in the file name:

- <transmission mode>
Characters 'A', 'B', 'C' or 'D' depending on the mode.
- <bandwidth>
Signal bandwidth in kHz as two digits.
- <modulation of MSC cells>
 - '16' (for 16QAM)
 - '64' (for 64QAM)
 - 'HM' (for hierarchical mixed mode)
 - 'HS' (for hierarchical symmetrical mode)
- <interleaver length>
 - 's' for short interleaving
 - 'l' for long interleaving
- <number of code rate>
 - Number out of '0', '1', '2' and '3' for 64QAM, HM and HS
 - Number out of '0' and '1' for 16QAM
- <special case>
 - 'uep' for unequal error protection (the number of the code rate of the high protected part is one step lower than of the low protected part in each case).
 - '4st' for a signal file using 4 PRBS data streams and services, 'ber1e-?' giving the bit error rate for all used PRBS data streams or 'async' for asynchronous PRBS content.
- [_wrap]
Capable of wrapping without errors.
- <value>dBFS
Scaled to a mean signal level of -<value> dBFS

Example for naming conventions: A04_16l1_uep_wrap_10dBFS.wv

Transmission mode: A

Bandwidth: 4 kHz

Modulation of MSC cells: 16QAM

Interleaver length: long

Number of code rate: 1

Special case: uep

wrap: capable of wrapping without errors

Signal level: -10 dB full scale

2.2.1 A transmission mode

2.2.1.1 A04_16l0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-52: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-53: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-54: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	313 bytes/frame

2.2.1.2 A04_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-55: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-56: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data

Data stream ID	0
Application ID	0

Table 2-57: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	266 bytes/frame

2.2.1.3 A04_1611_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-58: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-59: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-60: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	391 bytes/frame

2.2.1.4 A04_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-61: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz

Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-62: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-63: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	313 bytes/frame

2.2.1.5 A04_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-64: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-65: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-66: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	391 bytes/frame

2.2.1.6 A04_6410_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-67: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-68: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-69: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	469 bytes/frame

2.2.1.7 A04_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-70: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-71: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-72: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	443 bytes/frame

2.2.1.8 A04_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-73: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-74: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-75: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	563 bytes/frame

2.2.1.9 A04_64I2_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-76: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-77: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-78: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	547 bytes/frame

2.2.1.10 A04_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-79: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-80: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-81: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	665 bytes/frame

2.2.1.11 A04_64I3_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-82: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-83: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-84: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	625 bytes/frame

2.2.1.12 A04_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-85: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-86: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-87: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	737 bytes/frame

2.2.1.13 A04_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-88: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-89: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-90: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	469 bytes/frame

2.2.1.14 A04_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-91: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-92: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-93: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	563 bytes/frame

2.2.1.15 A04_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-94: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-95: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-96: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	665 bytes/frame

2.2.1.16 A04_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-97: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-98: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-99: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	737 bytes/frame

2.2.1.17 A04_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-100: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-101: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-102: Stream parameters

Parameter	Stream #0
Data length part H	77 bytes/frame

2.2.1.18 A04_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-103: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-104: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-105: Stream parameters

Parameter	Stream #0
Data length part H	89 bytes/frame

2.2.1.19 A04_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-106: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-107: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-108: Stream parameters

Parameter	Stream #0
Data length part H	93 bytes/frame

2.2.1.20 A04_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-109: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-110: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-111: Stream parameters

Parameter	Stream #0
Data length part H	103 bytes/frame

2.2.1.21 A04_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-112: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-113: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-114: Stream parameters

Parameter	Stream #0
Data length part H	156 bytes/frame

2.2.1.22 A04_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-115: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-116: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-117: Stream parameters

Parameter	Stream #0
Data length part H	179 bytes/frame

2.2.1.23 A04_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-118: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-119: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-120: Stream parameters

Parameter	Stream #0
Data length part H	187 bytes/frame

2.2.1.24 A04_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-121: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-122: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-123: Stream parameters

Parameter	Stream #0
Data length part H	208 bytes/frame

2.2.1.25 A05_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-124: Main broadcasting parameters

Transmission mode	A
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-125: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-126: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	637 bytes/frame

2.2.1.26 A09_1610_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-127: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-128: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-129: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	656 bytes/frame

2.2.1.27 A09_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-130: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-131: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-132: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	570 bytes/frame

2.2.1.28 A09_1611_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-133: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-134: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-135: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	820 bytes/frame

2.2.1.29 A09_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-136: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-137: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-138: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	656 bytes/frame

2.2.1.30 A09_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-139: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-140: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-141: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	820 bytes/frame

2.2.1.31 A09_64I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-142: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-143: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-144: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	984 bytes/frame

2.2.1.32 A09_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-145: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-146: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-147: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	941 bytes/frame

2.2.1.33 A09_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-148: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-149: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-150: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1181 bytes/frame

2.2.1.34 A09_6412_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-151: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-152: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-153: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1158 bytes/frame

2.2.1.35 A09_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-154: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-155: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-156: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1394 bytes/frame

2.2.1.36 A09_64I3_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-157: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-158: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-159: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1323 bytes/frame

2.2.1.37 A09_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-160: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-161: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-162: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1545 bytes/frame

2.2.1.38 A09_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-163: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-164: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-165: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	984 bytes/frame

2.2.1.39 A09_64s1_aac_sbr_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-166: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-167: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio + data	Data
Audio stream ID	0	
Data stream ID	1	1
Program type	10	
Application ID		0
Service label	Audio AAC+SBR	Data PRBS
Language	7	
Language code	ger	
Country code	de	
Audio codec	AAC with SBR	
Audio mode	Mono	
Audio sampling	24.0 kHz	

Table 2-168: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	84 bytes/frame	0 bytes/frame

Data length part B	1036 bytes/frame	40 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004	

2.2.1.40 A09_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-169: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-170: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-171: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1181 bytes/frame

2.2.1.41 A09_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-172: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-173: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-174: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1394 bytes/frame

2.2.1.42 A09_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-175: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-176: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-177: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1545 bytes/frame

2.2.1.43 A09_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-178: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-179: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-180: Stream parameters

Parameter	Stream #0
Data length part H	163 bytes/frame

2.2.1.44 A09_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-181: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM

Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-182: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-183: Stream parameters

Parameter	Stream #0
Data length part H	187 bytes/frame

2.2.1.45 A09_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-184: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-185: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-186: Stream parameters

Parameter	Stream #0
Data length part H	196 bytes/frame

2.2.1.46 A09_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-187: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-188: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-189: Stream parameters

Parameter	Stream #0
Data length part H	218 bytes/frame

2.2.1.47 A09_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-190: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-191: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-192: Stream parameters

Parameter	Stream #0
Data length part H	328 bytes/frame

2.2.1.48 A09_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-193: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-194: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-195: Stream parameters

Parameter	Stream #0
Data length part H	375 bytes/frame

2.2.1.49 A09_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-196: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-197: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-198: Stream parameters

Parameter	Stream #0
Data length part H	393 bytes/frame

2.2.1.50 A09_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-199: Main broadcasting parameters

Transmission mode	A
Bandwidth	9.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-200: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-201: Stream parameters

Parameter	Stream #0
Data length part H	437 bytes/frame

2.2.1.51 A10_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-202: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-203: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-204: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1328 bytes/frame

2.2.1.52 A10_64I3_4st_ber1e-1_wrap_-10dBFS

Bit error rate 0.1; capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-205: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-206: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	0	1	2	3
Service type	Data	Data	Data	Data
Data stream ID	0	1	2	3
Application ID	0	0	0	0

Table 2-207: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	200 bytes/frame	200 bytes/frame	0 bytes/frame
Data length part B	500 bytes/frame	0 bytes/frame	200 bytes/frame	500 bytes/frame

2.2.1.53 A10_64I3_4st_ber1e-2_wrap_-10dBFS

Bit error rate 0.01; capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-208: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	16QAM

Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-209: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	0	1	2	3
Service type	Data	Data	Data	Data
Data stream ID	0	1	2	3
Application ID	0	0	0	0

Table 2-210: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	200 bytes/frame	200 bytes/frame	0 bytes/frame
Data length part B	500 bytes/frame	0 bytes/frame	200 bytes/frame	500 bytes/frame

2.2.1.54 A10_64I3_4st_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-211: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-212: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	0	1	2	3
Service type	Data	Data	Data	Data
Data stream ID	0	1	2	3
Application ID	0	0	0	0

Table 2-213: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	200 bytes/frame	200 bytes/frame	0 bytes/frame
Data length part B	506 bytes/frame	0 bytes/frame	200 bytes/frame	506 bytes/frame

2.2.1.55 A10_64s1_aac_sine1kHz-6dBFS_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-214: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-215: Service parameters

Parameter	Service #0	Service #1
Service ID	45054	15
Service type	Audio	Data
Audio stream ID	0	
Data stream ID		1
Program type	0	
Application ID		0
Service label	Sine 1kHz -6dBFS	Data PRBS
Audio codec	AAC	
Audio mode	Mono	
Audio sampling	24.0 kHz	

Table 2-216: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	800 bytes/frame	528 bytes/frame

2.2.1.56 A10_HMI3_4st_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-217: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.58
Code rate MSC part B	0.78
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-218: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	0	1	2	3
Service type	Data	Data	Data	Data
Data stream ID	0	1	2	3
Application ID	0	0	0	0

Table 2-219: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A		200 bytes/frame	200 bytes/frame	0 bytes/frame
Data length part B		0 bytes/frame	200 bytes/frame	692 bytes/frame
Data length part H	220 bytes/frame			
Input file	_prbs_s	_prbs_s	_prbs_s	

