Panellists:	
Emir Halilovic	Research Director, Telecoms & Networking EMEA, IDC
Ian Keene	Research Vice President, Gartner
Camille Mendler	Principal Analyst, Ovum
Pim Bilderbeek	Analyst, The METIS Files

Manek Dubash

So we've covered quite a lot of ground in the last few days. We started off talking about telco networks, visions for the enterprise. What do you think were the key learnings from that? Any thoughts on that, in Tom Homer's keynote and from obviously Emir's debate that followed, talking about transforming the telco network?

Camille Mendler

I think that some vendors are more enthusiastic about the maturity of certain technologies within the enterprise than my statistics would suggest would be the truth.

Manek Dubash

Would you like to unpack that a little, Camille?

Camille Mendler

No.

Manek Dubash

Well commercial considerations obviously in there. Anyone else? Any thoughts?

Pim Bilderbeek

Well, if anything, I think automation is something which is dearly needed within the industry because, face it, waiting six months for servers to come online is just crazy, because you're competing against guys who sell online and deliver within three clicks. So if you don't do it, too bad. You're out.

Manek Dubash

Yes. Emir, any thoughts on that given it was your debate?

Emir Halilovic

There is, as Pim said, dire need for automation. There are a lot of technologies that can enable that, that there's no question about it. And there's a lot of companies who are very willing to step in because obviously it's a great market, with big market potential.

The question is for each operator, whether they're going to be able to implement all those solutions and achieve those goals before their CapEx and OpEx run out and before their revenues dry up in a way that they're not going to be able to finance that transformation any more. So it's a game. And that process needs to be finished as fast and as efficient as possible in order to enable them to actually generate those new revenues before they actually run out of money and time.

Manek Dubash

Okay. Thank you. Moving on, we next talked about SDN and whether or not it's ready for the enterprise. What did you make of that Camille, given that it was your shout?

Camille Mendler

I think the enterprise may think that they need this, but I think that there is a purchasing cycle and it's going to take longer than maybe is expected for it to happen, though I do believe there is greater understanding of the benefits.

Manek Dubash

Where is it, Ian, on the hype cycle, SDN?

Ian Keene

Not very far advanced, in fact. But it's well hyped, it certainly is, so it's up high.

Manek Dubash

Top of the hype curve.

Ian Keene

Yes, around that area. And yes, I think it's going to stay there a while. Will we ever see it outside of the datacentre environment? I don't know, to be honest.

I think what is clear and what I think certainly looking at service providers, telcos, what they're interested in is the benefits they can get from network function virtualisation. We heard from Telefónica yesterday. It's early days. It's still in trials. Is it being rolled out? No. And I think you can get carried away with a lot of these technologies and how we can be fooled by how slowly they're going to be rolled out and the testing that's needed, the complexity of transforming carrier networks, particularly incumbent carriers is a huge task. And the risks involved, there are big risks involved here really.

So it's a different time. I think that we might see a phase of the communications world where it's not about just doing a little bit at a time any more but really their structures need to be radically changed. And yes, when's that going to happen? I don't know. It's a tough call for the service providers going forward.

Camille Mendler

What I was going to say is that EBITDA margin of the telco is in the low 30s, like 33%, 35% on average. The EBITDA margin of the cloud competitors is in the single digits. And my belief is that they have to invest in SDN and NFV as part of the cost reduction imperative. They still need to convince their CFOs and investors that those margins are going to change quite differently in this digital cloud age.

Manek Dubash

Yes. To what extent are we still buoyed up by voice revenues?

Camille Mendler

That really has changed quite a lot now.

Manek Dubash

Yes. I was wondering. Yes. Anyone else on that issue, SDN?

Emir Halilovic

Well let's say on voice revenues first, the traditional revenues are drying up. That's obvious. SDN/NFV, in my view, talking to the carriers, do understand it's strategic. And the bigger the operator is and the less they have in terms of growth potential or actually just, let's put it this way, revenue potential on voice, the more they are thinking about adopting SDN and the more they are working on it. You do see carriers like Telefónica who moved pretty early in the cycle. Obviously compare that to the situation in their home market in other markets that they operate in, there is a dire need. The US operators also very, very advanced in their plans.

Camille Mendler

Well think about NTT. The Virtela acquisition is about differentiation through NFV, through network differentiation. And that as an entity group has spent just under $3 billion in cloud-related acquisitions in the past 18 months alone. So I think they're looking to transform in their various different divisions.

Manek Dubash

Pim, any thoughts?

Pim Bilderbeek

On SDN for the enterprise, I guess mirror last year, SDN might be ready for the enterprise but the enterprise is not ready for SDN.

