The Importance of the International Telecommunication Union (ITU) and its World Radiocommunication Conferences to the Satellite Industry

The International Telecommunication Union (ITU) is a United Nations specialized agency that addresses international telecommunications issues. It is divided into three primary sectors addressing Radiocommunications (ITU-R), Telecommunications Standardization (ITU-T) and Telecommunications Development (ITU-D). The ITU has 191 Member States (countries) and more than 700 telecommunications companies/satellite operator and manufacturers and other private entities worldwide as sector members and associates. Given the vital importance of the ITU, as detailed below, it is imperative that the US Government demonstrate leadership in the ITU, its Radiocommunications Sector, and especially in the preparations for the World Radiocommunication Conference (WRC) in 2011.

ITU and Satellites

The ITU, and in particular the ITU-R, plays a vital role in the global management of the radio frequency spectrum and satellite orbit resources that are required to satisfy the increasing demands/requirements of the satellite operators and service providers. Satellite systems depend upon the use of radio frequencies and satellite orbits in order both to implement a wide range of services – whether commercial services, or civil or military missions, including, communications, space research, weather, and radionavigation, and to control the functioning of the spacecraft.

ITU World Radiocommunication Conferences (WRCs)

WRCs are critical to the satellite industry. Their decisions regarding frequency allocations, sharing criteria, Frequency Plans and regulatory procedures can determine the success or failure of satellite businesses and govern the ability of any satellite system to implement new and innovative applications and services

The ITU-R conducts WRCs, held approximately every 4 years, to consider changes to the ITU Radio Regulations (RR), the international treaty governing the use of the radio

Satellite Industry Association – 1730 M Street, N.W., Suite 600, Washington, D.C. 20036 Tel: +1 202 349 3650 Fax: +1 202 349 3622 SIA Website: http://www.sia.org

frequency spectrum and satellite orbits. The Radio Regulations allocate segments of the radio frequency spectrum to radio services, including various satellite services, on a primary or secondary basis, and does not further divide between government and commercial spectrum. The RR also i) establishes, where technically feasible, sharing criteria, and ii) sets forth detailed procedures for the coordination and recording of the frequency assignments for satellite networks and earth stations; this permits satellite systems to efficiently share frequency bands and avoid unacceptable interference as well as to confer international recognition to recorded assignments. ITU WRC's also develop and adopt Frequency Plans, which reserve spectrum and orbital locations for use by individual Member States (country) to deploy a satellite system to meet its own needs. The implementation of the Radio Regulations including these Plans is managed by the ITU Radiocommunication Bureau (BR).

WRC 2011

WRC 2011 is the next important conference for the satellite industry. Its agenda includes 31 different topics, several of which address the allocation of radio spectrum to satisfy new requirements of satellite services, such as mobile satellite, radiodetermination satellite, meteorological satellite, broadcasting satellite, and space research services. The US has already started technical preparations for WRC 2011, even though it is more than two years away. Other countries and regions are also well advanced in their preparatory processes.

US Preparatory Process

The Department of State relies upon the National Telecommunication and Information Administration (NTIA) and the Federal Communications Commission (FCC) as the expert agencies on the WRC agenda items. However, it ultimately defines the US positions for WRCs, and leads the US Delegation to the WRCs. The Interdepartment Radio Advisory Committee (IRAC) develops recommended USG positions to NTIA through its deliberations within the Radio Conference Subcommittee (RCS). The FCC is advised by the recommendations of the FCC's WRC Advisory Committee (WAC); the FCC establishes the WAC in advance of every WRC as the method for the private sector to develop and recommend proposals and positions to the FCC. The US International Telecommunication Advisory Committee (ITAC), consisting of private sector and USG participants, also advises the US State Department on US positions for WRC 2011.

The US Government must continue to take the lead on key satellite issues at WRC 2011, because satellite networks are integral to the worldwide communications fabric, as well as specific governmental missions. They provide an essential means of communications, upon which other radio services depend, and critical links during disasters and to geographic areas where no other communications infrastructure exists or can be practically deployed.