

## The digital market is much more robust than it used to be...

KATE BULKLEY meets Andre Kudelski, the CEO of Kudelski Group, which incorporates Nagravision, one of the world's leading independent suppliers of open conditional access and integrated solutions for digital TV operators and content providers.



**H**ow does Kudelski's conditional access technology for pay-TV smart cards stand up against other companies, particularly NDS, which is owned by News Corp?

First of all I would say that our company is independent and not part of a larger group or pay-TV company like NDS is. We have been able, therefore, to work with clients that are independent and to construct a client base over the years. We have a pretty good footprint in America and now in Europe, mainly in continental Europe, and Asia. One of the important stories for our company is it is a quite old company for a technical company having been started in 1951. It was first specialised in professional tape recorders for radio, movie and television industries.

**There is a history there and your move into the US market with your smart card technology was in 1995, with Echostar.** Yes, but the first element was we started in 1989 with a business in analogue pay-TV in Europe, including France, Spain and Germany. Then we came to a digital business with a contract with Echostar and after we extended our presence with telcos doing video like Bell South and Ameritech and some others in this field. So we have been able to win an important number of contracts with companies that were all present in digital TV or present in other businesses like the telcos that wanted to get into digital TV.

**You say that the fact that you are independent helps you win contracts, but isn't it also difficult when NDS is allied with one of the biggest pay-TV operators in the world – News Corp? Just this week we heard that DirecTV, now owned by News Corp, is going to take its new PVR technology from NDS and not TiVo, which has been their supplier, so it seems like News Corp has a juggernaut that is hard to break.**

I would say in fact it is the opposite. In the world you will never have one company in the consumer field or the media field that will have more than fifty percent of the market share. By definition media is quite sensitive. So, if you look at relative footprint that we have to NDS, basically if you look at the number of contracts outside of News Corp contracts that NDS has, it is a very small portion. In our company we have been able to have a very high market share on all the rest of the operators that you may find worldwide. Just look at the European footprint in France, in Germany and in the UK. With UK cable, it is not so small.

**In Germany you have satellite pay-TV operator Premiere.**

Yes, and also in Germany cable company KDG and some other smaller cable operators, and in the UK we have ntl and Telewest.

**In 2003 you bought a bit of Canal Plus Technologies, which had the pay-TV contract for Canal Plus in France and elsewhere. How has this helped your business become more robust niche and hopefully become more piracy-proof?**

We basically bought the conditional access part of Canal Plus Technologies called Mediaguard. But I would like to say that we are not speaking today about a niche because there is a basic trend to digitalisation. We have come from analogue to digital but it is not just analogue TV that is becoming digital. The real interest for us in acquiring Mediaguard was to improve our footprint in Europe because traditionally we were strong in America and in Asia and our weakest point was Europe. So in Europe we have done two things: first organic growth plus the acquisition of Mediaguard and the combination of these two has given us a quite interesting position in the European market.

**Your company had quite a difficult year in 2002 with the market down in general and then in 2003 you purchased, as you just explained, Mediaguard. I know you are not giving out exact figures until mid-February, but what can you tell me – without revealing too much being that you are a public company – about how your business and the digital TV business has done in 2004?**

If you look at the first half of 2004 we had, in digital TV, a growth of 75 per cent from the first half a year earlier. If you look just at the organic growth [minus the Mediaguard acquisition] we are in the position of 60 per cent growth in the first half. This is the generic trend that we have for the year. We have really seen a very interesting combination of the organic growth plus the acquisition that has given us a really optimum market situation.

**How do you see the market going forward? For example, do you think it is going to be healthy because we have not only more financially stable cable TV operators in Europe but also because the telcos around the world seem to be getting into the pay-TV business?**

I think the digital market is much more robust than it used to be simply because people are investing now based on elements like cash flows and not on stock market values. You had in 1999 and

2000 a lot of companies that did acquisitions for networks but paying very high prices and so basically it was very difficult to be a successful operator. Today, the financial solidity of the operators is much better. Another point is that the migration of analogue to digital is really becoming a mass-market phenomenon.

**And not to forget the telcos which are getting into the digital delivery of all sorts of content. Isn't this also impacting your business?**

This is not new but basically they are coming now with business models that are more efficient than they used to be.

**So where is the biggest growth area for your company, which kind of operators – satellite, cable or telcos – are signing up for your CA technology, or is it a little from all of them?**

I would say that one of our strengths is to be present on all continents and to be present in all distribution media, so that means we are present in cable, satellite, terrestrial and IP. That is a quite interesting situation because if you look at our distribution in terms of markets, we have a presence in all of the segments. If we compare to our competitors, they have not the same distribution. So, if you take NDS, they are more direct-to-home-centric, and Motorola, they are US-cable-centric. Kudelski has a smoother balance between the different types of transmission media.

**Let's talk about DTT. This has been a big success with Freeview in the UK. How do you see DTT developing and how is your company involved in the UK and elsewhere with DTT?**

We are present in the UK and in Italy and maybe with some more to come. We were also in the past in the Spanish DTT market with our conditional access but as you know the business model was not optimum. But we have in terms of expertise something that is quite interesting.