Manek Dubash

Just moving on slightly, would any of you like to make a call on the HP versus Dell approaches to SDN, the HP vertically integrated, the Dell disaggregated approaches? Any thoughts on the advantages/disadvantages of either of those, whether either of them is better or will make more of a success than the other? No, I'm not sure I drew much out of it either.

Emir Halilovic

No, I do have an opinion on that, and that is that – we discussed this a little bit yesterday, there is a whole spectrum of approaches that you can have, and there are clients that will take each one of those approaches. Obviously the whole spectrum is not going to exist all the way into the future. But in the next couple of years, yes, pretty much so. You're going to have from complete open networking kind of vision with bear bones, ODM switches, running completely open source software, all the way to completely closed proprietary solutions that a vendor not present here is proposing.

So in between that you will have all sorts of different approaches and they will find their customers. The mathematics is who is going to take the lead? And I'm not ready to make the call whether Dell or HP are better positions in this particular moment. But we'll all know, I guess, pretty soon, end of next year probably.

Manek Dubash

Okay. It'll be interesting to see. Telco cloud economics, that was your debate, Pim. Do you want to give us a couple of words on that?

Pim Bilderbeek

Well I guess it's sad, I think, to look at telcos and see how they disregard the smaller players, because all you see is that they're satisfying the big enterprise customers, which they need to do obviously, but all the interesting things are happening with small companies. And any small company in the UK, Germany, Netherlands,

Belgium, who's a start-up will not go to a big telco because they can't accommodate them because they're not going to wait six months for a service. So it's okay to serve – you have to serve your existing customers. But I think it's too bad that you're missing out on what we call the new digital economy players because they're not going to the telcos.

Manek Dubash

But isn't that what managed service providers are for, reaching out to the SMBs?

Pim Bilderbeek

Well yes, but even there you see there's plenty managed service providers that do not have the ability to move as quickly as some of these players would like to move, so naturally they go to someone else, right?

Camille Mendler

I would argue that some of the telcos are waking up to the fact that the SMEs and the SoHo is an area that they can make money in. If we think about Deutsche Telekom, I think they have a remit to generate 600 million in new revenues from SMEs in the next five years. And there are a few others that try to do that. Maybe because they feel like they've scraped the bottom of the barrel elsewhere, but actually I totally agree that this is where the growth potentially is. Interestingly, in some surveys the brand identify of the telco is not so bad. It varies by country, but it's, you know.

Manek Dubash

It does seem odd that given that they not only have the network, which is obviously one of their USPs, but also the relationship they have with pretty much every company in the country, I would think, most incumbents.

Ian Keene

Yes. I think telcos have an advantage that in terms of trust they score pretty high up compared with other service provider entities out there. But they don't seem to leverage that to the extent which I believe they could.

Manek Dubash

We've heard this year after year after year. Why is it they're not reacting to this?

Camille Mendler

They haven't figured out how to sell effectively to SMEs. They don't know if they should do it direct/indirect. And the audience, depending on the country, is not necessarily aligned to self serving on a telco portal. And in most of the telco marketplaces, the SaaS marketplaces, one in ten is typical in terms of online sales versus facilitated sales.

Manek Dubash

Okay. So let's catch up with what saw yesterday afternoon, the MEF announcement. Anybody got any thoughts on that, the third network, the pay extra and get better service network?

Pim Bilderbeek

I'm not sure about the pay extra, get better service.

Manek Dubash

Wasn't that Nan's vision when he came here about a year ago and said I wish I could do this, and lo and behold, here it is.

Pim Bilderbeek

Well to me it's more like automation. The ability to deliver a service quickly, which is sorely needed, but I think it's a good initiative. But I'll wait and see until it's being implemented, right.

Manek Dubash

Well, yes. It's just a putative standard, isn't it, at this stage.

So moving on to what we heard this morning about datacentre interconnection, the need for speed. I think the argument there is that Europe is actually slower at catching up, from what I understood of what Nicolas Fischbach was saying, because there's not so many Web 2.0 companies in Europe as there are in the US so the need for speed between datacentres is not as great here as it is in the US. Is that something you see changing?

Emir Halilovic

Well it is definitely going to change from the point of view of presence of those companies in Europe because they are building their new datacentres in Europe as we speak. And some of them are coming to Europe, like Netflix, for example. There is going to be more need for this type of solution in Europe going forward.

Globally it's one of the first, let's say, areas where the talk of SDN in carrier environment have started the datacentre interconnect. Some of the first use cases that I've seen actually appeared there. So it's a dire need. It exists. It exists in big companies, in big financial institutions. It exists within telcos, Web 2.0 companies and it's probably going to increase.

As some of those numbers that I've seen about the growth of the market, I think that the trend is fairly right. I would agree with the trend, the figures from those, when you look into the nitty-gritty. But there is a dire need and Europe is no exception.

