Interference and terrestrial telecommunications services

Nigel Fry, Head of Distribution
World Service; English and 28 languages

Of which these are a few:
BBC Worldwide channel brands
One C-band satellite covers a quarter of the World

Image courtesy of Asiasat
Transmitter sites

BBC FM relay at Bamyan, central Afghanistan – a low power lifeline

BBC shortwave transmitting station on Ascension Island, one of three broadcasting to 30million people across Africa
Why we are concerned about mobiles on C-band

• Geo-stationary satellites are 36,000km from earth
• BBC WSG has 5000 receiver locations worldwide
• Less than 2% of C-band receivers are registered
• Sharing part of C-band will affect all C-band receivers

Arthur C Clarke 1945
Current interference to BBC C-band reception

- BBC 98.7 FM Trinidad and Tobago programs downlinked from Intelsat 805 at 3.9347GHz
- Interference from Lisa Communications Wi-Max operation at 3.5GHz to reception in Port of Spain.
- BBC satellite dish installation registered with TATT
- Interference to BBC satellite reception due to High-Gain / wide band nature of satellite reception equipment.
...and in Tokyo
WBU–ISOG Position on C-band 3,400-4,200 MHz

• Regarding the C-band FSS downlink frequencies 3,400-4,200 MHz, these are well used throughout the world for FSS applications, and will continue to be used for the foreseeable future.

• Sharing studies have already been conducted in Report ITU-R M.2109, which show that the required separation distances are such that sharing is not feasible.

• Hence, this band is not suitable for identification for terrestrial IMT by WRC-15.
Milestones to WRC 15

• CPM March 2015

• Regional meetings
  – CEPT, CITEL, APT and ASMG