



# Innovation at the heart of the company

SWE-DISH Satellite Systems is a world-leading supplier of mobile satellite communications equipment and related services for broadband applications. Richard Hooper talked to Åke Jönsson, Vice President Marketing & Sales.

**SWE-DISH Satellite Systems is a world-leading** supplier of mobile satellite communications equipment and related services for broadband applications. The company supplies armed forces, disaster relief organizations and major broadcasters with compact and quick-to-air satellite terminals for live transmission of video, data, Internet and voice content from anywhere in the world.

The customer base includes broadcasters such as BBC, ABC and CNN, as well as disaster relief organizations such as the UN, and military organizations including the Swedish Defense Materiel Administration (FMV), NATO, United Nations and the US Department of Defense.

SWE-DISH develops, produces, integrates, sells and supports products and services for digital transmission of image, voice and data, with focus on mobile satellite terminals and enabling services. In-house technological development continually adapts and improves technology to meet customer requirements, as well as brings new products and services to the market.

The company has developed ground breaking broadband satellite terminals such as the IPT Suitcase, which allows 4 Mbps IP traffic in a package no bigger than a carry-on suitcase. SWE-DISH equipment was extensively used by both military and journalists during Operation Iraq Freedom, Tsunami relief efforts and after the Hurricane Katrina.

SWE-DISH has its backgrounds from the Swedish Space Corporation and is privately owned by Litorina Kapital, 3i and Nordic Wireless. The head office is located in Stockholm, Sweden with offices in London, Reston US, Hong Kong and Dubai. The company is a global company with sales & service support provided by local representatives and agents in most regions of the world.

**Richard Hooper: Where is SWE-DISH positioned in respect to the market?**

**Åke Jönsson:** We can clearly state that SWE-DISH is very well positioned when it comes to mobile systems, and that has been our aim from the beginning to really go for the mobility sector.

**Question: What makes the SWE-DISH product range so successful?**

**Åke Jönsson:** If you look back at the history of the company, you will see our products have originated from our own in-house development. The aim has been to make systems that are very easy to use, easy to transport, compact - but still with a very high efficiency.

**Question: When planning your products, do you have a set figure for the number of product releases each year?**

**Åke Jönsson:** Unfortunately, I cannot talk about that right now, but I



*IPT Mil Suitcase deployed. Photo courtesy of SWE-DISH.*

can assure you that we have a plan to launch several new products in the near future. Watch this space!

**Question: What are the key markets for SWE-DISH products?**

**Åke Jönsson:** If you look at our positioning, I would say that we are very well established in the European and US markets. For the last couple of years we have put effort into establishing our presence in Asia, and we are now well on our way to achieving that goal. Most recently, we have opened an office in Dubai as we see the Middle East offering huge potential for our products.

**Question: Is SWE-DISH planning to open further offices. Not just in the Middle East but worldwide?**

**Åke Jönsson:** Not for the time being, but that might be something for the future. ●

SWE-DISH Satellite Systems AB and Saab AB, through its business unit Saab Systems, have merged existing technologies and commercial of the shelf components into a demonstrator for an affordable Satcom-On-The-Move platform. The Satcom-On-The-Move (SOTM) platform is a result of a successful integration of SWE-DISH's leading satellite terminal technology, and Saab System's leading stabilized platform technology.

The SOTM demonstrator is based on well proven components. It offers on-the-move capability utilizing commercial satellites and conventional communication infrastructure, as well as other architectures. The demonstrator can be applied to vehicles and naval vessels, offering steering accuracy in accordance with satellite operator requirements.



# Technical simplicity

ND SatCom, an SES ASTRA company and a leading global supplier of satellite-based broadband VSAT, broadcast, government and defence communication network solutions, announced at IBC 2006 that it had just completed manufacturing its 100th SkyRAY antenna subsystem. Richard Hooper talked with Dr. Gerhard Bommas, Chief Technology Officer.

**The spectacular golden edition** of the 100th ND SatCom SkyRAY was rolled out at the IBC trade show. Developed and designed by ND SatCom's engineers, SkyRAY has become the company's flagship for mobile SNG requirements as a result of its aerodynamic style, reliability and performance as well as its robustness and longevity. Originally designed for broadcast & media companies, ND SatCom SkyRAY has created synergies for mobile VSAT solutions in defence and government sectors and markets such as oil & gas, disaster recovery or GSM backup.