**In Italy DTT is quite an interesting business model and quite different from the UK because the Government is subsidising the DTT boxes. I assume you have found this helpful for business there?**

Yes. We have a major contract with [Italian Prime Minister Silvio

Berlusconi's private media company] Mediaset and that is, of course, a very important point for the future.

**How do you think DTT will develop in other parts of Europe? Do you think the Italian model will take off elsewhere, or the UK model of a free DTT service promoted by the public service broadcaster?**

I think the first attempt to do DTT with a standard subscription TV model (like ITV Digital) was not the optimum approach for two reasons. First, the people using DTT are not really interested in paying for a monthly subscription fee and the prices of the decoders were quite expensive. If you look at the Italian concept now, first you have an offer where you buy a certain number of events or movies and the second element is the decoder price is very attractive for many reasons including the political decision.

**As you say in Italy, the service is attractive because of the box subsidy but also the flexibility of the pricing for content.**

The first model in the UK was a standard subscription mode and it had problems but now it has moved to something that is quite interesting, clearly showing that one of the main issues is business model.

**How will these models develop elsewhere?**

The models will develop depending on the country and it will depend on the technology and how the business model is fine-tuned to get market share.

**How big a part of your business will DTT be for Kudelski?**

It may become a substantial part of our business but that is not saying that the rest will not continue to grow in a quite interesting way. I think that the beauty of our approach is we try and be quite sensitive about what is happening in different continents and in different market segments.

**There are other and several smaller conditional access companies about, like Conax, ViaAccess and Irdeto. Do you think there will be more consolidation?**

Yes, but I also think that there is some specificity for some smaller networks where some of these companies may have their chance.

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## Andre Kudelski

Andre Kudelski is President and CEO of the Kudelski Group. He was born in Lausanne in 1960. He achieved his Master's Degree in Physics from the Federal Institute of Technology in the same city in 1984, joining the family company in the same year.

He became MD of the pay division, Nagravision, in 1989 and Group Chairman and CEO in 1991.

Andre has been nominated a 'Global Leader for Tomorrow' by the World Economic Forum and, in 1996, received an Emmy for achievements in the area of pay-TV, conditional access and scrambling systems.

There is also the debate between the smart card technology providers like Kudelski and NDS and the so-called smart card-less solutions that are being promoted by companies like Latens and which seem to be a more attractive solution for telcos getting into content distribution and protection. What do you think about smart card-less solutions and are they a threat to your business?

First of all, it is not a new problem. The question is, first, what level of security do you want? I don't think that systems that use software only [i.e. - smart card-less] can grant the same level of security. So, I would say the question is not with or without smart card. It is a question do you have a piece of hardware to protect the software or not? Basically you can get interesting solutions without embedded silicon but that will not give you the same level of security. So it is a question of trade-off: What is the value of security? From our experience the value of security is going up since the cost of the hardware in terms of the set-top box is going down. On the other side, the cost of the content is staying the same or even going up. This debate is not new. In the mobile phone industry in the US most of the mobile phones did not have any embedded hardware for protecting them five years ago. The result was that it was not possible to call outside the USA with this phone. So it is not a bad question and it will continue to be a debate.

**Are you developing smart card-less solutions or not?**

Not only are we developing it but it is part of our offer to secure content - but not at the same level - with solutions that are purely software. It is part of a family of solutions that we offer.

**How do you see the conditional access and digital rights management battle? Is it really about traditional CA developers like Kudelski having to develop DRM solutions in order to be ready for what many people see as the next big thing, like video-based iPods and the PVR-To-Go products that we started to see at last September's IBC in Amsterdam and will be out later this year?**

I would say that the two things are really linked; you can not think conditional access without thinking DRM. And you can not just look at DRM without thinking of some functions that are related to CA. I think the two things are very interlinked. We have programmes that we started a few years ago that take into account some aspects of DRM in our architecture of security and conditional access. The barrier between the two is not as solid as you may think.

**I know at IBC there were a few PVR-To-Go devices on display. I call it life after delivery to the home devices. Now, how does the content get protected after it leaves the set-top box and the traditional smart card environment?**

We have also shown some of these kinds of devices at IBC but we also have a clear programme to deliver volumes of such solutions. But the key element here for me is you need to protect the content not only the delivery. So, the question is not life after delivery but it is how to best protect content in any place you have it. People who think that the decoder must be secure, I don't think that is the right approach. You need to protect the signal and the content in a way that you can not just steal the signal or the content.

**Won't this be an increasingly difficult and important issue**

**especially now we are getting more 'to-go' devices and more sharing of content between the PC and the iPod and who knows what other kind of wireless devices?**

I would say you have two different market segments. You have one where the goal is to deliver some live TV channels or TV content and on the other side is the CD and the DVD. The two can share some security architecture and devices. The interesting element is to come to a convergence of these two ways of distributing information. The problems are not different than in the past but I will say some are more visible than they were in the past!

