

Converging worlds



Walter L. Morgan,
Communications
Center, Clarksburg,
Maryland, USA

As part of an in-house exercise, I recently put together a list of the ten most important events that will shape the future of satellite telecommunications over the next decade. After I sorted and re-sorted the list, what kept coming to the top? The opening of the US satellite markets to non-US telecommunications firms.

While this may seem a radical move, it isn't – it has been on its way for many years, taking small, often nearly invisible steps; international telecommunications have long been a key attraction for consortia of national telephone companies because the cost was too great for any single organization. Submarine cables, until recently, have had many part owners. Intelsat and Inmarsat followed the same model. BT, Cable & Wireless, France Telecom and Canada's Teleglobe have all participated in US domestic and international telecommunications. Perhaps the boldest stroke (so far! – Ed) was BT's attempt to combine with MCI.

As far back as 1993, the US regulatory agency, the Federal Communications Commission (FCC) approved the transfer of the Denver Earth station licenses held by the Teleport Transmission Co. to a new US company owned 59% by Canadians. In satellites the moves were less obvious until the BT/MCI combination was a contender for a BSS licence (approved) and News Corp's role in AskyB. The pace accelerated in 1997.

History

After the outbreak of hostilities in World War I, the US found itself tied to Europe through non-US short wave facilities. Congress seized the German station in Tuckerton, New Jersey and gave it to a new US organization, the Radio Corporation of America, to keep these circuits safe and secure. The insular attitude that demanded a majority US ownership of domestic telecommunications facilities continued until the early 1990's. By that time the restrictions on foreign ownership were melting with the privatization of the PTT structures. In the US the PTT equivalent (AT&T) was facing MCI and Sprint as strong competitors and all three organizations were exploring non-US operations.

It became obvious that entry into foreign markets had to be matched with access to the US market by others. Reciprocity was needed. It also was accepted that telecommunications competition was healthy. It improved service, broadened

offerings, encouraged new services and reduced costs. In short, it fed the telecommunications industry much faster than the previous arrangement with a single carrier. Even more important it became obvious that national and international networks were not going to crash if connections were made between dissimilar networks.

WTO and DISCO

The most important steps in the opening of domestic satellite telecommunications are the World Trade Organization's Basic Telecom Agreement and the FCC's 1997 Domestic-International Satellite Consolidation Order #2. Under the WTO BTA fifty countries made commitments to open satellite markets to competition. The United States is a signatory to this Agreement. DISCO-2 and other Orders provide the mechanism to open the skies for non-US satellites. An earlier order had dissolved the increasingly artificial boundaries between domestic, transborder and international satellite services.

In theory, a US user can select any provider, regardless of flag. It is almost that simple. Of course you should expect some fine print. The caveats are some tests. The most important will be the ECO-Sat (economic competitive opportunity for satellite) test. Basically it says that if a US system can freely operate in another WTO country (we'll call it Imagineria), then an Imaginerian satellite can provide service to the US. Flunk the test and entry can be denied. The other fine print is of the type you might expect (national defense and anti-competitive behavior). There is now a trickle of Letters of Intent being filed with the FCC by non-US satellite providers when the FCC is considering satellite matters. This makes more work for Washington's telecommunications lawyers and consultants.

High, neighbor?

More significant are the plans for the next generation Canadian and Mexican satellites. The Anik F series will have coverage of all of North America and parts of South America. This is a major step from the single ECBC (extended cross-border coverage) beams on Anik E1 and E2. These beams were centered on the US. Telesat's loss of Anik E capacity required these transponders to be switched back to the Canadian market and thus Telesat could not develop this beachhead. The Mexican Morelos III will extend its coverage north into wide areas of the US west and south. In the meantime, US

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Non-US satellite filings covering North America

Nation	Satellite name	Quantity
Russia	Yamal	1
France	WEST-GEO-J Syracuse-3A	1 1
Indonesia	M2A	1
China (Hong Kong)	Samsat	3
Malaysia	Measat-LA	1
Intersputnik/Cuba	Latamsat	2
Tonga	Tongasat X & Ka	1 each
India	Insast	Two pairs
Luxembourg	Lux-Ka	4
INTELSAT	INTELSAT Ka	1
Japan	N-Sat	4
Papua New Guinea	Logohu-V	4
Canada	Anik E	2
	Anik F	2
	DBS	1 – 2
	Cansat Ka	5
	MSAT	1
Mexico	Solidaridad	2
	Morelos	1
	Megasat	3
Totals		45 – 47 Satellites

satellites are covering Latin America and southern Canada.

And the future...

The United States telecommunications market is strong, willing to try new carriers and looking for innovation. It is the largest single-nation market and thus is very attractive. Furthermore, much of the money to finance new systems flows from New York.

Between 65.5 West and 135 West the ITU filings shown in Table 1 have been made.

US corporations have been set up by non-US companies or global consortia to build and operate satellite systems under US licenses. The M-Group, for example, is a license holder for Ka-band satellites (MorningStar) and the multinational (including Loral) Skybridge has filed for innovative NGSO LEO systems. These filings undergo the same FCC scrutiny as any US applicant and are subject to all of the legal barbs (Petitions to Deny, Comments, Replies, Objections, etc.) and Due Diligence requirements that characterise the US regulatory process.

Another entry means is to partner with an existing license holder.

Video entries

There is a thriving business in provision of non-English TV programming in the US. As the US still has large numbers of first and second generation immigrants that like to hear the mother tongue, there is a market for programs like Deutsche Welle, RTP (Portugal), RAI (Italy), ART (Arabic) and many oriental and Latin services. Most of the immigrants are widely scattered and cable TV finds these markets too small to displace a TV channel with broader appeal. C-band and BSS satellite receivers are the popular answer. With national coverage, one satellite transponder can cover millions of potential subscribers. At present INTELSAT and PAS satellites import most of this video to domestic US operators (GE, Hughes, Loral, DirecTV, EchoStar, etc.). Eventually this will be done via an inter-satellite link (ISL) between a regional satellite (e.g. Asian or European) directly to a matching satellite covering North America. Then the World will be a Global Village.

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