

**Speech by François Rancy, Director of the ITU Radiocommunication Bureau  
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**GLOBAL SPACE AND SATELLITE FORUM 2011**

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Ladies and gentlemen,

It is a privilege to be with you in Abu Dhabi today to address you at this prestigious forum. I am especially pleased to have been invited to discuss the promise of an industry dear to my heart, since I devoted a large part of my professional life to it and now have responsibilities, as Director of the ITU Radiocommunication Bureau, in the management of the spectrum /orbit resources, which are so important to this industry.

Encouragingly, despite the global recession of recent years, the satellite business in the MENA area continues to develop rapidly. Transponder fill rates are generally high, and operators are enjoying solid revenues from transponder leasing, thanks largely to strong demand for direct-to-home television and increasingly pressing broadband application requirements.

In this regard, allow me to congratulate the United Arab Emirates for the successful launch of Yahsat's first commercial telecommunication satellite, which marks another important step in UAE's aim to build a regional hub in technology and communications.

While broadcasting services still account for the lion's share of satellite capacity, new services and applications are emerging. Mobile communications are already becoming an important new business driver for the MENA satellite industry, with satellites providing important backhaul capacity for mobile operators, as well as helping bring access to remote areas, where difficult terrain or sparse population density rules out terrestrial solutions.

Satellites have emerged as one of the key enablers of economic and social development across this region, where vast distances, geographical challenges, the high-speed demands of new technologies and increasing pressure to realize economies of scale make satellites the obvious, and often the only, choice.

All this is good news for participants in the Global Space and Satellite Forum 2011, and good news for ITU too, since a thriving satellite industry and the increasing deployment of satellite-based services help us fulfil our mandate of connecting the people of the world.

But while growth is always good, it is not without its challenges.

I think we all understand the need to ensure that, in the rush to meet strong market demand, we do not compromise the services – and the very considerable investments – that have already been committed to.

Ladies and gentlemen,

As the United Nations specialized agency and focal point for telecommunications, ITU seeks “to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services – including those using the geostationary satellite orbit or other satellite orbits”.

Within this mandate, ITU manages international radio-frequency spectrum and satellite orbits. ITU is the international forum where the rights and obligations of member administrations in obtaining access to the spectrum/orbit resources are discussed and agreed. ITU also carries out the vital work of recording frequency assignments and orbital positions in the Master International Frequency Register and processing satellite filings to ensure that orbital positions and frequencies are compatible so that satellites can be operated in an interference-controlled environment.

Many of you are aware that it is becoming increasingly difficult to obtain suitable new orbital positions and frequencies and to fully coordinate them in accordance with the provisions of the Radio Regulations.

As a consequence, it is getting harder to ensure the exclusion of unwanted signals from neighbouring systems – a very serious risk to service delivery and to the multi-million dollar investment that each and every satellite deployment represents.

It is no exaggeration to say that efficient use of spectrum and orbit resources is one of the most crucial challenges facing the international community in its efforts to promote ICT development and achieve the connectivity access targets set by the World Summit on the Information Society.

As a result of the apparent congestion of spectrum / orbit resources, an increasing number of satellite networks are prevented access to these resources or can only access them under precarious conditions (subject to not causing harmful interference to, nor claiming protection from, incumbent networks in the Master International Frequency Register (MIFR)). Not surprisingly, this situation leads to an increase in complaints of harmful interference received by ITU.

At the same time, independent information on the real use of the spectrum and orbit resources often indicates considerable divergence with the information submitted to ITU in order to obtain rights to use these resources. This means that the ‘paper satellite’ issue – that is, fictitious frequency assignments recorded in the Master International Frequency Register – still persists.

In the mid 1990s, the incoming flow of ‘paper satellites’ received by ITU led to several years of backlog in the processing of the requests to use resources. The due diligence requirements and processing fees established by ITU have since made it possible to eliminate this problem and there is today no backlog and no delay in the processing of the satellite network filings received by ITU.

The new issue faced by ITU in respect of paper satellites is therefore no longer in the incoming flow, but within the Master Register. It is therefore important and urgent to envisage new approaches to address this issue, which may be discussed at the next meeting of the ITU Council this fall and at the next ITU world radiocommunication conference (WRC-12), next January.

A first approach was initiated by my predecessor, Mr Valery Timofeev, in 2009. It consisted in requesting that all administrations review their recorded satellite networks and remove unused frequency assignments and networks from the Master Register when they have not been in regular use. This was followed, in 2010, by additional requests regarding more specifically the C, Ku and then Ka bands. I cannot emphasize too strongly that this process serves the best interests of all administrations, operators, and the industry as a whole.

These efforts have resulted in the total or partial suppression of around 100 satellite networks over the last two years. Although significant, this result is insufficient in relation to the flow of incoming satellite networks being recorded in the MIFR (about 250 per year).