2.2.1.57 A10_HSI3_4st_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-220: Main broadcasting parameters

Transmission mode	A
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.55
Code rate MSC part B	0.78
Hierarchical mode	Symmetrical

Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-221: Service parameters

Parameter	Service #0	Service #1	Service #2	Service #3
Service ID	0	1	2	3
Service type	Data	Data	Data	Data
Data stream ID	0	1	2	3
Application ID	0	0	0	0

Table 2-222: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A		200 bytes/frame	200 bytes/frame	0 bytes/frame
Data length part B		0 bytes/frame	200 bytes/frame	376 bytes/frame
Data length part H	442 bytes/frame			

2.2.1.58 A18_1610_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-223: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-224: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-225: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1364 bytes/frame

2.2.1.59 A18_1611_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-226: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-227: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-228: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1455 bytes/frame

2.2.1.60 A18_1611_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-229: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-230: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-231: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1705 bytes/frame

2.2.1.61 A18_16s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-232: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-233: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-234: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1364 bytes/frame

2.2.1.62 A18_16s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-235: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-236: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-237: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1705 bytes/frame

2.2.1.63 A18_64I0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-238: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-239: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-240: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2046 bytes/frame

2.2.1.64 A18_6411_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-241: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-242: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-243: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2215 bytes/frame

2.2.1.65 A18_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-244: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-245: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-246: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2455 bytes/frame

2.2.1.66 A18_6412_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-247: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-248: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-249: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2663 bytes/frame

2.2.1.67 A18_64I2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-250: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-251: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-252: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2899 bytes/frame

2.2.1.68 A18_64I3_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-253: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-254: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-255: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2991 bytes/frame

2.2.1.69 A18_64I3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-256: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-257: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-258: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	3213 bytes/frame

2.2.1.70 A18_64s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-259: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-260: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-261: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2046 bytes/frame

2.2.1.71 A18_64s1_aac_sbr_celp_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-262: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-263: Service parameters

Parameter	Service #0	Service #1	Service #2
Service ID	45054	15	255
Service type	Audio + data	Data	Audio
Audio stream ID	0		2
Data stream ID	1	1	
Program type	10		29
Application ID		0	
Service label	Audio AAC+SBR	Data PRBS	Speech CELP
Language	7		5
Language code	ger		eng
Country code	de		gb
Audio codec	AAC with SBR		CELP
Audio mode	Parametric stereo		Parametric stereo
Audio sampling	24.0 kHz		8.0 kHz

Table 2-264: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2
Data length part A	204 bytes/frame	0 bytes/frame	110 bytes/frame

Data length part B	1332 bytes/frame	357 bytes/frame	385 bytes/frame
Text message	FhG PC-BASED\nSOFTWARE RADIO\nTest Showcase\nETSI TS 201 980\nv2.1.1 (2003-12)\n\nFhG 07.2004		

2.2.1.72 A18_64s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-265: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-266: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-267: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2455 bytes/frame

2.2.1.73 A18_64s2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-268: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM

Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-269: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-270: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2899 bytes/frame

2.2.1.74 A18_64s3_wrap_-12dBFS.txt

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-271: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-272: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-273: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	3213 bytes/frame

2.2.1.75 A18_HMI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-274: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-275: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-276: Stream parameters

Parameter	Stream #0
Data length part H	340 bytes/frame

2.2.1.76 A18_HMI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-277: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM

Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-278: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-279: Stream parameters

Parameter	Stream #0
Data length part H	389 bytes/frame

2.2.1.77 A18_HMI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-280: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-281: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-282: Stream parameters

Parameter	Stream #0
Data length part H	408 bytes/frame

2.2.1.78 A18_HMI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-283: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-284: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-285: Stream parameters

Parameter	Stream #0
Data length part H	454 bytes/frame

2.2.1.79 A18_HSI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-286: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-287: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-288: Stream parameters

Parameter	Stream #0
Data length part H	682 bytes/frame

2.2.1.80 A18_HSI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-289: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-290: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-291: Stream parameters

Parameter	Stream #0
Data length part H	779 bytes/frame

2.2.1.81 A18_HSI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-292: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-293: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-294: Stream parameters

Parameter	Stream #0
Data length part H	818 bytes/frame

2.2.1.82 A18_HSI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-295: Main broadcasting parameters

Transmission mode	A
Bandwidth	18.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-296: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-297: Stream parameters

Parameter	Stream #0
Data length part H	909 bytes/frame

2.2.1.83 A20_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-298: Main broadcasting parameters

Transmission mode	A
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-299: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-300: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2749 bytes/frame

2.2.1.84 A20_64I3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-301: Main broadcasting parameters

Transmission mode	A
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-302: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-303: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	3598 bytes/frame

2.2.2 B transmission mode

2.2.2.1 B04_16I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-304: Main broadcasting parameters

Transmission mode	B
Bandwidth	4.5 kHz

Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-305: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-306: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	240 bytes/frame

2.2.2.2 B04_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-307: Main broadcasting parameters

Transmission mode	B
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-308: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-309: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	432 bytes/frame

2.2.2.3 B05_1610_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-310: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-311: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-312: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	276 bytes/frame

2.2.2.4 B05_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-313: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-314: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-315: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	219 bytes/frame

2.2.2.5 B05_1611_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-316: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-317: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-318: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	345 bytes/frame

2.2.2.6 B05_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-319: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-320: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-321: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	276 bytes/frame

2.2.2.7 B05_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-322: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-323: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-324: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	345 bytes/frame

2.2.2.8 B05_64I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-325: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-326: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-327: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	414 bytes/frame

2.2.2.9 B05_6411_async_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-328: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-329: Service parameters

Parameter	Service #0
Service ID	45054
Service type	Data
Data stream ID	0
Application ID	0

Table 2-330: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	496 bytes/frame

2.2.2.10 B05_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-331: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-332: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-333: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	376 bytes/frame

2.2.2.11 B05_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-334: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-335: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-336: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	496 bytes/frame

2.2.2.12 B05_64I2_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-337: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-338: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-339: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	467 bytes/frame

2.2.2.13 B05_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-340: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-341: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-342: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	586 bytes/frame

2.2.2.14 B05_6413_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-343: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-344: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-345: Stream parameters

Parameter	Stream #0
Data length part A	100 bytes/frame
Data length part B	538 bytes/frame

2.2.2.15 B05_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-346: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-347: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-348: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	649 bytes/frame

2.2.2.16 B05_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-349: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-350: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-351: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	414 bytes/frame

2.2.2.17 B05_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-352: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-353: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-354: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	496 bytes/frame

2.2.2.18 B05_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-355: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-356: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-357: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	586 bytes/frame

2.2.2.19 B05_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-358: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-359: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-360: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	649 bytes/frame

2.2.2.20 B05_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-361: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-362: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-363: Stream parameters

Parameter	Stream #0
Data length part H	68 bytes/frame

2.2.2.21 B05_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-364: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-365: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-366: Stream parameters

Parameter	Stream #0
Data length part H	78 bytes/frame

2.2.2.22 B05_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-367: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-368: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-369: Stream parameters

Parameter	Stream #0
Data length part H	82 bytes/frame

2.2.2.23 B05_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-370: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-371: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-372: Stream parameters

Parameter	Stream #0
Data length part H	91 bytes/frame

2.2.2.24 B05_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-373: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-374: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-375: Stream parameters

Parameter	Stream #0
Data length part H	138 bytes/frame

2.2.2.25 B05_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-376: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-377: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-378: Stream parameters

Parameter	Stream #0
Data length part H	157 bytes/frame

2.2.2.26 B05_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-379: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-380: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-381: Stream parameters

Parameter	Stream #0
Data length part H	165 bytes/frame

2.2.2.27 B05_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-382: Main broadcasting parameters

Transmission mode	B
Bandwidth	5.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-383: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-384: Stream parameters

Parameter	Stream #0
Data length part H	184 bytes/frame

2.2.2.28 B09_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-385: Main broadcasting parameters

Transmission mode	B
Bandwidth	9.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-386: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-387: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame

2.2.2.29 B10_1610_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-388: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-389: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-390: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	582 bytes/frame

2.2.2.30 B10_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-391: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-392: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-393: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	478 bytes/frame

2.2.2.31 B10_1611_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-394: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-395: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-396: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	728 bytes/frame

2.2.2.32 B10_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-397: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-398: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-399: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	582 bytes/frame

2.2.2.33 B10_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-400: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-401: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-402: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	728 bytes/frame

2.2.2.34 B10_64I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-403: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-404: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-405: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	873 bytes/frame

2.2.2.35 B10_6411_async_-12dBFS

Scaled to a mean signal level of -12 dBFS.

