DECLARATION OF COMPLIANCE WITH THE REQUIREMENTS DEFINED IN THE ECC DECISION (ECC/DEC(05)11)
ON THE FREE CIRCULATION AND USE OF AIRCRAFT EARTH STATIONS (AES) 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)

The following are the information on the Connexion by Boeing[SM] (CBB) Broadband Satcom Network required for compliance with the ECC Dec. (05)11 on the Free Circulation and Use of Aircraft Earth Stations (AES) operating 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)11.

- **Points of Contacts**

  Network Operator's designated point of contact

Title of contact:	**Director, Regulatory Policy and International Spectrum Management**
Postal address:	Connexion by Boeing Ireland Limited c/o Boeing UK Ltd Heathrow House Bath Road TW5 9QQ Hounslow U.K.
Telephone and fax numbers:	Tel. +44 20 8235 5600 Fax. +44 20 8235 5608
email address	Mohamed.ElAmin@Boeing.com

Network Control Facility (NCF) designated point of contact

Title of contact:	**Network Manager NOC**
Postal address:	BBSN NOC, The Boeing Co. Kent Space Center Washington U.S.A.
Telephone and fax numbers:	+1 253 773-0609 (NOC)
Email address:	Mike.E.Turner@boeing.com

- **Technical Specification(s) of AES equipment type(s) used in the network**

  AES Antenna

Antenna type	**Phased Array**	**NGA Reflector Elliptical**	**TECOM KuStream 1500 Horn Array**
Antenna size	38 cm diameter	65cm x 19.6cm	81 cm x 20 cm
Transmit peak gain	34 dBi	32 dBi	28 dBi
Max e.i.r.p. per carrier	49 dBW	47 dBW	44.7 dBW
Transmit frequency bands	14.0-14.5 GHz	14.0-14.5 GHz	14.0-14.5 GHz
Min. operating elevation	15°	5°	5°
Antenna pointing accuracy	< 0.2 deg. rms	0.25 deg. rms (Az), 0.6 deg. rms (El)	< 0.2 deg rms

Waveform characteristics

Number of carriers per AES	1		
Occupied BW	**(Satellite)**	**(Bandwidth)**	
	E36B	9.925 MHz	
	I-907 27.5W	6.8 MHz	
	T11N 37.5 W	13.50 MHz	
Carrier center frequency	**(Satellite)**	**(Frequency)**	**(Polarization)**
	E36B	14 215.10 MHz	Horizontal
	I-907 27.5W	14 043.95 MHz	Horizontal
	T11N 37.5 W	14 106.00 MHz	Vertical
Modulation	Offset-QPSK		
Multiple access	Code Re-use Multiple Access		

- **Details of each Operating Satellite**

ITU BR Filing Information

	E36B	**I-907**	**T11N**
Operator	Eutelsat	Intelsat	Eutelsat
ITU BR filing satellite network name	EUTELSAT B1-36E	Intelsat-9 332.5E	USASAT-26A
ITU BR Circular reference number and date of publication	AP30/E dated 20 Nov 2008	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
GSO longitude	36 East	27.5 West	37.5 West
Satellite service area	Europe, North Atlantic, Middle East (**Figure 1**)	North Atlantic, Western Europe (**Figure 2**)	North Atlantic (**Figure 3**)

Forward Channel details (Satellite to AES)

	E36B	I-907	T11N
Transponder center frequency (MHz)	11 658.33	11 555	11 526.5
Transponder bandwidth (MHz)	72	36	36

Return Channel details (AES to satellite)

	E36B	I-907	T11N
Transponder center frequency (MHz)	14 041.67	14 042.5	14 090
Transponder bandwidth (MHz)	72	77	27

- **Other details**
  - As of 1 January 2007, CBB system has been renamed Boeing Broadband Satcom Network (BBSN). Equipment of BBSN has been installed exclusively on-board US government VIP aircraft.
  - As of 1 July 2010, the following coverage applies for CEPT (including French Oversea Territories and Azores for Portugal).