"Satellite News Gathering, mobile backup and disaster recovery missions require the rapid deployment of vehicles for unforeseen operations and territories. The ND SatCom SkyRAY series was engineered to fit these challenging requirements in terms of size, optimum weight and shape. Although our subsystem is a standardized component, it can be integrated into an individually tailored solution", commented Dr. Gerhard Bommas, CTO of ND SatCom. ND SatCom SkyRAY's technological edge resides in its components and software options. All critical components such as the mount and the Antenna Control Unit are manufactured at ND SatCom's German headquarters in Friedrichshafen.

**Richard Hooper: ND SatCom is now a wholly-owned subsidiary of SES Global. What positive impact has this had on the company?**

**Dr Gerhard Bommas:** I think SES Global as a worldwide satellite operator definitely gives us the opportunity to follow their business – so, for example, if there are broadcasters looking for equipment, if there are corporate entities looking for systems – we have a chance to follow up in these areas. Especially in the area of government business, we see quite some synergies coming together offering customers a bundle of space and ground segment systems.

**Richard Hooper: You have just completed the manufacture of your 100th SkyRAY antenna subsystem. Why has it been so successful?**

**Dr Gerhard Bommas:** Its success is due to its technical simplicity. It is easy to operate and has automatic pointing of the antenna. It is also a very attractive system, and that sells.

**Richard Hooper: Are all ND SatCom products designed and manufactured inhouse?**

**Dr Gerhard Bommas:** Yes, we design our own products. We have

"Last but not least, in Europe we see some business coming up in the area of governmental, military applications, as well as disaster recovery."



*Dr. Gerhard Bommas with the SkyRAY product. Photo courtesy of ND SatCom.*

some external work benches, but the final assembly and testing is performed inhouse in order to achieve the quality assurance. It also enables us to watch, closely, the manufacturing process in case there are any production problems.

**Richard Hooper: Which regions of the world are of particular interest to ND SatCom?**

**Dr Gerhard Bommas:** It is no secret, but we are very strong in the Arab Countries. There is a significant demand for our type of equipment there. We are also present in India, China – markets that are seeing upward movement. Last but not least, in Europe we see some business coming up in the area of governmental, military applications, as well as disaster recovery.

ND SatCom announced at IBC 2006 that the Greek systems integrator BLK has awarded them a contract for a SkyRAY antenna subsystem. BLK will further integrate ND SatCom components such as a 400 Watt Ku-band amplifier and an encoder into a Kia Sorento and finally deliver the SNG vehicle to a Greek broadcaster. No financial details have been disclosed.

The contract is of strategic importance for ND SatCom as it is the first SNG system delivered to the Greek broadcast market. There are options for follow-up orders.



# Satellite paradise

Bermuda is about to approve a new regulatory regime that is set to reduce the burden normally applied on companies that file for their satellite systems. Giovanni Verlini, Editor of Satellite Evolution Asia, reports.

**Famous for its golden beaches**, blue skies and crystal-clear seas, Bermuda is soon to become a destination of choice for the legal teams from would-be operators from around the world who intend to file for their satellite systems. The Bermuda government, in fact, is in the process of introducing a new piece of legislation that will allow for a flexible procedure for filing satellite network notices with the International Telecommunication Union (ITU).

Speaking with your correspondent during Euroconsult's World Summit for Satellite Financing, held in Paris on 5-7 September, Michael J Scott, Minister of telecommunications and E-commerce of Bermuda, pointed out the highlights of the planned legislative reform for the Caribbean island. He said: "A number of satellite companies already take advantage of our business-friendly legislation as they are registered on our soil. However, incorporation is just a first step. Soon it will be possible for companies to file for their satellite plans in Bermuda.

"The process of filing for a system with the Federal Communication Commission (FCC) is a quite expensive and cumbersome process. We will be offering a cheaper, slimmer and more flexible alternative to the traditional avenues available to operators so far."

Asked for the date when this new regime will be in place, Scott replied: "We looked at practices from around the world. We are in the process of drafting the new regulation. Once this is approved, we will then be ready to go. I would say that this whole process will be completed by early next year."

## Objectives of the Ministry of Telecommunications and e-Commerce

Long recognised as a centre for international business, Bermuda has leveraged this strength to create a business, regulatory, and tax regime that is uniquely suited to the international telecommunications industry, and has recently extended this to include those companies with interests in satellite communications, both for telecommunications and broadcasting. The Ministry seeks to harness the advantages which modern and innovative communications systems can bring to Bermudians, whilst at the same time, bring Bermuda's recognised services sector, which has long served the finance and tourism industries, to the benefit of the communications industry.

