

# **Space Services and Security - a broadcaster perspective**



**Cath Westcott  
BBC World Service Group Distribution  
GLIS 2016, ITU Geneva June 2016**

# The BBC "Bringing the UK to the world and the world to the UK"



29  
Languages

Radio, TV  
and Online



Reaches 320 million people weekly  
(BBC World Service, BBC World News, BBC.com and BBC  
Media Action)



Headline sales of  
£1,001.8m, £226.5m  
returned to BBC  
(2014/15)

## BBC Mission

To enrich people's lives with programmes and services that  
inform, educate and entertain

# BBC World Service - 84 years and counting

Shortwave  
radio  
1930s



**'This programme is being radiated by the Empire Transmitters'**

Do you hear the Empire Programmes? Daily, the Empire Transmitters broadcast a programme that caters for every taste—symphony and promenade concerts, talks, dance music, vaudeville. These programmes provide a **big link with the Motherland!** A link that enables those who are situated in the far flung corners of the world to enjoy the wealth of entertainment the Motherland offers. Those who miss the programmes of the Empire Transmitter are missing the finest broadcasts that the world has ever known.

Eelex Short Wave Converter, utilises ALL THE VALVES of your present set, that the power of your set is increased, and you can receive England, Europe and the World!

No alteration is necessary to your present set.

Testimonials show that as many as 100 extra stations have been logged by satisfied users.

**Can you receive England, Europe and the World?**

**Fit an Eelex Short-Wave Converter to your present set and you will!**

**DUPLEX CONVERTOR.** Eight valve instrument for Radio, A.C. or D.C. mains operation. Covers 15-60 Mc/sec. £8/15/0 (Mains) £4/18/0 (Mains) complete.

**80 CONVERTOR.** Two valve instrument for battery operation. Covers 15-60 Mc/sec. £8/15/0 complete.

**40 SUPER CONVERTOR.** Two valve instrument for battery operation. Powerful results on 15-60 Mc/sec. £8/15/0 complete.

Full details available on request. Write for booklet No. D.M.L. giving further particulars.

**J. J. EASTICK & SONS,**  
EELEX HOUSE,  
118, BUNHILL ROW, LONDON, E.C.1.

Satellite  
broadcasting  
1996/2007



Web and  
mobile  
2000 onwards



BBC 央视网

“世界最具影响力女性”中国人数创新高

国际象棋大师科尔奇诺伊瑞士逝世 1976年以当时苏联最强大国际象棋名国棋手科尔奇诺伊在瑞士逝世...享年95岁。

2016年6月4日

脱欧呼声渐长 英镑成声下跌

2016年6月4日

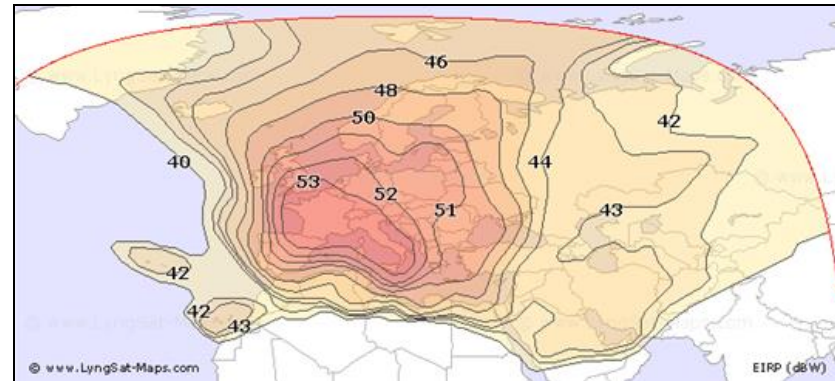
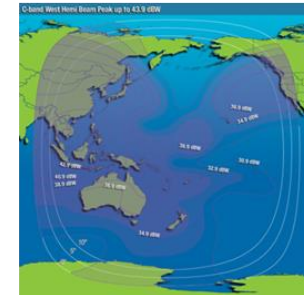
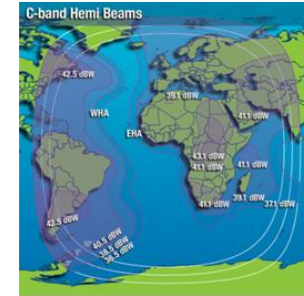
中国海军上将重申不承认国际仲裁并批评美国

2016年6月4日

特别推荐



# Satellites are the backbone of our international operations



# Universal Declaration of Human Rights 1948

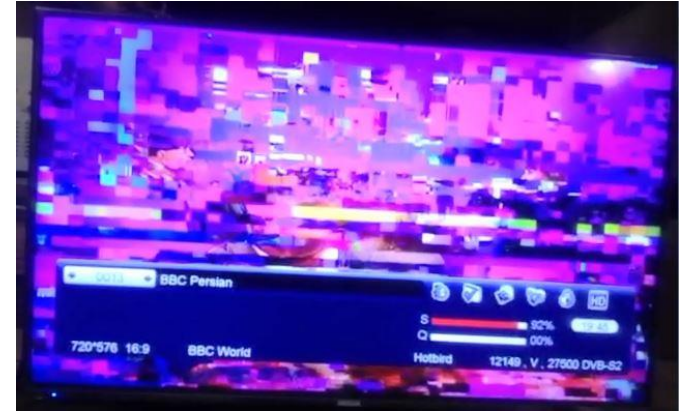
## Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers

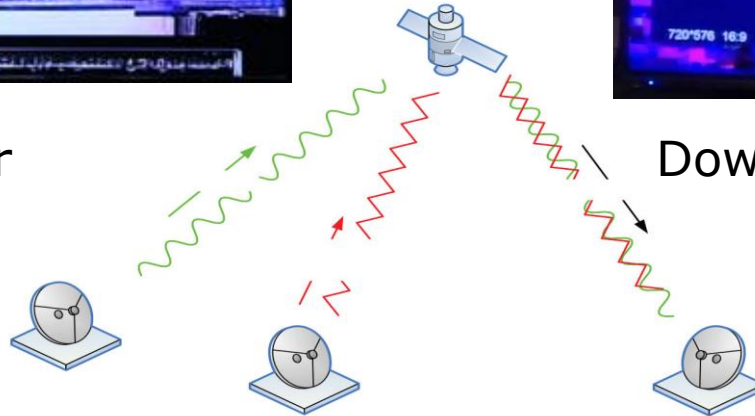
# Targeted interference to uplink and downlink



Uplink - MBC Masr  
March 2014



Downlink - BBC Persian TV  
2015/16



Uplink - Al Jazeera  
Sport TV  
June 2010

# ITU Constitution

## Article 45 Harmful Interference

(197) All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations

## Article 34 Stoppage of Telecommunication

(181) Member States also reserve the right to cut off, in accordance with their national law, any other private telecommunications which may appear dangerous to the security of the State or contrary to its laws, to public order or to decency

# Challenges Involved in Resolution



TECHNICAL



REGULATORY



DIPLOMATIC

- Evidence and Mitigation - geolocation, monitoring, tactical solutions, satellite configuration, on-board technologies
- Events – BBC (Nov 2012), Eutelsat (Jan 2013), ITU (Jun 2013, June 2016), ASBU (Oct 2013), IFRI (Oct 2014)
- Publicity and Information – Broadcaster press releases (2009, 2010, 2014), Al Jazeera documentary (Dec 2015), WBU-IMCG (June 2016)
- Activity at ITU Plenipotentiary 2010, 2014
- Activity at ITU WRC-12, WRC-15
- UNGGE work on Transparency and Confidence Building Measures in Outer Space



**Thank you**