

# IBC 2008 Mobile Media Demonstration Parameters

## DVB-H

VERSION CONTROL		
Version Number	Date	Amendment
1	18 August 2008	Initial issue

Author : P.Osborne IBC MM Demo Technical Lead

## ***IBC 2008 Parameters***

### ***DVB-H Transmission Parameters***

#### ***Network Parameters***

<b><i>Parameter</i></b>	<b><i>Value</i></b>
<i>Original Network ID</i>	<i>0xFF01</i>
<i>Network ID</i>	<i>0xFF01</i>
<i>Cell ID</i>	<i>0001</i>
<i>Platform ID</i>	<i>0xFFF003</i>
<i>Platform Name</i>	<i>IBC2008</i>
<i>Demo Platform Provider Name</i>	<i>IBC2008</i>
<i>Transport Stream ID</i>	<i>0001</i>

#### ***Physical Layer***

<b>Parameter</b>	<b>Value</b>
Frequency Band	UHF
Channel	28
Centre Frequency	530 MHz
Network Structure	MFN
Transmitter Power (ERP)	1kW
Bandwidth	8 MHz
Mode	8K
Modulation	QPSK (non-hierarchical)
Code Rate	2/3
Guard Interval	1/16
TPS Signalling	Cell ID Signalling of DVB-H Time Slicing
Channel Search	Required

## ***MPE-FEC parameters***

<b><i>Parameter</i></b>	<b><i>Value</i></b>
<i>MPE FEC code rate</i>	<i>2/3</i>
<i>Burst Duration</i>	<i>Variable (statmux)</i>
<i>Burst Size</i>	<i>Variable (statmux)</i>
<i>Peak Bit Rate per Burst</i>	<i>7,8 Mbps</i>
<i>Time Slice Period</i>	<i>1200ms</i>
<i>Number of MPE-FEC Rows</i>	<i>512</i>

## ***PSI/Signalling***

*Following tables will be used: NIT, INT, PAT and PMT.*

*The repetition rates are:*

<b><i>Repetition Rate of</i></b>	<b><i>Value</i></b>
<i>NIT</i>	<i>≤10s</i>
<i>PAT</i>	<i>≤100 ms</i>
<i>PMT</i>	<i>≤ 100ms</i>
<i>INT</i>	<i>≤ 10s</i>

## ***IP Layer Requirements***

*All services will be broadcasted in IPv4 and some in IPv6, properly announced in the ESG and PSI/SI tables.*

## **DVB-H Content Formats**

### **TV Services**

<b>Parameter</b>	<b>Value</b>
<i>Video Codec</i>	<i>H.264 AVC</i>
<i>IRD Class</i>	<i>A, B</i>
<i>Profile</i>	<i>simple, 1.2</i>
<i>Picture Size</i>	<i>QVGA, 320x240</i>
<i>Frame Rate</i>	<i>12,5 fps, 25 fps</i>
<i>Max Bit Rate</i>	<i>384 kbps</i>
<i>Preferred Bit Rate</i>	<i>256 kbps</i>
<i>Video Encapsulation</i>	<i>RTP, RFC 3984</i>
<i>Audio Codec</i>	<i>HE AACv1</i>
<i>Audio Format</i>	<i>mono stereo</i>
<i>Audio Bit Rate</i>	<i>24 - 64 Kbps</i>
<i>Audio Sampling Frequency</i>	<i>32 - 48 KHz</i>
<i>Audio Encapsulation</i>	<i>RTP, RFC 3640</i>
<i>A/V Packetization Mode</i>	<i>non-interleaved</i>

### **ESG**

The broadcast ESG that will be used is based on DVB-CBMS phase 1. The receivers shall support:

- *ESG bootstrapping*
- *Multiple ESG streams / Multiprovider ESG*
- *SDP transmission via ESG*

<b>Parameter</b>	<b>Value</b>
<i>Data Model</i>	<i>DVB-CBMS [DVB bluebook A099]</i>
<i>Transport</i>	<i>ALC/FLUTE incl. CBMS extensions</i>
<i>Bootstrap IP Address</i>	<i>224.0.23.14</i>
<i>Bootstrap Port Number</i>	<i>9214</i>

*Note: ESG data rate will be in a range of 50 to 300 Kbps.*

Content types in the Flute FDT will be the following, following the DVB A099 bluebook.

<b>Content Type</b>	<b>Remarks</b>
<i>text/xml</i>	<i>Provider discovery descriptor</i>
<i>application/vnd.dvb.ipdces gaccess</i>	<i>ESG Access Descriptor</i>
<i>application/vnd.dvb.esgcon tainer</i>	<i>ESG Container</i>

*ESG Containers may hold ESG Data Repositories. Logos will be carried inside the ESG Data Repositories.*

*SDP files will be inlined in the Access fragments.*

*Text encoding will be UTF-8 wherever applicable.*

## ***DVB-H Content List***

### *Video channels*

*BBC News*

*E4*

*Film 4*

*ITV1 (London)*

*ITV2*

*ITV4*

*CITV*

*BBC1 London*

*BBC2 England*

### *Radio channels*

*BBC Radio 1*

*BBC Radio 2*

*BBC Radio 3*

*BBC Radio 4*