## Telecommunications

The current regulatory structure was developed in the mid-1980s and although it has served Bermuda and Bermudians well, increasing choice and competition, this framework now seems inadequate when compared with current regulatory practices. The Department of Telecommunications has initiated a review of the existing framework and - working in consultation with consumer groups and with industry - is developing proposals for reform.

The Ministry aims to make Bermuda's domestic industry stronger and more responsive, producing a regulatory framework which reflects the current and likely future needs of telecommunications service providers, whilst at the same time, allowing greater market ac-

cess to promote competition, leading to greater choice and quality of service for Bermudian customers.

## Space Services

Since the 1980s, Bermuda has had rights to deploy broadcasting satellites, according to an internationally-agreed plan. The Ministry is actively working with industry to exploit these rights and as part of this exercise, is also developing a flexible and responsive procedure for filing satellite network notices with the international Telecommunication Union. Satellite operators filing through Bermuda will be able to draw upon the expertise and support offered by the authorities of the United Kingdom, whilst having to bear none of the administrative burdens, such as performance bonds, recently imposed by some larger administrations. Satellite operators wishing to take advantage of these benefits will also be able to enjoy all of the advantages which Bermuda is famous for offering to international businesses.

## Broadcasting

The Ministry recognises the importance of broadcasting as a communications mechanism, not just as a means of entertainment but also as a means of providing information to consumers, such as by advertising, and to citizens, in the form of news and public information. Multiplicity and diversity in broadcasting promotes not only choice for consumers, but also increases the resilience of the broadcast media as a platform for the dissemination of vital public information, all of which are goals of this Ministry.

## Internet

As well as 'traditional' forms of telecommunications and broadcasting, the Ministry takes a great interest in emerging technologies, such as the use of the Internet as a distribution and communication mechanism. As part of its general review of the telecommunications regulatory framework, the Ministry is consulting industry on how the Internet, and activities conducted via that medium, should be regulated. Chief amongst the Ministry's objectives are the need to facilitate communications with the minimum of regulation and interference, whilst at the same time to protect the rights of authors and promote the Internet for social and economic good, preventing its use for undesirable or improper purposes.

## E-Commerce

Bermuda has long been the home of international business, and as well as the favourable business climate, robust communications systems are a central part of its attractiveness. The Ministry understands the role which e-commerce plays in international business, with the Internet acting as both a domain in which transactions take place, and as a tool for transaction management. Data-warehousing, disaster-recovery and transactions management are only three aspects of this sector, upon which international business increasingly relies, and the Ministry is investigating ways in which Bermuda can continue to offer the high resilience needed by international business, whilst investigating ways of building upon and expanding Bermuda's expertise and presence in this sector. ●

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"The process of filing for a system with the Federal Communication Commission (FCC) is a quite expensive and cumbersome process...."

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# The on-demand challenge

Internet Protocol Television (IPTV) is about to take the media, telecom and satellite industries by storm. How will it affect the satellite industry? Giovanni Verlini, Editor of Satellite Evolution EMEA, investigates.

It is relatively easy to fall into the temptation of drumming up a technology, elevating it to the status of catalyst for revolutionary change within an industry. Just look at what was written for years of Third Generation (3G) mobile telephony. Hailed as an Internet-on-the-go revolution that would transform people's life across the globe, in reality so far it has translated into something slightly more prosaic: Multimedia Messaging Services (MMS), and, above all, better voice quality. Despite the precautionary measures of the case, however, very few people today would argue against the fact that Internet Protocol Television (IPTV) represents the most powerful agent of change for broadcasting since the introduction of multi-channel television in the 1980s. Just take a look at the numbers thrown around by various sources: Alcatel recently said that it expects worldwide subscribers to IPTV to reach 100 million by late 2010, up from three million now, despite some operators delaying roll-out. According to Pyramid Research's latest Analyst Insight, the number of China IPTV subscribers is expected to surpass ten million by 2011, while RNCOS has recently stated that it predicts the subscriber base in France to reach approximately five million by 2010.