Manek Dubash

Sure. Any thoughts, Ian?

Ian Keene

Yes. I can see a need, certainly in some countries, some areas, for basically more distributed datacentres, simply because of the power issues, the connectivity issues, the real estate problem. It's really getting to a point where you have to spread your resources around. And yes, and coupled with that the cost of the interconnect equipment is getting to a point where, yes, you can stick metro-type 100gig connections in place now. It will vary from country to country depending on the availability of fibre and regulations, just pointing out what can be done.

But yes, having looked at speed in some of the huge European datacentres and internet exchanges and whatever, they can't make these things much bigger now so they're going to have to spread out.

Manek Dubash

Just on the issue, incidentally, of 100gig ports, are we now at the point where there's enough critical mass for the price to start falling in the kind of way it always does?

Ian Keene

Critical mass, yes, I'd say there is. It's basically do the vendors want to cut their prices accordingly.

Manek Dubash

Obviously they don't.

Ian Keene

Well I don't know. It does depend. It's a balance, right. It's a balance between how much fibre's available and it's a cost, but it's how much is fibre going to cost me compared with how much is the high bandwidth equipment going to cost me. And so it's a sum that works out and it works out different in different situations. So yes, increasingly where there is an issue with fibre capacity then 100gig is going to go in, I think most datacentres are resigned to that happening and we're starting to see a push for more than 100gig. I saw a press release the other day, Alcatel-Lucent had bought a 200gig product out, non-standard, but there's obviously a need for it otherwise they wouldn't have produced it. And maybe we could see an acceleration of the 400gig standard take place. So yes, there's definitely a need.

Prices really, I suppose the more cheap fibre that's around then the lower the 100gig prices are going to be because people are going to be more desperate to sell it. But yes, the economy of scale's there now.

Manek Dubash

Sure. Okay. Any other thoughts on that? Shall we move on? Okay.

Emir's next debate was on getting the cloud infrastructure right. So any thoughts on what came out of that? Is everyone going to look like AWS? Headless sellers and Google style?

Emir Halilovic

Obviously horses for courses. There's solutions for – many different methods are going to be in the marketplace, just looking at the various types of requirements in different stages of cloud development for each company or each company size, maybe even verticals. So – and not even going into the distinction between the telco and the enterprise – there's no silver bullet. There's no common set of solutions.

Some best practices may appear, but I think that that's – I'm fairly isolated with that opinion. And obviously looking at further along, like maybe five years horizon. So yes, that would be my takeaway from that discussion.

And finally, another conclusion, and that is that the skills have to evolve. The HR issues probably every player in the marketplace is going to face it.

Manek Dubash

Unicorns. Pim?

Pim Bilderbeek

Yes. I think the biggest issue here is the orchestration and automation part, it's not really about Dell or HP or whatever, it's more about what kind of software are you using to quickly deliver services and orchestrate your cloud. And what I see is most of the infrastructure players, smaller and bigger, in Europe are basically making their own stuff for that, apart from – if you look at what they have, you say we have hardware. We have these vendors for storage. We have these vendors for network. We have these vendors for orchestration. Oh, we do it ourselves. So they're building their own stuff. And I think that's the most important part where you can make a difference in the automation or orchestration. Forget about [inaudible]. It's less important in my view.

Manek Dubash

Well since we're a networking conference, I have to ask about the network. Are those datacentre networks ready? We hear a lot about east/west traffic, but as I understand it, a lot of datacentres simply aren't architected yet for that kind of traffic yet. Obviously that's where a lot of them are going. Do you have any thoughts on that anyone?

Emir Halilovic

A lot of them may be lagging behind in terms of what requirements are. But I think that there's a lot of work being put in to making it work. And it's more or less inevitable. And the companies who rely on their datacentres to run their day-to-day business, they are going to be there first. And they are already there, I would argue.

So it really remains a question of criticality of the datacentre infrastructure for the company's business. If it is critical, I'm pretty sure that they're already there, otherwise we would see those companies failing in their respective verticals.

Manek Dubash

Okay. Wireless now. Talked a lot about 11ac and wave one and wave two and so on. I'm going to be a bit of a heretic here. Do we actually need faster wireless? Is there any point any more? It's kind of a last-mile thing, isn't it? Isn't the back end more important?

Ian Keene

Well, quite. Due to the WiFi we've experienced here, if most people I think could have got 1-megabit-per-second connection, they'd be comparatively very happy. And so we talk about you can bundle in 160 megahertz of bandwidth into one channel and you can do – was it, I can't remember, I've lost count now, [128] of whatever. You can get an awful lot of data down this pipe and you could use an awful lot of battery up on your device if you run it at that speed.