In the spirit of cooperation and consensus that lies at the very heart of ITU’s mandate and mission, ITU recently held workshops in Geneva, Singapore and Wroclaw on the efficient use of spectrum and orbit resources. These workshops were attended by top-level representatives from across industry and government, who shared presentations on key concerns, engaged in constructive and productive debate, and proposed a number of practical steps that could help resolve current problems.

A steady move to state-of-the-art technology, for example, is a very effective way of improving spectrum efficiency. Another would be to reduce the range of possible transmissions that any single system intends to use. A wide range of possible transmissions increases the operator’s flexibility, but it reduces the flexibility of future comers. In particular, ITU could consider introducing a procedure to discourage the fully flexible use of steerable satellite beams. In doing so, there would be a need to strike a balance between the long-term rights and need for flexibility

of satellite operators, and the need to manage finite spectrum and orbit resources more efficiently for the benefit of the global community as a whole.

I was greatly encouraged by the evident commitment and cooperative spirit shown by all participants in these workshops, many of whom represented competing commercial interests. These leaders and technical experts recognized the importance of laying their rivalry aside and working together under the auspices of ITU to find solutions to problems that affect us all. The next step will be WRC-12.

But additional, effective means of preventing “paper satellites” from remaining in the MIFR may also be considered in relation to the fees which are in force at ITU to recover the costs associated with the processing of satellite networks filings. These fees currently reflect the processing of filings up to the entry of the information in the Master Register. However, costs related to the maintenance of such information throughout the life of the network are not considered, even though such information is taken into account in the technical examination of new satellite networks, and compatibility calculations carried out by BR involve both the new networks as well as the incumbent networks already recorded in the MIFR. As a consequence, it may be concluded that newcomers are taking on a greater financial burden than incumbent networks, many of which were recorded prior to the application of these fees.

In order to ensure a more equitable apportionment of overall processing costs between satellite users, in particular with respect to the costs associated with the maintenance of frequency assignments during the lifetime of a satellite network, a fee model that would include yearly fees (related to the Bureau’s costs for the maintenance of information in the MIFR) might therefore be considered. This issue may be discussed at the ITU Council in the fall of 2011.

I would also like to praise the initiative which is at this very moment being discussed in Rome by UNIDROIT, to establish a register of space assets. If it materializes, this initiative would provide an accurate and up-to-date register of real satellites, which would facilitate the linkage between the rights of use of spectrum / orbit resources and the physical objects which actually implement these rights and justify that they be kept in the ITU Master Register. ITU is therefore following this initiative with great interest.

Similarly, ITU would be very happy to more closely rely on the use of existing space monitoring facilities in operation throughout the world. Using these facilities more extensively would also help in relating existing rights with existing use in space. This also has a cost, which may need to be shared between all satellite users, which would benefit from it.

Distinguished colleagues,

In the realm of satellite services, I would have been happy to say that malign, intentional interference never happens. Unfortunately, however, ITU has noted some recent instances of intentional interference to satellite TV broadcasts or radionavigation systems or satellite services to GSM-type mobile terminals. These are not, however, technical issues, but political ones, and can therefore only be resolved with political solutions.

Such cases of interference are nonetheless in violation of the Radio Regulations, the international treaty signed under the auspices of ITU, which governs the use of radio-frequency spectrum and orbit resources. As foreseen by the Regulations, ITU immediately contacted the administrations concerned, requesting urgent action to eliminate this interference.

ITU is extremely concerned to witness such practices, as is the satellite community as a whole, and it may be time to strengthen the ITU regulations in this regard. This may be considered at WRC-12 next year.

I would like to take this opportunity to praise the sustained efforts by the UAE Administration over the last 15 years, under the leadership of the Director-General of TRA, Mohamed Al Ghanim, to promote the interests of this region

in the preparations of the countries of the region for the ITU world radiocommunication conferences, in a very efficient and graceful way.

Ladies and gentlemen,

There can be no doubt that the efficient and equitable use of spectrum and orbit resources requires a coordinated and transparent international approach. Since the birth of the very first commercial satellite systems in the 1960s up to the recent launches of the Yahsat and Dawn satellites, ITU has been serving as the industry's faithful partner, performing the vital technical coordination and oversight functions essential to the ongoing growth of the industry.

But effective management of these resources also requires the goodwill and cooperation of industry and governments. For satellite communications to continue to flourish, everybody must play by the rules.

A decision to 'go it alone' not only risks millions of investment dollars, it puts others' investments at risk. Just as we would all wish to be protected by the international regulatory framework, we must respect this framework.

I thus urge industry and governments to work closely within ITU to resolve the above issues.

A concerted effort by us all will open up plenty of new windows of opportunity, while ensuring fair access to the shared global resources for which we are all here. I will be happy to welcome you in Geneva at the beginning of next year for WRC-12.

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