Table 2-406: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-407: Service parameters

Parameter	Service #0
Service ID	45054
Service type	Data
Data stream ID	0
Application ID	0

Table 2-408: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame

2.2.2.36 B10_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-409: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-410: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-411: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	808 bytes/frame

2.2.2.37 B10_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-412: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-413: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-414: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame

2.2.2.38 B10_64I2_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-415: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-416: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-417: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1001 bytes/frame

2.2.2.39 B10_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-418: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-419: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-420: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1237 bytes/frame

2.2.2.40 B10_64I3_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-421: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71

Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-422: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-423: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1149 bytes/frame

2.2.2.41 B10_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-424: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-425: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-426: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1372 bytes/frame

2.2.2.42 B10_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-427: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-428: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-429: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	873 bytes/frame

2.2.2.43 B10_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-430: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-431: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-432: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame

2.2.2.44 B10_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-433: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-434: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-435: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1237 bytes/frame

2.2.2.45 B10_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-436: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-437: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-438: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1372 bytes/frame

2.2.2.46 B10_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-439: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-440: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-441: Stream parameters

Parameter	Stream #0
Data length part H	145 bytes/frame

2.2.2.47 B10_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-442: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-443: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-444: Stream parameters

Parameter	Stream #0
Data length part H	166 bytes/frame

2.2.2.48 B10_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-445: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-446: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-447: Stream parameters

Parameter	Stream #0
Data length part H	174 bytes/frame

2.2.2.49 B10_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-448: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-449: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-450: Stream parameters

Parameter	Stream #0
Data length part H	193 bytes/frame

2.2.2.50 B10_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-451: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-452: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-453: Stream parameters

Parameter	Stream #0
Data length part H	291 bytes/frame

2.2.2.51 B10_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-454: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-455: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-456: Stream parameters

Parameter	Stream #0
Data length part H	333 bytes/frame

2.2.2.52 B10_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-457: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-458: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-459: Stream parameters

Parameter	Stream #0
Data length part H	349 bytes/frame

2.2.2.53 B10_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-460: Main broadcasting parameters

Transmission mode	B
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-461: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-462: Stream parameters

Parameter	Stream #0
Data length part H	388 bytes/frame

2.2.2.54 B18_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-463: Main broadcasting parameters

Transmission mode	B
Bandwidth	18.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-464: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-465: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1909 bytes/frame

2.2.2.55 B20_1610_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-466: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-467: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-468: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1191 bytes/frame

2.2.2.56 B20_1611_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-469: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-470: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-471: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1239 bytes/frame

2.2.2.57 B20_16I1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-472: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-473: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-474: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1490 bytes/frame

2.2.2.58 B20_16s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-475: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-476: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-477: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1191 bytes/frame

2.2.2.59 B20_16s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-478: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-479: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-480: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1490 bytes/frame

2.2.2.60 B20_6410_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-481: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-482: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-483: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1788 bytes/frame

2.2.2.61 B20_6411_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-484: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-485: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-486: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1904 bytes/frame

2.2.2.62 B20_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-487: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-488: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-489: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2145 bytes/frame

2.2.2.63 B20_64I2_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-490: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-491: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-492: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2296 bytes/frame

2.2.2.64 B20_64I2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-493: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-494: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-495: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2533 bytes/frame

2.2.2.65 B20_6413_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-496: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-497: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-498: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2585 bytes/frame

2.2.2.66 B20_64I3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-499: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-500: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-501: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2807 bytes/frame

2.2.2.67 B20_64s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-502: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-503: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-504: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1788 bytes/frame

2.2.2.68 B20_64s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-505: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-506: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-507: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2145 bytes/frame

2.2.2.69 B20_64s2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-508: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-509: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-510: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2533 bytes/frame

2.2.2.70 B20_64s3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-511: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-512: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-513: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2807 bytes/frame

2.2.2.71 B20_HMI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-514: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-515: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-516: Stream parameters

Parameter	Stream #0
Data length part H	297 bytes/frame

2.2.2.72 B20_HMI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-517: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-518: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-519: Stream parameters

Parameter	Stream #0
Data length part H	340 bytes/frame

2.2.2.73 B20_HMI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-520: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-521: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-522: Stream parameters

Parameter	Stream #0
Data length part H	357 bytes/frame

2.2.2.74 B20_HMI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-523: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-524: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-525: Stream parameters

Parameter	Stream #0
Data length part H	396 bytes/frame

2.2.2.75 B20_HSI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-526: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-527: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-528: Stream parameters

Parameter	Stream #0
Data length part H	596 bytes/frame

2.2.2.76 B20_HSI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-529: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-530: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-531: Stream parameters

Parameter	Stream #0
Data length part H	681 bytes/frame

2.2.2.77 B20_HSI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-532: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-533: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-534: Stream parameters

Parameter	Stream #0
Data length part H	715 bytes/frame

2.2.2.78 B20_HSI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-535: Main broadcasting parameters

Transmission mode	B
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-536: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-537: Stream parameters

Parameter	Stream #0
Data length part H	794 bytes/frame

2.2.3 C transmission mode

2.2.3.1 C10_16I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-538: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz

Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-539: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-540: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	459 bytes/frame

2.2.3.2 C10_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-541: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-542: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-543: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	324 bytes/frame

2.2.3.3 C10_16I1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-544: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-545: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-546: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	574 bytes/frame

2.2.3.4 C10_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-547: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-548: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-549: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	459 bytes/frame

2.2.3.5 C10_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-550: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-551: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-552: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	574 bytes/frame

2.2.3.6 C10_6410_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-553: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-554: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-555: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	689 bytes/frame

2.2.3.7 C10_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-556: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-557: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-558: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	586 bytes/frame

2.2.3.8 C10_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-559: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-560: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-561: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	826 bytes/frame

2.2.3.9 C10_64I2_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-562: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-563: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-564: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	739 bytes/frame

2.2.3.10 C10_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-565: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-566: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-567: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	976 bytes/frame

2.2.3.11 C10_64I3_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-568: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-569: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-570: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	859 bytes/frame

2.2.3.12 C10_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-571: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-572: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-573: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1081 bytes/frame

2.2.3.13 C10_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-574: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-575: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-576: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	689 bytes/frame

2.2.3.14 C10_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-577: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-578: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-579: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	826 bytes/frame

2.2.3.15 C10_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-580: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-581: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-582: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	976 bytes/frame

2.2.3.16 C10_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-583: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-584: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-585: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1081 bytes/frame

2.2.3.17 C10_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-586: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-587: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-588: Stream parameters

Parameter	Stream #0
Data length part H	114 bytes/frame

2.2.3.18 C10_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-589: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-590: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-591: Stream parameters

Parameter	Stream #0
Data length part H	130 bytes/frame

2.2.3.19 C10_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-592: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-593: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-594: Stream parameters

Parameter	Stream #0
Data length part H	137 bytes/frame

2.2.3.20 C10_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-595: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-596: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-597: Stream parameters

Parameter	Stream #0
Data length part H	152 bytes/frame

2.2.3.21 C10_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-598: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-599: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-600: Stream parameters

Parameter	Stream #0
Data length part H	229 bytes/frame

2.2.3.22 C10_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-601: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-602: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-603: Stream parameters

Parameter	Stream #0
Data length part H	262 bytes/frame

2.2.3.23 C10_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-604: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-605: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-606: Stream parameters

Parameter	Stream #0
Data length part H	275 bytes/frame

2.2.3.24 C10_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-607: Main broadcasting parameters

Transmission mode	C
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-608: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-609: Stream parameters

Parameter	Stream #0
Data length part H	306 bytes/frame

2.2.3.25 C20_16I0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-610: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-611: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-612: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	965 bytes/frame

2.2.3.26 C20_1611_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-613: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-614: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-615: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	956 bytes/frame

2.2.3.27 C20_16I1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-616: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-617: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-618: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1206 bytes/frame

2.2.3.28 C20_16s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-619: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-620: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-621: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	965 bytes/frame

2.2.3.29 C20_16s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-622: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-623: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-624: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1206 bytes/frame

2.2.3.30 C20_6410_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-625: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-626: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-627: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1447 bytes/frame

2.2.3.31 C20_6411_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-628: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-629: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-630: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1497 bytes/frame

2.2.3.32 C20_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-631: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-632: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-633: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1737 bytes/frame

2.2.3.33 C20_64I2_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-634: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-635: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-636: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1813 bytes/frame

2.2.3.34 C20_64I2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-637: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-638: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-639: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2050 bytes/frame

2.2.3.35 C20_64I3_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-640: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-641: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-642: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	2050 bytes/frame

2.2.3.36 C20_64I3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-643: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-644: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-645: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2273 bytes/frame

2.2.3.37 C20_64s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-646: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-647: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-648: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1447 bytes/frame

2.2.3.38 C20_64s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-649: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-650: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-651: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1737 bytes/frame

2.2.3.39 C20_64s2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-652: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-653: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-654: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2050 bytes/frame

2.2.3.40 C20_64s3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-655: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-656: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-657: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	2273 bytes/frame

2.2.3.41 C20_HMI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-658: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-659: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-660: Stream parameters

Parameter	Stream #0
Data length part H	240 bytes/frame

2.2.3.42 C20_HMI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-661: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-662: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-663: Stream parameters

Parameter	Stream #0
Data length part H	275 bytes/frame

2.2.3.43 C20_HMI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-664: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-665: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-666: Stream parameters

Parameter	Stream #0
Data length part H	289 bytes/frame

2.2.3.44 C20_HMI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-667: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-668: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-669: Stream parameters

Parameter	Stream #0
Data length part H	321 bytes/frame

2.2.3.45 C20_HSI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-670: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-671: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-672: Stream parameters

Parameter	Stream #0
Data length part H	482 bytes/frame

2.2.3.46 C20_HSI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-673: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-674: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-675: Stream parameters

Parameter	Stream #0
Data length part H	551 bytes/frame

2.2.3.47 C20_HSI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-676: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-677: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-678: Stream parameters

Parameter	Stream #0
Data length part H	579 bytes/frame

2.2.3.48 C20_HSI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-679: Main broadcasting parameters

Transmission mode	C
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-680: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-681: Stream parameters

Parameter	Stream #0
Data length part H	643 bytes/frame

2.2.4 D transmission mode

2.2.4.1 D10_16I0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-682: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz

Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-683: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-684: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	304 bytes/frame