Whether these figures are hype or reasonable expectations, there are other elements pointing out to the fact that IPTV will be the future of the broadcasting industry. Several studies are now suggesting that Hollywood studios must accelerate electronic distribution of their film content if they are to halt the rapid growth of digital piracy. Bain & Company, for example, have recently warned that digital piracy is projected to increase three-fold by 2015. While it currently costs Hollywood \$2.3 billion a year in lost revenues, equivalent to about three percent of total inter-national film industry revenues, by 2015 it will rise to \$8 billion a year, for an equivalent of at least 10 per cent of their revenues. The answer, experts suggest, is simple: if you can't beat them, join them. And joining them they are! Distribution deals for Video On Demand (VOD) content between media companies and telcos are being signed literally every day all over the globe.

In Spain, Telefonica and Walt Disney have agreed for the telco's IPTV service Imagenio to distribute its films on a VOD basis. A selection of films from Walt Disney Pictures, Touchstone Pictures and Miramax Films, will thus become available Spain's largest IPTV audience of 280,000 subscribers.

Buena Vista International Television (BVITV) has secured a series of VOD distribution deals in Europe and Asia, and has also announced the first non-US deal for Disney-ABC Television Group's ABC News Now channel. In the first such deal, BVITV has extended the terms of its long-term TV licensing agreement with French terrestrial broadcaster TF1 by making around 100 current movie releases and blockbusters available on demand via broadband on the TF1 Vision website.

In Australia BBC Worldwide has signed an agreement with Telstra to supply a selection of BBC VOD content for its Portal platform, BigPond Movies. The new service, allows Telstra broadband subscribers to license a substantial range of BBC programming, including programmes such as Little Britain, The Office and Top Gear.

Meanwhile, several heavy-weight technology companies are making their move in this arena. Microsoft, jointly with Cisco, Motorola, Philips and Tatung, have announced that advanced System-On-a-Chip (SOC) Set Top Boxes (STBs) are now available to support Microsoft TV IPTV Edition deployments with leading telecommunications carriers worldwide. They say these SOC STBs will make it easier for service providers to deploy IPTV Edition more broadly, quickly and cost efficiently.

Clearly, there are a lot of converging interests on IPTV: Hollywood studios, telcos, media and technology companies worldwide have decided to adopt the VOD model before it is too late and digital pirates steal the initiative as it happened for the music industry. So, everybody's happy? Not really. There is tension between the major studios and the major retailers of DVDs, let alone video rental shops. Besides, with the new on-demand model 'windows' (the time between the release of the same content over different formats) are likely to collapse, forcing a complete overhaul of the media industry's very business model. Nonetheless, the ball has been set in motion and it is not likely to stop now.

## Opportunities

Does IPTV present an opportunity for the satellite industry? If so, how? The answer is far from being monochromatic, so to speak. In fact, there are at least three satellite applications that will be affected by IPTV: video distribution, direct broadcasting and Direct-To-Home (DTH). In the video distribution arena, IPTV is likely to have a minimal impact on the satellite industry other than as a new customer. In other words, satellites will transport and distribute IPTV in the very same way they have been doing for years with analogue and digital television.

As far as direct-to-the-viewer broadcasting via satellite is concerned, pundits and analysts seem to be of the opinion that IPTV will not make an inroad in the satellite industry.

However, direct broadcasting via satellite, also known as DTH, is likely to be strongly affected by IPTV. So far, analysts from around the world have been keen to point out that satellite has suffered from a technology shortfall compared to cable: the latter allows for interactivity, while the former, as is widely known, does not. Thanks to IPTV, however, this could be about to change, as the two technologies (ie, DTH and IPTV) are joining forces in the creation of a new, more powerful distribution medium. This is a process similar to what other distribution platforms are undertaking. In the UK, for example, incumbent telco operator British Telecom (BT) is about to launch its IPTV platform that leverages on the country's Digital Terrestrial Television (DTT) resources. BT Vision, in fact, will join the broadcast element provided by DTT operator Freeview with a VOD element provided by Digital Subscriber Line (DSL). Recently, BT has secured a video-on-demand film deal with independent studio Lionsgate Entertainment Corp for its IPTV service that it plans to launch in autumn 2006. The deal will provide BT Vision customers with access to the Lionsgate library, one of the biggest independent film libraries in the world.

Similarly, BSkyB's recent acquisition of the UK's broadband operator Easynet should be seen as a first step that should lead to the enhancement of its traditional DTH broadcast service with a return path via DSL. In this case too, this would mean the launch of on-demand services. Thanks to IPTV satellite broadcasting is acquiring that elusive return path that will allow for real interactive services. How long will it take for this hypothetical scenario to develop into a real-life case? We are just at the beginning, but now studios have decided to make their libraries available online, a full-blown development cannot be that far away.