



For this month's Question and Answer (Q&A) session, *Giovanni Verlini*, Editor of *Satellite Evolution Asia (SEA)*, spoke with *Dr Claßen*, Chief Executive Officer (CEO) of ND SatCom.

Strong demand from government sectors

▶▶ **In what could be described as an ironic** twist in the development of satellite communications, in recent months it is the ground segment rather than the orbiting spacecraft that is increasingly being seen as the most crucial element to the success of satellite-based services. In other words, it is what companies do on the ground rather than in space that is likely to determine the future of our industry.

ND SatCom AG is Europe's largest satellite network solutions and ground-stations provider, delivering innovative solutions for customers operating in the whole gamut of satellite applications: telecom, Internet, broadcast, enterprise, government and military. Despite being a European company, ND SatCom is rapidly expanding its operations on a global scale. The inauguration of its new office in Beijing, China, follows similar operations in the Middle East and the US.

Giovanni Verlini: How would you introduce ND SatCom to the readers of *Satellite Evolution Asia (SEA)*?

Dr Karl Claßen: We are a leading supplier of satellite based commercial and military communication networks and ground station solutions. Our innovative technologies are deployed in the broadcast, enterprise, telecom, Internet, government and military environments worldwide. Our company has gathered over 20 years of experience in the satellite networks and systems business during which it was affiliated with reputable companies like Nortel and Daimler Chrysler Aerospace. Currently, ND SatCom is jointly owned by Augusta of Germany and the satellite operator SES Astra of Luxembourg.

Giovanni Verlini: What kinds of services do you provide, and who are your typical clients?

Dr Karl Claßen: Our solutions can be grouped into four families of services:

- > Broadband Very Small Aperture Terminals (VSATs): mesh and star corporate networks;
- > Broadcast solutions: ground stations, Satellite News Gathering vehicles (SNG), media networks for contribution, distribution and management of media content, and fly aways;
- > Military solutions: anchor stations, mobile and transportable tactical terminals, military network management systems and military components; and
- > Satellite control stations.

Furthermore, we provide customer services to our clients. In particular, we provide our customers with a full range of customer services ranging from requirements and specifications, project management, network engineering, implementation, initial network operation and after sales support.

I can best describe ND SatCom as a three-in-one company which makes us so unique in the market:

- > we develop our own core technology: for example our SkyWAN which is the technology leader in the Mesh Broadband VSAT segment;
- > we are a system integrator, with the ability to manage large complex system projects for satellite or teleport operators and for defence contracts; and
- > we are a system house, with own software and hardware development capabilities we can develop to customer requirements.

What also makes ND SatCom unique is the fact that we are active in four market segments: Broad-



Dr Karl Claßen, (CEO) of ND SatCom.

cast & Media, Telecom, Government and Military and through this we can anticipate more easily on the changing market requirements taking place within and throughout these markets.

Our customers range from international and national satellite operators, broadcasters, broadcasting service providers, VSAT service providers, international carriers, teleport operators, SNG service providers, Ministries of Defence (MoD), government agencies, and many more.

Giovanni Verlini: At this point, I would like to discuss issues of a general nature relating to the satellite sector. Which would you say are the trends in the current marketplace? In other words, which direction is the satellite sector taking?

Dr Karl Claßen: I believe that you will be seeing the following developments in the satellite industry: consolidation, globalisation and value chain expansion. Companies are currently consolidating to gain further economies of scale and global coverage. As a consequence, you will see further consolidation all along the entire industry's value chain starting from satellite manufacturers, satellite operators, system integrators, hardware suppliers, service providers etc. The second trend is that of globalisation. The satellite sector is definitely becoming a global marketplace: many of our customers already are global players, while the continuing trend of global digital television and telecoms will drive the need for solutions which function and are supported on a global scale. Finally, we are seeing companies moving up the value chain striving to increase their profitability. A typical example of this trend being satellite operators providing end-to-end solutions.

Giovanni Verlini: From our standpoint, we have registered a greater emphasis on the ground segment in recent years. Would you agree with this statement? Would you say that this overall trend makes companies such as ND SatCom even more crucial to the success for satellite applications as a whole?

Dr Karl Claßen: The answer to this question in an emphatic yes! The satellite ground station market is a relatively large business in satellite communication. This includes commercial as well as military applications. We are currently experiencing a strong demand from government clients, something that is being fuelled by the recent global events. But this is not the only area in which demand is picking up. Our ground station customers go from satellite operators to broadcasters, and from service providers to teleport operators and international and national carriers. Examples of recent projects we have been realising in the ground station market are the Intelsat Mountainside (US) and Fuchsstadt (Germany) teleport projects. In the VSAT terminal business we are focusing on high-end, vertical market, customised solutions such as the oil and gas, air traffic control, and embassy network markets.