2.2.4.2 D10_1611_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-685: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-686: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-687: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	131 bytes/frame

2.2.4.3 D10_16I1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-688: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-689: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-690: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	381 bytes/frame

2.2.4.4 D10_16s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-691: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-692: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-693: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	304 bytes/frame

2.2.4.5 D10_16s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-694: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-695: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-696: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	381 bytes/frame

2.2.4.6 D10_6410_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-697: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-698: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-699: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	457 bytes/frame

2.2.4.7 D10_6411_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-700: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-701: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-702: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	308 bytes/frame

2.2.4.8 D10_6411_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-703: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-704: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-705: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	548 bytes/frame

2.2.4.9 D10_64I2_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-706: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-707: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-708: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	411 bytes/frame

2.2.4.10 D10_64I2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-709: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-710: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-711: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	648 bytes/frame

2.2.4.11 D10_64I3_uep_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-712: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-713: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-714: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	495 bytes/frame

2.2.4.12 D10_64I3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-715: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-716: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-717: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	718 bytes/frame

2.2.4.13 D10_64s0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-718: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-719: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-720: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	457 bytes/frame

2.2.4.14 D10_64s1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-721: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-722: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-723: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	548 bytes/frame

2.2.4.15 D10_64s2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-724: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-725: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-726: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	648 bytes/frame

2.2.4.16 D10_64s3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-727: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-728: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-729: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	718 bytes/frame

2.2.4.17 D10_HMI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-730: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-731: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-732: Stream parameters

Parameter	Stream #0
Data length part H	75 bytes/frame

2.2.4.18 D10_HMI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-733: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-734: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-735: Stream parameters

Parameter	Stream #0
Data length part H	86 bytes/frame

2.2.4.19 D10_HMI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-736: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-737: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-738: Stream parameters

Parameter	Stream #0
Data length part H	90 bytes/frame

2.2.4.20 D10_HMI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-739: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-740: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-741: Stream parameters

Parameter	Stream #0
Data length part H	101 bytes/frame

2.2.4.21 D10_HSI0_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-742: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-743: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-744: Stream parameters

Parameter	Stream #0
Data length part H	152 bytes/frame

2.2.4.22 D10_HSI1_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-745: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-746: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-747: Stream parameters

Parameter	Stream #0
Data length part H	174 bytes/frame

2.2.4.23 D10_HSI2_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-748: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-749: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-750: Stream parameters

Parameter	Stream #0
Data length part H	183 bytes/frame

2.2.4.24 D10_HSI3_wrap_-10dBFS

Capability of wrapping without errors; scaled to a mean signal level of -10 dBFS.

Table 2-751: Main broadcasting parameters

Transmission mode	D
Bandwidth	10.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-752: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-753: Stream parameters

Parameter	Stream #0
Data length part H	203 bytes/frame

2.2.4.25 D20_1610_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-754: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-755: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-756: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	649 bytes/frame

2.2.4.26 D20_1611_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-757: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-758: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-759: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	562 bytes/frame

2.2.4.27 D20_16I1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-760: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Long (2.0 s)

Table 2-761: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-762: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	812 bytes/frame

2.2.4.28 D20_16s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-763: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-764: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-765: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	649 bytes/frame

2.2.4.29 D20_16s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-766: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.62
Interleaver depth	Short (0.4 s)

Table 2-767: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-768: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	812 bytes/frame

2.2.4.30 D20_6410_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-769: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-770: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-771: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	975 bytes/frame

2.2.4.31 D20_6411_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-772: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-773: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-774: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	929 bytes/frame

2.2.4.32 D20_6411_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-775: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-776: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-777: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1169 bytes/frame

2.2.4.33 D20_64I2_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-778: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-779: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-780: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1144 bytes/frame

2.2.4.34 D20_64I2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-781: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-782: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-783: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1381 bytes/frame

2.2.4.35 D20_6413_uep_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-784: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-785: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-786: Stream parameters

Parameter	Stream #0
Data length part A	200 bytes/frame
Data length part B	1308 bytes/frame

2.2.4.36 D20_64I3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-787: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-788: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-789: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1530 bytes/frame

2.2.4.37 D20_64s0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-790: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-791: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-792: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	975 bytes/frame

2.2.4.38 D20_64s1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-793: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-794: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-795: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1169 bytes/frame

2.2.4.39 D20_64s2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-796: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-797: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-798: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1381 bytes/frame

2.2.4.40 D20_64s3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-799: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50

Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-800: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-801: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1530 bytes/frame

2.2.4.41 D20_HMI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-802: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-803: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-804: Stream parameters

Parameter	Stream #0
Data length part H	162 bytes/frame

2.2.4.42 D20_HMI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-805: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-806: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-807: Stream parameters

Parameter	Stream #0
Data length part H	185 bytes/frame

2.2.4.43 D20_HMI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-808: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48

Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-809: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-810: Stream parameters

Parameter	Stream #0
Data length part H	194 bytes/frame

2.2.4.44 D20_HMI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-811: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.48
Code rate MSC part B	0.48
Hierarchical mode	Mixed
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-812: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-813: Stream parameters

Parameter	Stream #0
Data length part H	216 bytes/frame

2.2.4.45 D20_HSI0_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-814: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.50
Interleaver depth	Long (2.0 s)

Table 2-815: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-816: Stream parameters

Parameter	Stream #0
Data length part H	325 bytes/frame

2.2.4.46 D20_HSI1_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-817: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45

Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.57
Interleaver depth	Long (2.0 s)

Table 2-818: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-819: Stream parameters

Parameter	Stream #0
Data length part H	371 bytes/frame

2.2.4.47 D20_HSI2_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-820: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.60
Interleaver depth	Long (2.0 s)

Table 2-821: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-822: Stream parameters

Parameter	Stream #0
Data length part H	390 bytes/frame

2.2.4.48 D20_HSI3_wrap_-12dBFS

Capability of wrapping without errors; scaled to a mean signal level of -12 dBFS.

Table 2-823: Main broadcasting parameters

Transmission mode	D
Bandwidth	20.0 kHz
Constellation SDC	4QAM
Constellation MSC	64QAM
Code rate MSC part A	0.45
Code rate MSC part B	0.45
Hierarchical mode	Symmetrical
Code rate MSC hierarchical part	0.67
Interleaver depth	Long (2.0 s)

Table 2-824: Service parameters

Parameter	Service #0
Service ID	1193046
Service type	Data
Data stream ID	0
Application ID	0

Table 2-825: Stream parameters

Parameter	Stream #0
Data length part H	433 bytes/frame

2.3 Artificial xHE-AAC folder

The files in this folder are for source-coding test purposes with artificial files for demonstration purposes:

- Artificial signal files containing music (xHE-AAC), maybe combined with PRBS data.

Naming conventions

The main broadcasting parameters are coded in the file name:

- <transmission mode>
Characters 'A', 'B', 'C' or 'D' depending on the mode.
- <bandwidth>
Signal bandwidth in Hz as four or five digits.
- <modulation of MSC cells>
– 'M16' for 16QAM
– 'M64' for 64QAM
- <modulation of SDC cells>
'S16' for 16QAM
- <interleaver length>
– 'I400' for short interleaving (0.4 s)
– 'I2000' for long interleaving (2.0 s)
- <number of code rate>
– Number out of 'L0', 'L1', 'L2' and 'L3' for MSC part B
– Number out of 'H0', 'H1', 'H2' and 'H3' for MSC part A
- <MUX configuration>
- See chapter 2.3.1.

Example for naming conventions: A_10000_M64_S16_I2000_L3H1_MUX0.wv

Transmission mode: A

Bandwidth: 10 kHz

Modulation of MSC cells: 16QAM

Modulation of SDC cells: 16QAM

Interleaver length: long

Number of code rate: L3, H1

MUX configuration: MUX0

2.3.1 MUX configuration

Scaled to a mean signal level of 20 dBFS.

Loop time: 3 minutes

Table 2-826: MUX0

	Service 0	Service 1
Audio codec	xHE-AAC	
Audio mode	Stereo	
Data	Synchronous PRBS	Synchronous PRBS
Coded file description	Bach	
Service ID	0x45045	0xFF2FF2
Service label	Audio xHE-AAC	Data PRBS
Audio stream ID	0	

Data stream ID	1	1
Language	German	German
Program type	Science	
Text message headline	Rohde und Schwarz DRM30 Test	
Text message	Rohde und Schwarz DRM30 Test ETSI ES 201 980 V4.1.1 (2014-01)	
Audio sampling	48 kHz	
Linked to	Audio S0+PAD S1P-1	Data S1

Table 2-827: MUX1

	Service 0	Service 1	Service 2	Service 3
Audio codec	xHE-AAC	xHE-AAC		
Audio mode	Mono	Mono		
Data	Synchronous PRBS		Synchronous PRBS	Synchronous PRBS
Coded file description	Bach			
Service ID	0x45045	0x7F7FF	0xFF2FF2	0x3EB
Service label	Audio xHE-AAC	Audio xHE-AAC 2	Data PRBS	Data PRBS 2
Audio stream ID	0	1		
Data stream ID	2		2	3
Language	German	German	German	German
Program type	Science	Science		
Text message headline	Rohde und Schwarz DRM30 Test			
Text message	Rohde und Schwarz DRM30 Test ETSI ES 201 980 V4.1.1 (2014-01)			
Audio sampling	48 kHz	48 kHz		
Linked to	Audio S0+PAD S2P-1	Audio S1	Data S2	Data S3

Table 2-828: MUX2

	Service 0	Service 2
Audio codec	HE-AAC	xHE-AAC
Audio mode	24 kHz SBR parametric stereo	Mono
Data		

