

DECLARATION OF COMPLIANCE WITH THE REQUIREMENTS DEFINED IN THE ECC DECISION (ECC/DEC(05)10)  
ON THE FREE CIRCULATION AND USE OF EARTH STATIONS ON BOARD VESSELS OPERATING IN FIXED  
SATELLITE SERVICE NETWORKS IN THE FREQUENCY BANDS

14-14.5 GHz (EARTH-TO-SPACE),  
10.7-11.7 GHz (SPACE-TO-EARTH) AND  
12.5-12.75 GHz (SPACE-TO-EARTH)

The following are the information on the Connexion by Boeing<sup>SM</sup> (CBB) ESV satellite system required for compliance with the ECC Dec. (05)10 on the Free Circulation and Use of Earth Stations on-board Vessels (ESV) operating in the Fixed Satellite Service Networks in the Frequency Bands 14.0-14.5 GHz (Earth-to-Space), 10.7-11.7 GHz (Space-to-Earth) and 12.5-12.75 GHz (Space-to-Earth).

With this submission CBB declares its compliance with the ECC Decision (05)10.

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### Network Operator Details

#### 1. Technical Specification(s) of ESV type(s) used in the network

##### ESV Antenna

Antenna type	Symmetric Parabolic Reflector
Antenna size	Diameter 1.0 metre
Transmit frequency bands	14.0-14.5 GHz
Transmit peak gain	41.5 dBi
Max e.i.r.p. per carrier	48.2 dBW
Typical Bandwidth	13.5 MHz
Min. operating elevation	5°
Pointing accuracy	No more than 0.2 degrees, 1 sigma, including the 0.1 degree conical scan offset, when vessel motion is taken into account.

**Waveform definition**

Number(s) of carriers per ESV

Maximum occupied bandwidth(s) per carrier

Modulation

Multiple access scheme

One

between 6.0 to 32.4 MHz, depending on the satellite, typical bandwidth 13.5 MHz.

O-QPSK, Direct Spread Spectrum Sequence (DSSS)  
CDMA**Waveform characteristics**

Number of carriers per AES	1	
Occupied BW	<b>(Satellite)</b> W7 36E I-907 27.5W T11N 37.5 W	<b>(Bandwidth)</b> 9.925 MHz 3.400 MHz 13.50 MHz
Carrier center frequency	<b>(Satellite)</b> W7 36E I-907 27.5W T11N 37.5 W	<b>(Frequency)</b> 14 215.10 MHz 14 042.00 MHz 14 106.00 MHz
Modulation	Offset-QPSK	
Multiple access	Direct Spread Spectrum Sequence	

- Details of each Operating Satellite**

**ITU BR Filing Information**

	<b>W7</b>	<b>I-907</b>	<b>T11N</b>
<b>Operator</b>	Eutelsat	Intelsat	Eutelsat
<b>ITU BR filing satellite network name</b>	EUTELSAT 3-36E	Intelsat-9 332.5E	USASAT-26A
<b>ITU BR Circular reference number and date of publication</b>	AR11/C/2579 dated 22 October 1996	AR11/A/2295 dated 28 Jul 1998  API/A/2082 dated 30 Oct 2001  AR11/C/3401 dated 27 Jun 2000  AR11/C/3401 Mod 1 dated 26 Jun 2001	AR11/C/1832 dated 12 Mar 1991  AR11/C/2456 Dated 19 Sep 1995  AR11/C/2456 Dated 24 Oct 1995  CR/C/652 dated 28 Jan 2003
<b>GSO longitude</b>	36 East	27.5 West	37.5 West
<b>Satellite service area</b>	Europe, North Atlantic, Middle East (Figure 1)	North Atlantic, Western Europe (Figure 2)	North Atlantic (Figure 3)