**We have the consumer electronics players like Sony with the Playstation that it wants to turn into the home entertainment hub and the PC makers using Microsoft's Media Centre product to make the PC the home entertainment hub. With all these heavyweight players lining up, how will this change who you deal with, or will traditional CA makers be sidelined by DRM in these non-set-top box products?**

I think the set-top box vendor is just one of our potential partners in the chain. I think our main contacts are operators, including digital pay-TV operators, telcos and maybe even some Hollywood studios. I don't think this will change the relationship we have with our existing clients. It will just open opportunities with some other players.

**So are you talking to Microsoft or Sony or PC makers or are they doing their own thing, that is to say buying DRM products?**

I would say we are in a sector where everybody is speaking to everyone. And I think each player has his own speciality and his own skills and I think there is a lot to be done by communicating.

**I know that a lot of the set-top box makers are in a difficult position as they see the Sonys and Microsofts, not to mention Nokia and others, heading into their turf, so to speak. Everyone seems to want to own the customer that seems to be the holy grail for these companies.**

I think that is one part of the equation but I think that without operators that are quite powerful it is quite difficult to have something that is organised in terms of distribution. If you take the parallel with other sectors, like in the consumer goods business, then the ones that are really the gate keepers are the Walmarts or, in continental Europe, Carrefour and Metro in Germany. So I think the role of the operator in pay-TV is a little bit of the same. I think that to have just consumer electronics people controlling the home network is not the exact picture for the future.

**NDS has been promoting a DRM solution via an alliance that they have dubbed the SVP alliance for in-home transfer of protected content. Do you endorse this as a standard or is it more of an NDS solution as opposed to an open-standard industry solution?**

Once more I think you have a company that is part of the News Corp group that has their own approach that makes sense for them but that is not the only approach.

**Will you at Kudelski be developing your own approach then?**

I cannot comment at this point on that.

**You have had telco clients for a number of years. How do you see the IPTV business developing?**

We think it is a really complementary approach to digital TV. I don't think it will replace the rest of TV but it is a very interesting way to deliver content that has a high proportion of on-demand content.

**There are quite a few of these in Europe and in the US especially developing like Maligne TV by France Telecom and many others. Are you supplying any of these?**

I can't comment on that right now.

**For the telcos, I know that traditional CA companies like Kudelski have an immediate disadvantage because these companies tend to like network-based solutions versus smart cards out in the consumer's homes because that is the architecture they are used to. Is this an issue?**

The question for us is not smart cards or not. We deliver a solution that can be based on different technologies. So we adapt our architecture to what is really needed. There are two elements. For small networks you may have one architecture and for big networks you may have a very different architecture. We are flexible to find the solution for every need.

**When you look forward into 2005 and beyond, what do you see as the biggest opportunities and also hurdles for your company?**

I would say one of the interesting questions for 2005 in the US is to see how the DTH will perform overall and if it will continue to

have interesting growth [against cable and increasingly the telcos and ISPs moving into video distribution]. I think there is a good chance to have momentum in that field. I am also interested in what will happen in the cable industry in the US and what will be the success of the deployment of IPTV. In Europe, the big challenges will be to see how DTT grows and what is the opportunity of IPTV. In Asia, the real question is how fast will the subscriber base grow because we have seen for a few years that there has been important investments in infrastructure but the sub-base has not grown as fast as in some other parts of the world.

**Certainly in the US there is a big move on the part of the telcos and cable to capture more of a lot of different markets, including pay-TV. I was just reading about how Comcast is going to add internet telephony to their offer in a big way. The lines of business are certainly blurring between communications and entertainment.**

Yes, but you should not only look at what is announced but what is delivered because it is not always the same.

**True. So, looking forward to 2005?**

The last two years have been really exciting and we expect the next few years will continue to be as exciting.

**Well, your share price is at 42 Swiss Francs which is close to its 52-week high of 44, so the market certainly thinks you are doing alright.**

But I think the best is ahead of us. Oh, and I'm not speaking about share price, I am speaking about the business!



**Kudelski Group** is focused on security. It says: "Security is first and foremost a state of mind, an active process based on the permanent monitoring of all forms of attack on security."

**Digital TV :**

**Nagravision**

One of the world's leading suppliers of integrated security software solutions for digital television operators and content providers.

**Nagra France**

Develops and markets the MediaGuard Conditional Access system

**NagraCard**

Security technology using smart cards for digital television and other applications such as physical access.

**NagraID**

Development and production of modules and smart cards for contact and contactless identification systems.

**Livewire**

Development of software for digital decoders, particularly for the cable market.

**Logiways**

Digital television navigation software products. Joint-venture with A-Novio (F).

**Nagra Plus**

Security systems for analog pay television. Equally owned with Canal+ (F).

**NagraStar**

Conditional access and smart cards used by EchoStar's DISH Network American satellite television system and its affiliated companies. Equally owned with EchoStar (USA).

**MediaCrypt**

Fundamental encryption technology based on Ascom's IDEATM algorithm. Equally owned with Ascom (CH).

**Leman Consulting**

Intellectual Property Rights

It also operates in Public Access systems and retains its origins in high-end audio products

*One of our strengths is to be present on all continents and to be present in all distribution media.*

*The migration of analogue to digital is really becoming a mass-market phenomenon.*