Coded file description		Bach
Service ID	0x3F8	0x45045
Service label	Audio HE-AAC	Audio xHE-AAC
Audio stream ID		
Data stream ID		
Language	German	German
Program type	Science	Science
Text message headline	HE-AAC TEST	Rohde und Schwarz DRM30 Test
Text message	HE-AAC TEST	Rohde und Schwarz DRM30 Test ETSI ES 201 980 V4.1.1 (2014-01)
Audio sampling	48 kHz	48 kHz
Linked to	Audio S0+PAD S1P-1	Audio S0+PAD S1P-1

2.3.2 A transmission mode

2.3.2.1 A_4500_M64_S16_I400_L3H1_MUX0

Table 2-829: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-830: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	593 bytes/frame	144 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.2 A_4500_M64_S16_I2000_L3H1_MUX0

Table 2-831: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-832: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	593 bytes/frame	144 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.3 A_5000_M64_S16_I400_L3H1_MUX0

Table 2-833: Main broadcasting parameters

Transmission mode	A
Bandwidth	5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-834: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	641 bytes/frame	192 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.4 A_5000_M64_S16_I2000_L3H1_MUX0

Table 2-835: Main broadcasting parameters

Transmission mode	A
Bandwidth	5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-836: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	641 bytes/frame	192 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.5 A_9000_M64_S16_I400_L3H1_MUX0

Table 2-837: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-838: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	997 bytes/frame	548 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.6 A_9000_M64_S16_I2000_L3H1_MUX0

Table 2-839: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-840: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	997 bytes/frame	548 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.7 A_10000_M64_S16_I400_L3H1_MUX0

Table 2-841: Main broadcasting parameters

Transmission mode	A
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-842: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1094 bytes/frame	644 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.8 A_10000_M64_S16_I400_L3H1_MUX1

Table 2-843: Main broadcasting parameters

Transmission mode	A
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-844: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	134 bytes/frame	133 bytes/frame
Data length part B	560 bytes/frame	560 bytes/frame	134 bytes/frame	133 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.9 A_10000_M64_S16_I2000_L3H1_MUX0

Table 2-845: Main broadcasting parameters

Transmission mode	A
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-846: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1094 bytes/frame	644 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.2.10 A_10000_M64_S16_I2000_L3H1_MUX1

Table 2-847: Main broadcasting parameters

Transmission mode	A
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-848: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	134 bytes/frame	133 bytes/frame
Data length part B	560 bytes/frame	560 bytes/frame	134 bytes/frame	133 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.11 A_18000_M64_S16_I400_L3H1_MUX0

Table 2-849: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-850: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1831 bytes/frame	1382 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.2.12 A_18000_M64_S16_I400_L3H1_MUX1

Table 2-851: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-852: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	304 bytes/frame	303 bytes/frame
Data length part B	903 bytes/frame	903 bytes/frame	304 bytes/frame	303 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.13 A_18000_M64_S16_I400_L3H1_MUX2

Table 2-853: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-854: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	334 bytes/frame	0 bytes/frame
Data length part B	1278 bytes/frame	1497 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.2.14 A_18000_M64_S16_I2000_L3H1_MUX0

Table 2-855: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-856: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1831 bytes/frame	1382 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.2.15 A_18000_M64_S16_I2000_L3H1_MUX1

Table 2-857: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-858: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	304 bytes/frame	303 bytes/frame
Data length part B	903 bytes/frame	903 bytes/frame	304 bytes/frame	303 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.16 A_18000_M64_S16_I2000_L3H1_MUX2

Table 2-859: Main broadcasting parameters

Transmission mode	A
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-860: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	334 bytes/frame	0 bytes/frame
Data length part B	1278 bytes/frame	1497 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.2.17 A_20000_M64_S16_I400_L3H1_MUX0

Table 2-861: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-862: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	2024 bytes/frame	1574 bytes/frame
Audio encoder input rate	48.0 kHz	-

2.3.2.18 A_20000_M64_S16_I400_L3H1_MUX1

Table 2-863: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-864: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	350 bytes/frame	349 bytes/frame
Data length part B	991 bytes/frame	992 bytes/frame	350 bytes/frame	349 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.19 A_20000_M64_S16_I400_L3H1_MUX2

Table 2-865: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-866: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	374 bytes/frame	0 bytes/frame
Data length part B	1424 bytes/frame	1683 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.2.20 A_20000_M64_S16_I2000_L3H1_MUX0

Table 2-867: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-868: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	2024 bytes/frame	1574 bytes/frame
Audio encoder input rate	48.0 kHz	-

2.3.2.21 A_20000_M64_S16_I2000_L3H1_MUX1

Table 2-869: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-870: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	350 bytes/frame	349 bytes/frame
Data length part B	991 bytes/frame	991 bytes/frame	350 bytes/frame	349 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.2.22 A_20000_M64_S16_I2000_L3H1_MUX2

Table 2-871: Main broadcasting parameters

Transmission mode	A
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-872: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	374 bytes/frame	0 bytes/frame
Data length part B	1424 bytes/frame	1683 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.3 B transmission mode

2.3.3.1 B_4500_M64_S16_I400_L3H1_MUX0

Table 2-873: Main broadcasting parameters

Transmission mode	A
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-874: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	508 bytes/frame	57 bytes/frame
Audio encoder input rate	34.4 kHz	-

2.3.3.2 B_4500_M64_S16_I2000_L3H1_MUX0

Table 2-875: Main broadcasting parameters

Transmission mode	B
Bandwidth	4.5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-876: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	508 bytes/frame	57 bytes/frame
Audio encoder input rate	34.4 kHz	-

2.3.3.3 B_5000_M64_S16_I400_L3H1_MUX0

Table 2-877: Main broadcasting parameters

Transmission mode	B
Bandwidth	5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (2.0 s)

Table 2-878: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	549 bytes/frame	100 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.4 B_5000_M64_S16_I2000_L3H1_MUX0

Table 2-879: Main broadcasting parameters

Transmission mode	B
Bandwidth	5 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-880: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	549 bytes/frame	100 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.5 B_9000_M64_S16_I400_L3H1_MUX0

Table 2-881: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-882: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	826 bytes/frame	377 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.3.6 B_9000_M64_S16_I2000_L3H1_MUX0

Table 2-883: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-884: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	826 bytes/frame	377 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.3.7 B_10000_M64_S16_I400_L3H1_MUX0

Table 2-885: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-886: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	911 bytes/frame	461 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.3.8 B_10000_M64_S16_I400_L3H1_MUX1

Table 2-887: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-888: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	92 bytes/frame	90 bytes/frame
Data length part B	476 bytes/frame	476 bytes/frame	92 bytes/frame	90 bytes/frame
Audio encoder input rate	38.4 kHz	38.4 kHz	-	-

2.3.3.9 B_10000_M64_S16_I2000_L3H1_MUX0

Table 2-889: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-890: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	911 bytes/frame	461 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.3.10 B_10000_M64_S16_I2000_L3H1_MUX1

Table 2-891: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-892: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	92 bytes/frame	90 bytes/frame
Data length part B	476 bytes/frame	476 bytes/frame	92 bytes/frame	90 bytes/frame
Audio encoder input rate	38.4 kHz	38.4 kHz	-	-

2.3.3.11 B_18000_M64_S16_I400_L3H1_MUX0

Table 2-893: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-894: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1473 bytes/frame	1024 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.12 B_18000_M64_S16_I400_L3H1_MUX1

Table 2-895: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-896: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	222 bytes/frame	221 bytes/frame
Data length part B	737 bytes/frame	737 bytes/frame	222 bytes/frame	221 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.3.13 B_18000_M64_S16_I400_L3H1_MUX2

Table 2-897: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-898: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	264 bytes/frame	0 bytes/frame
Data length part B	1000 bytes/frame	1150 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.3.14 B_18000_M64_S16_I2000_L3H1_MUX0

Table 2-899: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-900: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1473 bytes/frame	1024 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.15 B_18000_M64_S16_I2000_L3H1_MUX1

Table 2-901: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-902: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	222 bytes/frame	221 bytes/frame
Data length part B	737 bytes/frame	737 bytes/frame	222 bytes/frame	221 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.3.16 B_18000_M64_S16_I2000_L3H1_MUX2

Table 2-903: Main broadcasting parameters

Transmission mode	B
Bandwidth	18 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-904: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	264 bytes/frame	0 bytes/frame
Data length part B	1000 bytes/frame	1150 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.3.17 B_20000_M64_S16_I400_L3H1_MUX0

Table 2-905: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-906: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1628 bytes/frame	1179 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.18 B_20000_M64_S16_I400_L3H1_MUX1

Table 2-907: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-908: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	258 bytes/frame	258 bytes/frame
Data length part B	807 bytes/frame	807 bytes/frame	258 bytes/frame	258 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.3.19 B_20000_M64_S16_I400_L3H1_MUX2

Table 2-909: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-910: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	294 bytes/frame	0 bytes/frame
Data length part B	1121 bytes/frame	1300 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.3.20 B_20000_M64_S16_I2000_L3H1_MUX0

Table 2-911: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-912: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1628 bytes/frame	1179 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.3.21 B_20000_M64_S16_I2000_L3H1_MUX1

Table 2-913: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-914: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	258 bytes/frame	258 bytes/frame
Data length part B	807 bytes/frame	807 bytes/frame	258 bytes/frame	258 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.3.22 B_20000_M64_S16_I2000_L3H1_MUX2