**Forward Channel details (Satellite to ESV)**

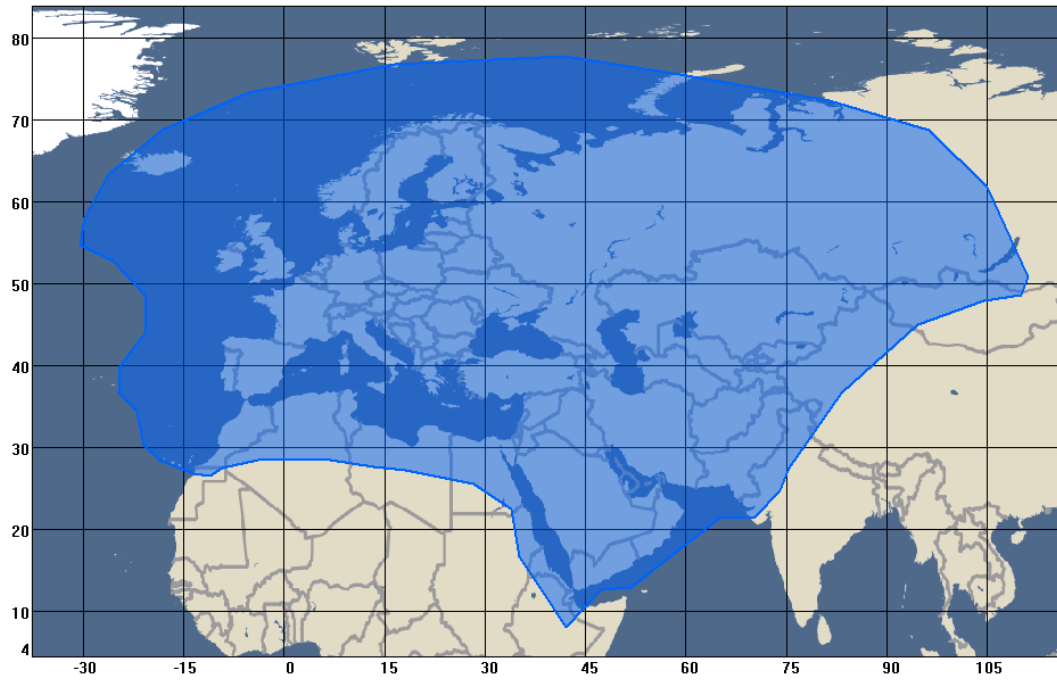
	<b>W7</b>	<b>I-907</b>	<b>T11N</b>
<b>Transponder center frequency (MHz)</b>	11 658.33	11 555	11 526.5
<b>Transponder bandwidth (MHz)</b>	72	36	36

**Return Channel details (ESV to satellite)**

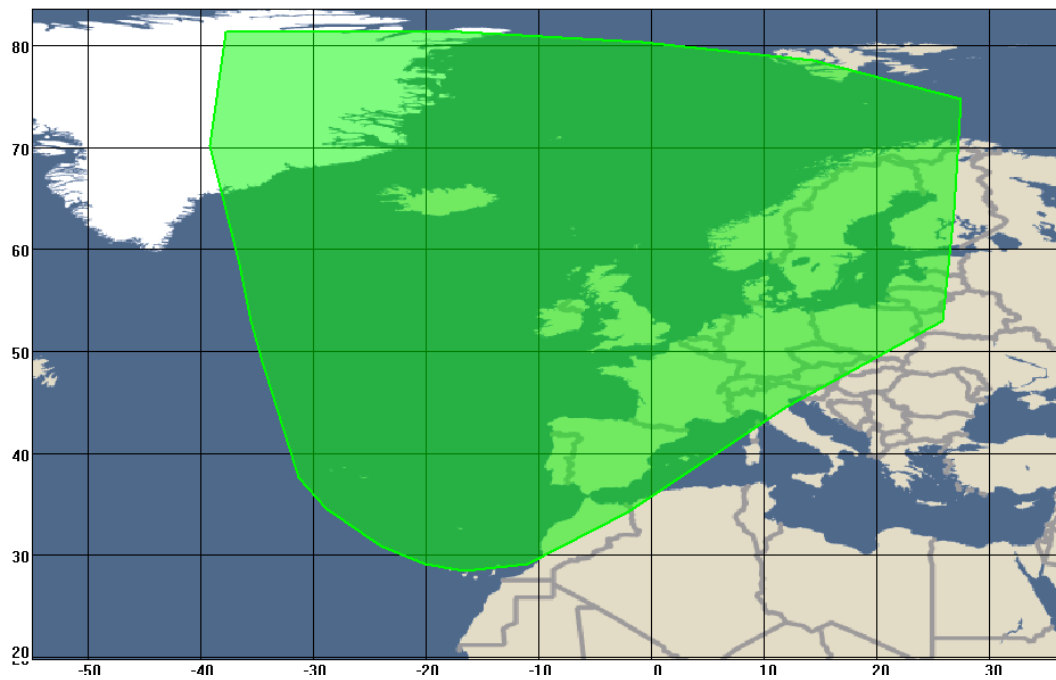
	<b>W7</b>	<b>I-907</b>	<b>T11N</b>
<b>Transponder center frequency (MHz)</b>	14 041.67	14 042.5	14 090
<b>Transponder bandwidth (MHz)</b>	72	77	27