I remember seeing a demonstration – this wasn't WiFi, it was LTE, by Everything Everywhere in the UK and with Huawei. And they were sending in parallel ten high-definition TV broadcasts down an LTE link. And the end user device was this box that was plugged into the mains and they could only keep it switched on for 20 minutes before it overheated. We've got to get real with end-user devices here. So yes, there is – you're absolutely right, there is a limit. I think in most people's devices now, battery lifetime is maybe as important in many cases as speed. So there's got to be a balance.

But I think everything's getting noisy. More things are communicating. More and more products have communications devices in them, so we're going to get a lot of noise. So there is the need for more bandwidth. There is the need for managing a hell of a lot more devices in the market. Just looking at all the different products coming out now that has some sort of wireless connectivity. It may not be WiFi. It may not be cellular. It could be Bluetooth, for example. There's a lot of stuff out there making the network noisy. And that is why I believe talking about 11ac, I think that is going to become the high-speed lane of WiFi, and there's an awful lot of stuff that's going to clutter up the 2.4 gigahertz band.

Manek Dubash

And with the Internet of Things it's only going to get worse.

Ian Keene

Yes, yes. Now also what's utilising the 5 gigahertz bandwidth, you can marry that with cellular capability and to offer a seamless experience, if you like. But there again, if you've got to pay a lot more for it, you may not want the seamless experience. But nevertheless, I think we're going to see a lot of movement that way.

And we're going to see more of a marriage between licensed technology, I think, and unlicensed technology. And then you've got things like white spaces getting in there and [leave it] there. Huawei just bought – was it Neul? Yes, I can never remember the exact pronunciation of the company. Yes, so now the heavyweight, like telco vendors are starting to take white spaces seriously. I know Microsoft have and Intel for some time, but the equipment vendors are too.

Manek Dubash

Okay. Sorry, Camille, did you want to have any thoughts on that?

Camille Mendler

I was just casually thinking that boys always want go-faster stripes, that was one. But the second point is EE is an interesting example because, of course, 18 months ago this is a company, a telco that saw uploads outpacing downloads. So let's not forget about the avalanche of user-generated content going in that direction, not the download aspect. We forget that. And that's one of the key reasons why we do need all of this bandwidth.

Manek Dubash

This is true. Okay. So quickly now security, before everyone dashes off to lunch. Any thoughts on the last debate that we had? Did we see any light shining upon the whole?

Ian Keene

Yes. My advice is take out insurance.

Manek Dubash

Isn't that what security vendors are saying, and why no-one likes them.

Okay, questions for the analysts? You've got some analysts here. You can get some free advice, free thoughts that you can write up. Anyone? Questions from the floor for analysts. The man with the phone, Thierry.

Thierry Outrebon, InformatiqueNews

I would like to know what is your best memory of this NetEvents from a technical point of view. Best memory of all those NetEvents.

Manek Dubash

Yes. Your best memories of NetEvents for this event. What's the one thing that stood out?

Camille Mendler

Actually, I was thinking how very good and articulate the security panel was, from Bernt to all of the different panellists, thinking let's not forget human error and frailty

in this digital environment. That is still pre-eminent in my mind. That's a big takeaway for me.

Manek Dubash

Pim, go on.

Pim Bilderbeek

Are we talking about this particular NetEvents?

Manek Dubash

This particular NetEvents.

Camille Mendler

Or all of them? My goodness. There are many stories we cannot tell.

Manek Dubash

Most of them we cannot tell.

Pim Bilderbeek

I would definitely say that this is the first event where, in a lot of formal and informal discussions, we have really all agreed on the need for the development of skills in deploying all this technology. At this particular stage it seems to be becoming critical. So that is the, let's say, the one thing that I'm going to remember.

Manek Dubash

We need some perfect unicorns.

Pim Bilderbeek

Yes, well, perfect unicorns. But you will need them in every single organisation, so to say, or there's going to be a lot of professional services growth for companies that don't have it in house.

Manek Dubash

Thanks. Ian, a word?

Ian Keene

A couple of things. Every year security tends to continue to be in a mess. And I guess we're not as smart as we'd like to think in terms of sorting the security issues out and it's a big thing. And yes, the keynote the first day and how pleased Australian taxpayers must be.

Manek Dubash

Yes, that struck me as well, I have to say. Okay, and on that note, unless you had any thoughts, okay, thank you. Well thank you very much, Pim, Camille, and Ian and–

You can do a prediction, if you like.

Emir Halilovic

So what about Amazon opening up a datacentre in Germany next year.

Manek Dubash

Yes. That wouldn't surprise me. There you go. You heard it here first.

Okay. Thank you very much, ladies and gentlemen. And thank you, ladies and gentlemen, for coming along and being such good sports and everything.

[End]