Table 2-915: Main broadcasting parameters

Transmission mode	B
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-916: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	294 bytes/frame	0 bytes/frame
Data length part B	1121 bytes/frame	1300 bytes/frame
Audio encoder input rate	24.0 kHz	38.4 kHz

2.3.4 C transmission mode

2.3.4.1 C_10000_M64_S16_I400_L3H1_MUX0

Table 2-917: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-918: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	765 bytes/frame	316 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.4.2 C_10000_M64_S16_I2000_L3H1_MUX0

Table 2-919: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-920: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	765 bytes/frame	316 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.4.3 C_20000_M64_S16_I400_L3H1_MUX0

Table 2-921: Main broadcasting parameters

Transmission mode	C
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-922: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1362 bytes/frame	911 bytes/frame
Audio encoder input rate	38.4 kHz	-

2.3.4.4 C_20000_M64_S16_I400_L3H1_MUX1

Table 2-923: Main broadcasting parameters

Transmission mode	C
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-924: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	196 bytes/frame	195 bytes/frame
Data length part B	685 bytes/frame	685 bytes/frame	196 bytes/frame	195 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.4.5 C_20000_M64_S16_I2000_L3H1_MUX0

Table 2-925: Main broadcasting parameters

Transmission mode	C
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-926: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	1362 bytes/frame	911 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.4.6 C_20000_M64_S16_I2000_L3H1_MUX1

Table 2-927: Main broadcasting parameters

Transmission mode	C
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-928: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	196 bytes/frame	195 bytes/frame
Data length part B	685 bytes/frame	685 bytes/frame	196 bytes/frame	195 bytes/frame
Audio encoder input rate	32.0 kHz	32.0 kHz	-	-

2.3.5 D transmission mode

2.3.5.1 D_10000_M64_S16_I400_L3H1_MUX0

Table 2-929: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-930: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame

Data length part B	584 bytes/frame	134 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.5.2 D_10000_M64_S16_I2000_L3H1_MUX0

Table 2-931: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-932: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	584 bytes/frame	134 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.5.3 D_20000_M64_S16_I400_L3H1_MUX0

Table 2-933: Main broadcasting parameters

Transmission mode	D
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-934: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	990 bytes/frame	540 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.5.4 D_20000_M64_S16_I400_L3H1_MUX1

Table 2-935: Main broadcasting parameters

Transmission mode	D
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Short (2.0 s)

Table 2-936: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	109 bytes/frame	108 bytes/frame
Data length part B	514 bytes/frame	513 bytes/frame	109 bytes/frame	108 bytes/frame
Audio encoder input rate	38.4 kHz	38.4 kHz	-	-

2.3.5.5 D_20000_M64_S16_I2000_L3H1_MUX0

Table 2-937: Main broadcasting parameters

Transmission mode	D
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-938: Stream parameters

Parameter	Stream #0	Stream #1
Data length part A	0 bytes/frame	0 bytes/frame
Data length part B	990 bytes/frame	540 bytes/frame
Audio encoder input rate	32.0 kHz	-

2.3.5.6 D_20000_M64_S16_I2000_L3H1_MUX1

Table 2-939: Main broadcasting parameters

Transmission mode	D
Bandwidth	20 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-940: Stream parameters

Parameter	Stream #0	Stream #1	Stream #2	Stream #3
Data length part A	0 bytes/frame	0 bytes/frame	109 bytes/frame	108 bytes/frame
Data length part B	514 bytes/frame	513 bytes/frame	109 bytes/frame	108 bytes/frame
Audio encoder input rate	38.4 kHz	38.4 kHz	-	-

2.4 Receiver test folder

The files in this folder are for source-coding test purposes with artificial files for demonstration purposes:

- Artificial signal files containing music (AAC, MUX3 or xHE-AAC, MUX6), PRBS data (MUX4) or sine waves (AAC, MUX5)

Naming conventions

The main broadcasting parameters are coded in the file name:

- <transmission mode>
Characters 'A', 'B', 'C' or 'D' depending on the mode.
- <bandwidth>
Signal bandwidth in Hz as four or five digits.
- <modulation of MSC cells>
– 'M16' for 16QAM
– 'M64' for 64QAM
- <modulation of SDC cells>
'S16' for 16QAM
- <interleaver length>
– 'I400' for short interleaving (0.4 s)
– 'I2000' for long interleaving (2.0 s)

- <number of code rate>
 - Number out of 'L0', 'L1', 'L2' and 'L3' for MSC Part B
 - Number out of 'H0', 'H1', 'H2' and 'H3' for MSC Part A
- <MUX configuration>
See chapter 2.4.1
- <frequency>
Audio sine frequency in Hz, MUX7 only
- <audio level>
Audio signal level in dBFs, MUX8 only

Example for naming conventions: B_9000_M64_S16_I2000_L1H1_MUX7_1000.wv

Transmission mode: B

Bandwidth: 9 kHz

Modulation of MSC cells: 64QAM

Modulation of SDC cells: 16QAM

Interleaver length: long

Number of code rate: L1, H1

MUX configuration: MUX7

Audio sine frequency: 1 kHz

2.4.1 MUX configuration

Scaled to a mean signal level of -12 dBFS.

Loop time:

- MUX3 to MUX6: 6 minutes
- MUX7: 15 minutes

	MUX3 - Service 0	MUX4 - Service 0	MUX5 - Service 0	MUX6 - Service 0	MUX7 - Service 0	MUX8 - Service 0
Audio codec	AAC		AAC	xHE-AAC	AAC	AAC
Audio mode	Mono		Mono	See file description	Mono	Mono
Data		PRBS synchronous				
Service ID	0x1	0x1	0x3F0	See file description	0x1	0x3F0
Service label	See file description	See file description	See file description	See file description	DRM Test	See file description
Audio stream ID	0	0	0	0	0	0
Language	German	German	German	German		German

Language of audience	German		See file description	See file description		See file description
Country	Germany		See file description	See file description		See file description
Program type	Light classical		Science	See file description		Science
Text message headline	See file description		See file description	See file description		See file description
Text message	See file description		See file description	See file description		See file description
Audio sampling WAV file	48 kHz		44.1 kHz	48 kHz	48 kHz	44.1 kHz
Linked to	Audio S0	Data S0	Audio S0	Audio S0	Audio S0	Audio S0
Links to other networks Service AFS Schedule Content Frequency	DRM30 0x2 Schedule 1 Equal 6.02 MHz		DRM30 0x3F1 Schedule 1 Equal 6.02 MHz	See file descr. Schedule 1 Equal 6.02 MHz		DRM30 0x3F1 Schedule 1 Equal 6.02 MHz

2.4.2 Minimum receiver test

2.4.2.1 A_9000_M64_S16_I400_L2H2_MUX3

Table 2-941: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-942: Stream parameters

Parameter	Stream #0
Data length part A	294 bytes/frame
Data length part B	1100 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-943: Service parameters

Service label	DRM30 mode A
Text message headline	-
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400ms Bandwidth = 9kHz

2.4.2.2 A_9000_M64_S16_I400_L2H2_MUX4**Table 2-944: Main broadcasting parameters**

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-945: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1394 bytes/frame

Table 2-946: Service parameters

Service label	DRM30 mode A
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2.4.2.3 A_9000_M64_S16_I400_L2H2_MUX5**Table 2-947: Main broadcasting parameters**

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-948: Stream parameters

Parameter	Stream #0
Data length part A	294 bytes/frame
Data length part B	1100 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-949: Service parameters

Service label	DRM30 mode A
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400ms Bandwidth = 9kHz

2.4.2.4 A_9000_M64_S16_I400_L2H2_MUX6

Table 2-950: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-951: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1394 bytes/frame
Audio encoder input rate	38.4 kHz

Table 2-952: Service parameters

Audio mode	Stereo
Service ID	0x3EA
Service label	DRM30 mode A

Language of audience	German, middle high
Country	Algeria
Program type	Easy listening music
Text message headline	-
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400ms Bandwidth = 9kHz
Links to other Networks Service	DRM30 0x3EB

2.4.2.5 A_9000_M64_S16_I400_L3H3_MUX3

Table 2-953: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.78
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-954: Stream parameters

Parameter	Stream #0
Data length part A	324 bytes/frame
Data length part B	1221 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-955: Service parameters

Service label	DRM30 mode A
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 3 (0.78) IL Depth = 400ms Bandwidth = 9kHz

2.4.2.6 A_9000_M64_S16_I400_L3H3_MUX4**Table 2-956: Main broadcasting parameters**

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.78
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-957: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1545 bytes/frame

Table 2-958: Service parameters

Service label	DRM30 mode A
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2.4.2.7 A_9000_M64_S16_I400_L3H3_MUX5**Table 2-959: Main broadcasting parameters**

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.78
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-960: Stream parameters

Parameter	Stream #0
Data length part A	324 bytes/frame
Data length part B	1221 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-961: Service parameters

Service label	DRM30 mode A
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 3 (0.78) IL Depth = 400ms Bandwidth = 9kHz

2.4.2.8 A_9000_M64_S16_I400_L3H3_MUX6

Table 2-962: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.78
Code rate MSC part B	0.78
Interleaver depth	Short (0.4 s)

Table 2-963: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1394 bytes/frame
Audio encoder input rate	38.4 kHz

Table 2-964: Service parameters

Audio mode	Stereo
Service ID	0x3EA
Service label	Music xHE-AAC

Language of audience	German, middle high
Country	Algeria
Program type	Easy listening music
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 3 (0.78) IL Depth = 400ms Bandwidth = 9kHz
Links to other Networks Service	DRM30 0x3EB