Giovanni Verlini: Let us talk about broadcasting now. What are the trends in this sector? Is it any different from telecoms?

Dr Karl Claßen: Looking at the portfolio of broadcasting solutions we provide worldwide, I see an increase

in the demand for media contribution, distribution and management solutions. We have a whole suite of solutions in this area. We currently are implementing a large media network for a large north American broadcaster.

We are seeing a continuous increase in television (TV) and media channels worldwide. Generally I believe that the increase in media content will fuel the demand for media networks in the broadcasting environment. Do not forget that TV is still the most popular medium in the world.

Giovanni Verlini: As far as broadcasting via satellite is concerned, are you of the opinion that on-board processing will play more of a fundamental role in the future?

Dr Karl Claßen: First of all the competitive edge of satellite communication compared to its terrestrial adversary is its ability to broadcast or multicast to thousands and millions of end users throughout a wide geographical area.

Overall 60 per cent of today's satellite capacity is used for broadcast applications. In the future you will see more hybrid network solutions making use of the strengths of both infrastructures. In a broadcasting environment on-board processing is less of an advantage than in a telecom application environment for example using satellite for internet access where you have predominantly a more bi-directional communication.

Giovanni Verlini: At this point, I would move away from arguments of a general nature and focus on the Asian market. How do you see it evolving in the near future? What would you say are the main drivers and drags? I have a number of well-documented issues in mind: poor terrestrial infrastructure and large populations amongst the drivers, while protectionism and government control could be enlisted among the drags. What are your views on the subject?

ND SatCom AG opens China office

ND SatCom AG of Germany, a leading global supplier of satellite based broadband VSAT, broadcast and military communication network solutions, is pleased to announce the opening of its Beijing, China office. ND SatCom decided to increase its presence in China due to the area's potential and growing satellite communications needs. The 'ND SatCom AG Beijing Representative Office' will better serve ND SatCom's clients and strengthen activities in the Asian region. Roland Schua, Chief Representative China will head the new ND SatCom office that includes highly-experienced local sales and engineering support.

ND SatCom's presence in Asia has grown from its beginning in 1997 with an office in Singapore to a current network of four sales and service offices in Singapore, New Delhi, Jakarta and Beijing. "By augmenting our activities in Beijing we believe that not only are we positioning ourselves perfectly for the Chinese market but also for expansion into more areas of Asia", commented Schua. He continued: "The official opening of ND SatCom's Beijing office represents our long term commitment to become a major provider of satellite communication solutions in this important emerging market." ND SatCom has won a number of key contracts with governmental customers and enterprises in Asia over the last three years. It is consistently expanding its product portfolio to offer innovative solutions, products and services to Asian customers in the telecom, internet, broadcast, enterprise, governmental and military markets.





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Dr Karl Claßen: Your analysis is correct, at least in part. The lack of existing infrastructure is a driver for satellite-based solutions. In this part of the world satellite communications are the only cost-effective and easy way to deploy solutions. To this day, for example, a large part of Asia's population has no access to any telecom infrastructure. However, while it is true that in the past the region's governments were not doing much of an effort to promote space-based solutions, we are now witnessing a fundamental change in attitude. In many a country governments have adopted a more liberal policy towards the satellite sector, and are even investing in their own governmental infrastructure.

Giovanni Verlini: You have just opened an office in Beijing, China. This suggests to me that you have faith in the Chinese market. Is that correct? Do you see China becoming a new regional hub for satellite communications?

Dr Karl Claßen: Yes, we have just opened a subsidiary in China. We had been operating in the country for many years, winning a number of strategic projects. This gave us confidence in the market, showing that there is a good market potential in China for our solutions.

As it is our strategy to focus on key markets and come closer to our customers, it was natural for us to take the next step and open an office in China. We are currently building up a regional hub in Beijing with the

necessary pre-sales, technical support and operations capabilities. With this operation, we are also showing our commitment to becoming a major provider of satellite communication solutions in this important emerging market.

Giovanni Verlini: What about the rest of the Asia-Pacific region? Are there any other 'hot' countries? If so, which are they and why?

Dr Karl Claßen: I would rather say that there are specific markets or application segments which are developing and areas where we have noticed increasing demand. These are, for example, infrastructure, disaster recovery, security projects or specific vertical markets.

I would point out the fact that since we already have local sales offices in Singapore, New Dehli, India, and Djakarta, Indonesia, we already have access to the most important markets in the rest of the Asia-Pacific region.

Giovanni Verlini: Where do you see your company in five years time?

Dr Karl Claßen: In five years from now I would like to see ND SatCom as the leading provider of satellite solutions in the world, serving our clients with customised solutions for the broadcast and media, government, military as well as the telecom markets. ■