- **Other details**

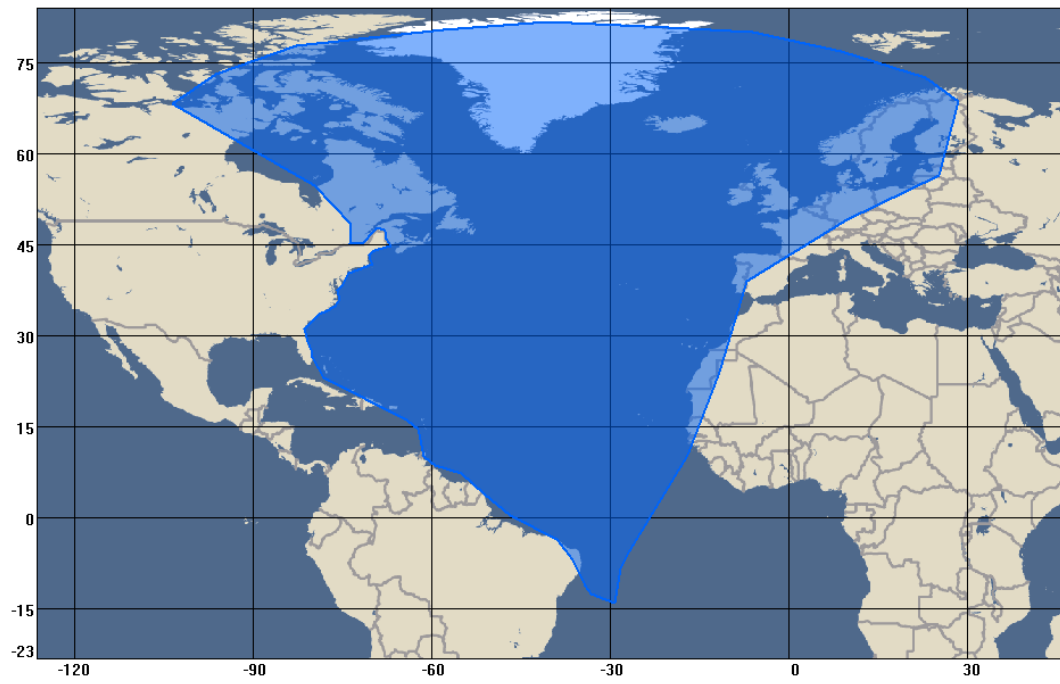
- As of 1 January 2007, CBB system has been renamed Boeing Broadband Satcom Network (BBSN).
- As of 1 July 2010, the following coverage applies for CEPT countries (including French Oversea Territories and Azores for Portugal).



**Fig. 1:** Eutelsat W7



**Fig. 2:** Intelsat I-907



**Fig.3:** T11N North Atlantic Coverage