2.4.2.9 A_9000_M64_S16_I2000_L2H2_MUX5

Table 2-965: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-966: Stream parameters

Parameter	Stream #0
Data length part A	294 bytes/frame
Data length part B	1100 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-967: Service parameters

Service label	DRM30 Mode A
Language of audience	-
Country	Andorra
Program type	Easy listening music

Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 2000ms Bandwidth = 9kHz

2.4.2.10 A_9000_M64_S16_I2000_L3H3_MUX5

Table 2-968: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.78
Code rate MSC part B	0.78
Interleaver depth	Long (2.0 s)

Table 2-969: Stream parameters

Parameter	Stream #0
Data length part A	324 bytes/frame
Data length part B	1221 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-970: Service parameters

Service label	DRM30 Mode A
Language of audience	-
Country	Andorra
Program type	Easy listening music
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 3 (0.78) IL Depth = 2000ms Bandwidth = 9kHz

2.4.2.11 B_10000_M64_S16_I400_L1H1_MUX3

Table 2-971: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-972: Stream parameters

Parameter	Stream #0
Data length part A	224 bytes/frame
Data length part B	824 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-973: Service parameters

Service label	DRM30 Mode B
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 400ms Bandwidth = 10kHz

2.4.2.12 B_10000_M64_S16_I400_L1H1_MUX4

Table 2-974: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-975: Stream parameters

Parameter	Stream #0
Data length part A	0bytes/frame
Data length part B	1048 bytes/frame

Table 2-976: Service parameters

Service label	Mode B
---------------	--------

2.4.2.13 B_10000_M64_S16_I400_L1H1_MUX5

Table 2-977: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-978: Stream parameters

Parameter	Stream #0
Data length part A	224 bytes/frame
Data length part B	824 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-979: Service parameters

Service label	DRM30 Mode B
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.14 B_10000_M64_S16_I400_L2H2_MUX5

Table 2-980: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-981: Stream parameters

Parameter	Stream #0
Data length part A	264 bytes/frame
Data length part B	973 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-982: Service parameters

Service label	DRM30 Mode B
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400ms Bandwidth = 10kHz

2.4.2.15 B_10000_M64_S16_I2000_L1H1_MUX3

Table 2-983: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-984: Stream parameters

Parameter	Stream #0
Data length part A	224 bytes/frame
Data length part B	824 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-985: Service parameters

Service label	DRM30 Mode B
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.16 B_10000_M64_S16_I2000_L1H1_MUX5

Table 2-986: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-987: Stream parameters

Parameter	Stream #0
Data length part A	224 bytes/frame
Data length part B	824 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-988: Service parameters

Service label	DRM30 Mode B
Language of audience	-
Country	Andorra

Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.17 B_10000_M64_S16_I2000_L1H1_MUX6

Table 2-989: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-990: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame
Audio encoder input rate	32.0 kHz

Table 2-991: Service parameters

Audio mode	Stereo
Service ID	0x3EA
Service label	Music xHE-AAC
Language of audience	German
Country	Algeria
Program type	Easy listening music
Text message headline	Rohde&Schwarz DRM30 Waveform

Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz
Links to other Networks Service	DRM30 0x3EB

2.4.2.18 B_10000_M64_S16_I2000_L2H2_MUX3

Table 2-992: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-993: Stream parameters

Parameter	Stream #0
Data length part A	264 bytes/frame
Data length part B	973 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-994: Service parameters

Service label	DRM30 Mode B
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.19 B_10000_M64_S16_I2000_L2H2_MUX4

Table 2-995: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-996: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1237 bytes/frame

Table 2-997: Service parameters

Service label	DRM30 mode B
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2.4.2.20 B_10000_M64_S16_I2000_L2H2_MUX5

Table 2-998: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-999: Stream parameters

Parameter	Stream #0
Data length part A	264 bytes/frame
Data length part B	973 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1000: Service parameters

Service label	DRM30 Mode B
Language of audience	-

Country	Andorra
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.21 B_10000_M64_S16_I2000_L2H2_MUX6

Table 2-1001: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Long (2.0 s)

Table 2-1002: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1237 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1003: Service parameters

Audio mode	Mono
Service ID	0x1
Service label	Music xHE-AAC
Language of audience	German
Country	Germany
Program type	Light classical
Text message headline	Rohde&Schwarz DRM30 Waveform

Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 2000ms Bandwidth = 10kHz
Links to other Networks Service	DRM30 0x2

2.4.2.22 C_10000_M16_S16_I400_L1H1_MUX5

Table 2-1004: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1005: Stream parameters

Parameter	Stream #0
Data length part A	121 bytes/frame
Data length part B	453 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1006: Service parameters

Service label	DRM30 Mode C
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode C MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 400ms Bandwidth = 10kHz

2.4.2.23 C_10000_M16_S16_I2000_L1H1_MUX3

Table 2-1007: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1008: Stream parameters

Parameter	Stream #0
Data length part A	121 bytes/frame
Data length part B	453 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1009: Service parameters

Service label	DRM30 Mode C
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode C MSC 16QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.24 C_10000_M16_S16_I2000_L1H1_MUX4

Table 2-1010: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1011: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	574 bytes/frame

Table 2-1012: Service parameters

Service label	DRM30 mode C
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2.4.2.25 C_10000_M16_S16_I2000_L1H1_MUX5

Table 2-1013: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1014: Stream parameters

Parameter	Stream #0
Data length part A	121 bytes/frame
Data length part B	453 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1015: Service parameters

Service label	DRM30 Mode C
Language of audience	-
Country	Andorra
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode C MSC 16QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.26 C_10000_M16_S16_I2000_L1H1_MUX6

Table 2-1016: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1017: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	574 bytes/frame
Audio encoder input rate	32.0 kHz

Table 2-1018: Service parameters

Audio mode	Mono
Service ID	0x3EA
Service label	Music xHE-AAC
Language of audience	German, middle high
Country	Algeria
Program type	Easy listening music
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode C MSC 16QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000ms Bandwidth = 10kHz
Links to other Networks Service	DRM30 0x3EB

2.4.2.27 D_10000_M64_S16_I400_L0H0_MUX5

Table 2-1019: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz

Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-1020: Stream parameters

Parameter	Stream #0
Data length part A	96 bytes/frame
Data length part B	361 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1021: Service parameters

Service label	DRM30 mode D
Language of audience	Japanese
Country	Japan
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode D MSC 64QAM SDC 16QAM MSC Prot. Level 0 (0.50) IL Depth = 400ms Bandwidth = 10kHz

2.4.2.28 D_10000_M64_S16_I2000_LOH0_MUX3

Table 2-1022: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	64QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-1023: Stream parameters

Parameter	Stream #0
Data length part A	96 bytes/frame

Data length part B	361 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1024: Service parameters

Service label	DRM30 mode D
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode D MSC 64QAM SDC 16QAM MSC Prot. Level 0 (0.50) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.29 D_10000_M64_S16_I2000_LOH0_MUX4

Table 2-1025: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-1026: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	457 bytes/frame

Table 2-1027: Service parameters

Service label	DRM30 mode D
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2.4.2.30 D_10000_M64_S16_I2000_LOH0_MUX5

Table 2-1028: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM

Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-1029: Stream parameters

Parameter	Stream #0
Data length part A	96 bytes/frame
Data length part B	361 bytes/frame
Audio encoder input rate	12.0 kHz

Table 2-1030: Service parameters

Service label	DRM30 mode D
Language of audience	Japanese
Country	Japan
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode D MSC 64QAM SDC 16QAM MSC Prot. Level 0 (0.50) IL Depth = 2000ms Bandwidth = 10kHz

2.4.2.31 D_10000_M64_S16_I2000_LOH0_MUX6

Table 2-1031: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	64QAM
Constellation MSC	16QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Long (2.0 s)

Table 2-1032: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	457 bytes/frame
Audio encoder input rate	38.4 kHz

Table 2-1033: Service parameters

Audio mode	Mono
Service ID	0x3EA
Service label	Music xHE-AAC
Language of audience	Hindi
Country	India
Program type	Easy listening music
Text message headline	Rohde&Schwarz DRM30 Waveform
Text message	Robustness Mode D MSC 64QAM SDC 16QAM MSC Prot. Level 0 (0.50) IL Depth = 2000ms Bandwidth = 10kHz
Links to other Networks Service	DRM30 0x3EB

2.4.3 BER measurement

2.4.3.1 B_9000_M64_S16_I400_L1H1_MUX3

Table 2-1034: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1035: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1036: Service parameters

Service label	DRM30 Mode B
Language of audience	German
Country	Germany
Text message headline	---
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 0.6 EEP IL Depth = 2s Bandwidth = 9kHz

2.4.3.2 B_9000_M64_S16_I400_L1H1_MUX4

Table 2-1037: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1038: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame

Table 2-1039: Service parameters

Service label	Mode B
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2.4.3.3 B_9000_M64_S16_I400_L1H1_MUX5

Table 2-1040: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60

Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1041: Stream parameters

Parameter	Stream #0
Data length part A	204 bytes/frame
Data length part B	716 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1042: Service parameters

Service label	DRM30 Mode B
Language of audience	German
Country	Germany
Text message headline	Rohde&Schwarz DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 400ms Bandwidth = 9kHz

2.4.3.4 B_9000_M64_S16_I2000_L1H1_MUX3

Table 2-1043: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1044: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1045: Service parameters

Service label	DRM30 Mode B
Language of audience	German
Country	Germany
Text message headline	---
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 0.6 EEP IL Depth = 2s Bandwidth = 9kHz

2.4.3.5 B_9000_M64_S16_I2000_L1H1_MUX4

Table 2-1046: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1047: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame

Table 2-1048: Service parameters

Service label	DRM30 Mode B
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2.4.3.6 B_10000_M64_S16_I400_L1H1_MUX3_1

Table 2-1049: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60

Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1050: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1051: Service parameters

Service label	DRM30 Mode B
Language of audience	German
Country	Germany
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 0.6 EEP IL Depth = 2s Bandwidth = 10kHz

2.4.3.7 B_10000_M64_S16_I400_L1H1_MUX4_1

Table 2-1052: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1053: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame

Table 2-1054: Service parameters

Service label	Mode B
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2.4.3.8 B_10000_M64_S16_I2000_L1H1_MUX3_1

Table 2-1055: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1056: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1057: Service parameters

Service label	DRM30 Mode B
Language of audience	German
Country	Germany
Text message headline	Rohde&Schwarz DRM Waveform Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 0.6 EEP IL Depth = 2s Bandwidth = 10kHz

2.4.3.9 B_10000_M64_S16_I2000_L1H1_MUX4

Table 2-1058: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM

Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1059: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	1048 bytes/frame

Table 2-1060: Service parameters

Service label	DRM30 Mode B
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2.4.4 Frequency response

Apart from the audio sine frequency, the frequency response files are all coded identically.