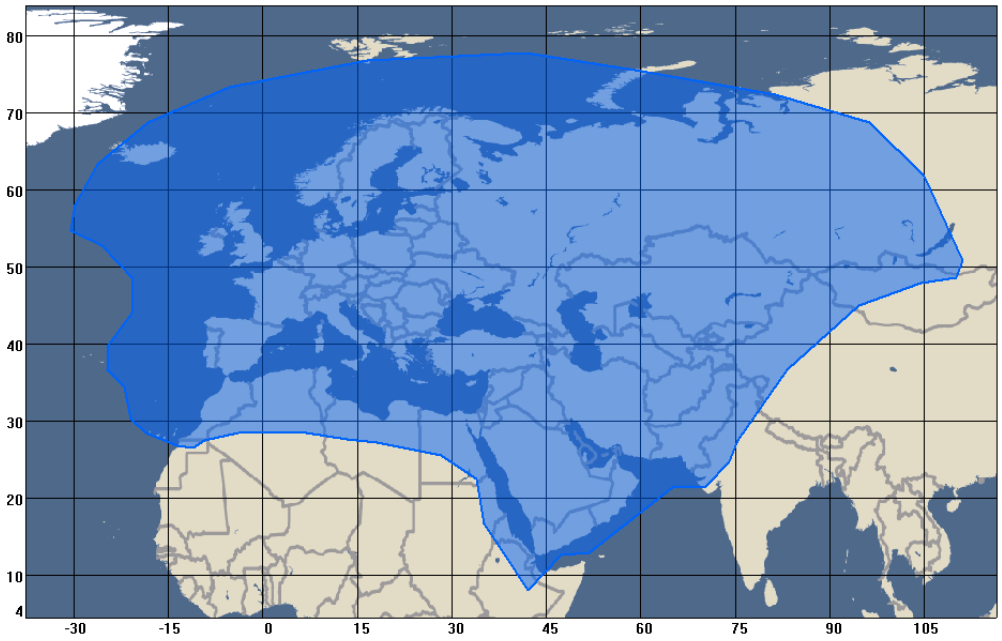

Fig. 1: Eutelsat E36B

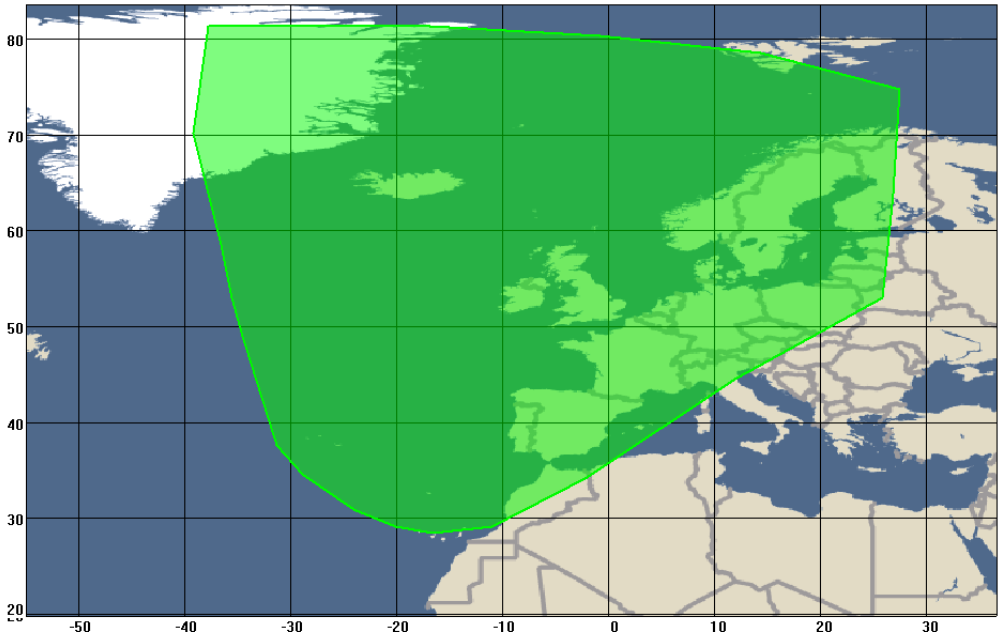

Fig. 2: Intelsat I-907

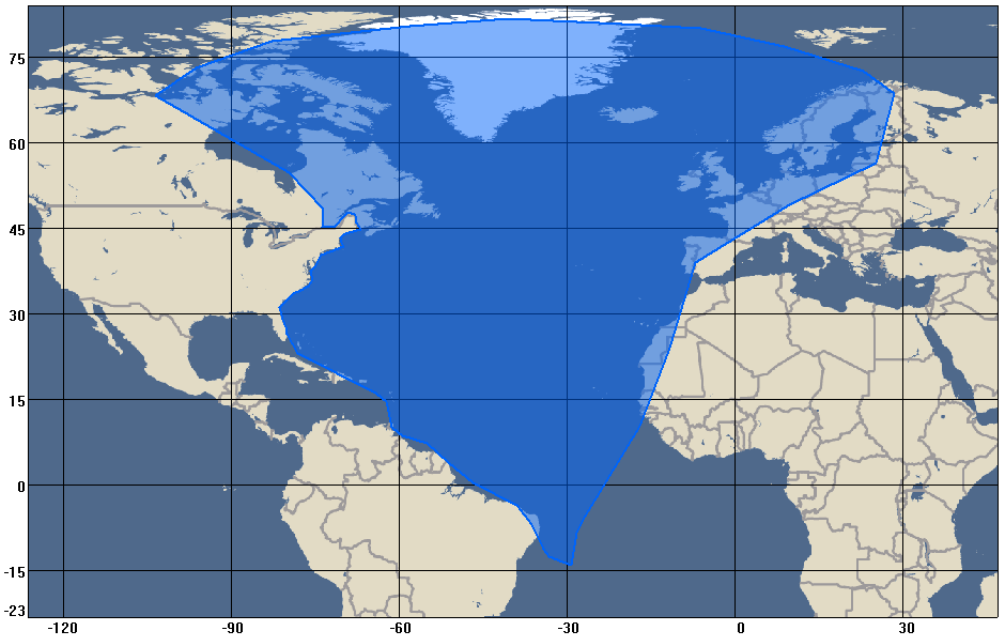

Fig.3: T11N North Atlantic Coverage