Bouygues Telecom puts the future in focus

Compared with its bigger competitors, Bouygues Telecom, a major alternative provider of mobile and fixed services in France, may have fewer resources and had a later start in the mobile data race. Yet, it has found a way to stand out in the market. Cyrille Guetin, CTO of the operator, tells us how his company is using a dynamic approach and innovative solutions to prepare for future growth.

By Julia Yao

WinWin: Can you tell us about Bouygues Telecom's overall technology and network strategy? What are your current priorities, and what will you be looking at in the next two or three years?

Guetin: We are a very customer-centric company. We want to provide service of the best quality to the customer. To achieve this, we currently have three priorities when it comes to technology and network deployment. First, we will expand our 3G network to full nationwide coverage (from 85% to 99%) by the end of 2013. Second, we need to increase network capacity to accommodate a significant increase in traffic. Third, we need to move to an All-IP architecture – to implement IP for all the network layers, from backbone to access layers, for both mobile and fixed networks. During this transition, IPv6 is inevitable, as it will enable us to deliver IPv6 addresses to every customer and every machine.

WinWin: To expand your 3G network to nationwide coverage must be challenging in a country as big as France. How are you going to do this in a cost-efficient manner? And how much longer does Bouygues Telecom plan to prioritize UMTS and HSPA?

Guetin: You are right. The remaining 15% of coverage will be the most expensive to achieve, as we plan to cover more rural areas. To accelerate the expansion of 3G services in France, we have signed an agreement with Orange and SFR in 2010 to share 3G mobile network deployment. This move is key to ensuring the rapid roll-out of mobile broadband, and bringing fast Internet access to customers in isolated areas.

As for the choice of technology, we believe HSPA+ can offer sufficient capacity over the next three years. So we don't need LTE for capacity purposes before 2014. When it comes to the decision to deploy LTE, it will depend on our competitors, handsets and other factors.

WinWin: What are your priorities in the area of fixed network infrastructure development? Is there a plan for similar joint investment in the fixed infrastructure area?

Guetin: Today, we offer fixed access through DSL and cable. In the coming years, we will put a lot of investment into FTTH. As FTTH deployment is very expensive, Bouygues Telecom and SFR have agreed to a joint initiative to share costs of FTTH passive infrastructure in major French cities.

The joint investment will see us sharing investments and pooling the horizontal portion of the optical fiber

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network deployed between the central offices and each building. As for the technical aspect, we plan to employ GPON rather than P2P Active Ethernet fiber technology. However, the agreement only covers the passive elements of the network, leaving the carriers free to compete using differentiated service offerings. The French regulator ARCEP has endorsed the agreement and praised Bouygues for our 'dynamic' approach to providing broadband.

WinWin: Talking about the operator's fixed-mobile convergence strategy, what are the current challenges you face from the network perspective, and how are you planning to tackle these?

Guetin: As we acquired an external fixed network in 2008, we had to link both telecom sites between fixed and mobile networks. Since the POPs of both networks will be linked, we will be able to build a common backbone. That means IP MPLS plugged in on an optical loop, with WDM and P Router. The aggregation network, mainly the PE router and PTN network, is quite different due to different geographical and physical sites.

WinWin: We know you started very early in fixed mobile converged services by launching the country's first quad-play offer, and it is very popular. In your opinion, what has made the product so successful?

Guetin: In May 2009, we introduced the all-in-one solution, with Ideo being the first quadruple play offer in the market. The service was launched with an offer comprising high-speed Internet access, TV with up to 90 channels, unlimited fixed telephony and a mobile phone service, for the relatively low price of EUR45 per month.

One year later, we continued to lead the way in the fixed mobile market innovation by launching Ideo 24/24, the first all-in-one offer to include unlimited calls to all operators, 24 hours a day – virtually the first totally unlimited fixed-mobile plan on the French consumer market. Also, we have introduced a very-high-speed offer – up to 100Mbps – with access to 3.3 million connection points.

I would say the unique feature of Ideo is value for money, as it offers significant savings for our consumers and enhances the company's brand image in the French telecom market. But if we want to absorb this low price, we need to have a competitive cost structure. To provide good coverage and capacity with a low price, we need to be innovative.

WinWin: Can you give us a few examples on how you are keeping the costs low?

Guetin: For example, on the mobile network, we are deploying 900MHz bands for 3G as far as we can. At the same time, we are actively transforming the network to IP and Ethernet. We are moving from SDH microwave to optical fiber at the aggregation layer, called long haul microwave. At the access layer, we are upgrading our microwave and our NodeBs to Ethernet. By moving from TDM to Ethernet, the costs can be reduced.

WinWin: Talking about mobile services, how has your mobile data traffic growth been, and what innovative solutions have you employed to cope with the growth?

Guetin: The handset market is evolving. The middle market is shrinking. Now we have smartphones at one end, and feature phones at the other end, each accounting

for half of the total. The traffic from smartphones has multiplied by three times in 2010. This is a big challenge for us.

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Image compression is a good example. We compress images very carefully, so that the end user sees no difference at all in terms of quality of image. As the page is lighter, the download is more fluent; it reduces network traffic and is less expensive for us. So it's a win-win for both us and our customers. We are going to do video compression this year in the same manner.

WinWin: It sounds like you place a lot of emphasis on end user experience. What are the main technical concerns and challenges you face in this regard?

Guetin: When you talk about web browsing, the Quality of Experience is not so much depending on throughput, but more on latency of the network, on the quality of the handset, on the web browser you use…We pay attention to all these technical issues. For example, you can have a very good network, but if the CPU of the handset is too weak, the end user experience will be bad, and customers will blame the operators anyway.

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