Table 2-1061: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1062: Stream parameters

Parameter	Stream #0
Data length part A	0 bytes/frame
Data length part B	920 bytes/frame
Audio encoder input rate	24 kHz

2.4.4.1 Available frequency response files

Filename	Audio sine frequency
B_9000_M64_S16_I2000_L1H1_MUX7_20	20 Hz
B_9000_M64_S16_I2000_L1H1_MUX7_100	100 Hz
B_9000_M64_S16_I2000_L1H1_MUX7_200	200 Hz

B_9000_M64_S16_I2000_L1H1_MUX7_400	400 Hz
B_9000_M64_S16_I2000_L1H1_MUX7_1000	1 kHz
B_9000_M64_S16_I2000_L1H1_MUX7_2000	2 kHz
B_9000_M64_S16_I2000_L1H1_MUX7_4000	4 kHz

2.4.5 Audio 0dbfs

2.4.5.1 A_9000_M64_S16_I400_L2H2_MUX5_0dBfs

Table 2-1063: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-1064: Stream parameters

Parameter	Stream #0
Data length part A	294 bytes/frame
Data length part B	1100 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1065: Service parameters

Service label	DRM30 mode A
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400 ms Bandwidth = 9 kHz

2.4.5.2 A_9000_M64_S16_I400_L2H2_MUX5_0dBfs

Table 2-1066: Main broadcasting parameters

Transmission mode	A
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-1067: Stream parameters

Parameter	Stream #0
Data length part A	294 bytes/frame
Data length part B	1100 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1068: Service parameters

Service label	DRM30 mode A
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode A MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400 ms Bandwidth = 9 kHz

2.4.5.3 B_9000_M64_S16_I400_L1H1_MUX5_0dBfs

Table 2-1069: Main broadcasting parameters

Transmission mode	B
Bandwidth	9 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1070: Stream parameters

Parameter	Stream #0
Data length part A	204 bytes/frame
Data length part B	716 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1071: Service parameters

Service label	DRM30 mode B
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 400 ms Bandwidth = 9 kHz

2.4.5.4 B_10000_M64_S16_I400_L1H1_MUX5_0dBfs

Table 2-1072: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Short (0.4 s)

Table 2-1073: Stream parameters

Parameter	Stream #0
Data length part A	224 bytes/frame
Data length part B	824 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1074: Service parameters

Service label	DRM30 mode B
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 400 ms Bandwidth = 10 kHz

2.4.5.5 B_10000_M64_S16_I400_L2H2_MUX5_0dBfs

Table 2-1075: Main broadcasting parameters

Transmission mode	B
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.71
Code rate MSC part B	0.71
Interleaver depth	Short (0.4 s)

Table 2-1076: Stream parameters

Parameter	Stream #0
Data length part A	264 bytes/frame
Data length part B	973 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1077: Service parameters

Service label	DRM30 mode B
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode B MSC 64QAM SDC 16QAM MSC Prot. Level 2 (0.71) IL Depth = 400 ms Bandwidth = 10 kHz

2.4.5.6 C_10000_M16_S16_I2000_L1H1_MUX5_0dBfs

Table 2-1078: Main broadcasting parameters

Transmission mode	C
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	16QAM
Code rate MSC part A	0.60
Code rate MSC part B	0.60
Interleaver depth	Long (2.0 s)

Table 2-1079: Stream parameters

Parameter	Stream #0
Data length part A	121 bytes/frame
Data length part B	453 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1080: Service parameters

Service label	DRM30 mode C
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode C MSC 16QAM SDC 16QAM MSC Prot. Level 1 (0.60) IL Depth = 2000 ms Bandwidth = 10 kHz

2.4.5.7 D_10000_M64_S16_I400_LOH0_MUX5_0dBfs

Table 2-1081: Main broadcasting parameters

Transmission mode	D
Bandwidth	10 kHz
Constellation SDC	16QAM
Constellation MSC	64QAM
Code rate MSC part A	0.50
Code rate MSC part B	0.50
Interleaver depth	Short (0.4 s)

Table 2-1082: Stream parameters

Parameter	Stream #0
Data length part A	96 bytes/frame
Data length part B	361 bytes/frame
Audio encoder input rate	24.0 kHz

Table 2-1083: Service parameters

Service label	DRM30 mode D
Text message headline	R&S DRM30 Lib
Text message	Robustness Mode D MSC 64QAM SDC 16QAM MSC Prot. Level 0 (0.50) IL Depth = 400 ms Bandwidth = 10 kHz

2.5 EN 303 345 DRM testing folder

The files in this folder are for DRM testing according to EN 303 345-5 v0.0.5. Table 1 in this standard defines the required parameters.

The proposed test cases are defined for three different frequency bands:

- LFMF
- HF
- VHF

For each frequency band, two signals are required:

- Wanted signal (1 kHz sine)
- Unwanted signal (2 kHz sine)

The LFMF band and the HF band use robustness mode B. The VHF band uses robustness mode E.

This waveform library (R&S SMCVB-KV11) contains only DRM test signals that use robustness mode B. They are described in the chapters 2.5.1 and 2.5.2.

DRM test signals using robustness mode E are part of the DRM+ waveforms library (R&S SMCVB-KV12).

Naming conventions

The file name consists of:

- Frequency band
- Wanted/unwanted signal

Example: LFMF_wanted.wv

2.5.1 Wanted DRM signals

2.5.1.1 LFMF_wanted

Table 2-1084: Main broadcasting parameters

Robustness mode	B
Channel bandwidth	9 kHz
MSC constellation	64-QAM
Interleaver depth	400 ms
MSC protection level	EEP, PL=1
SDC constellation	16-QAM

Table 2-1085: Service parameters

Parameter	Service #0
DRM service label	"Sine 1 kHz"
Service ID	0x1001 (4097)
Program type	Other music
Language	English
Country	United Kingdom

Table 2-1086: Audio parameters

Parameter	Service #0
Audio signal	1 kHz tone, -3 dBFS
Audio coding	AAC
Audio mode	Mono
SBR	Enabled
Sampling rate	24 kHz
Bit rate	18400 bps

2.5.1.2 HF_wanted

Table 2-1087: Main broadcasting parameters

Robustness mode	B
Channel bandwidth	10 kHz
MSC constellation	64-QAM

Interleaver depth	400 ms
MSC protection level	EEP, PL=1
SDC constellation	16-QAM

Table 2-1088: Service parameters

Parameter	Service #0
DRM service label	"Sine 1 kHz"
Service ID	0x1001 (4097)
Program type	Other music
Language	English
Country	United Kingdom

Table 2-1089: Audio parameters

Parameter	Service #0
Audio signal	1 kHz tone, -3 dBFS
Audio coding	AAC
Audio mode	Mono
SBR	Enabled
Sampling rate	24 kHz
Bit rate	20960 bps

2.5.2 Unwanted DRM signals

2.5.2.1 LFMF_unwanted

Table 2-1090: Main broadcasting parameters

Robustness mode	B
Channel bandwidth	9 kHz
MSC constellation	64-QAM
Interleaver depth	400 ms
MSC protection level	EEP, PL=1
SDC constellation	16-QAM

Table 2-1091: Service parameters

Parameter	Service #0
DRM service label	"Sine 2 kHz"

Service ID	0x1001 (4097)
Program type	Other music
Language	English
Country	United Kingdom

Table 2-1092: Audio parameters

Parameter	Service #0
Audio signal	2 kHz tone, -3 dBFS
Audio coding	AAC
Audio mode	Mono
SBR	Enabled
Sampling rate	24 kHz
Bit rate	18400 bps

2.5.2.2 HF_unwanted

Table 2-1093: Main broadcasting parameters

Robustness mode	B
Channel bandwidth	10 kHz
MSC constellation	64-QAM
Interleaver depth	400 ms
MSC protection level	EEP, PL=1
SDC constellation	16-QAM

Table 2-1094: Service parameters

Parameter	Service #0
DRM service label	"Sine 2 kHz"
Service ID	0x1001 (4097)
Program type	Other music
Language	English
Country	United Kingdom

Table 2-1095: Audio parameters

Parameter	Service #0
Audio signal	2 kHz tone, -3 dBFS
Audio coding	AAC
Audio mode	Mono

SBR	Enabled
Sampling rate	24 kHz
Bit rate	20960 bps

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