

ORANGE

dreams come true

After many years in business, and a massive operational effort, Orange now ranks fourth in the world and number two in Europe as a full-service operator. Meanwhile, the cooperation between Huawei and Orange has moved into the fast lane.

By Zhao Yuan Editor: Li Xuefeng xuefengli@huawei.com





In Paris, London, Belgium, and even Egypt, you will find the uniform service brand of France Telecom–Orange, which has built its brand loyal customer base on outstanding and responsive services. After many years in business, and a massive operational effort, Orange now ranks fourth in the world and number two in Europe as a full service operator. Orange has distributed its mobile networks in 23 countries, covering 110 million subscribers and operating the biggest 3G network in the world.

Story behind the glory

France Telecom has consistently been regarded as highly innovative among the world's leading telecom operators and launched its three-year transformation strategy named "NExT" in June 2005. They have made great strides ever since. In 2007, France Telecom's annual sales revenue was EUR52.9 billion, which was an unprecedented amount of income.

NExT is focused on mobile broadband service and subscriber numbers continuously rise. In 2006, there were 5.8 million Orange mobile broadband users, compared with 1.6 million users in 2005.

The number of broadband users kept streaming upward in 2007 and net profits increased by 52% compared to 2006.

It is Orange's diligence that has brought those remarkable numbers. As one of the most powerful operators in terms of research and development in Europe, Orange knows quite well that network transformation is the most direct and most effective support to service transformation.

Success in transformation depends heavily on deployment of advanced networks that can smoothly evolve in the future. Success of mobile broadband service is also inseparable from advanced networks, especially for the high-speed data service. To smoothly develop mobile broadband service, strong co-operative links in the chain are indispensable.

Orange has stringent standards when it comes to choosing strategic equipment suppliers. Its partners must be leaders in the technological fields, stable and resourceful enough to cooperate on a long-term basis.

In early 2006, Orange launched the re-bidding for the 3G RAN project, which was to be held every three years. Based on strict testing procedures and whole-process auditing, the capacity test results showed that Huawei's HSDPA, high-speed railway

“The Orange dream of providing a whole lot more advanced communications services to more people all over the world is coming true. The popularity of the brand shows the positive response from users.”

coverage, and power amplification efficiency were all beyond the expectations of Orange's R&D department. Due to excellent product performance and distinctive HSPA solution, Huawei beat the competition and a successful co-operation between Orange and Huawei began.

Initial success in mobile broadband

The previously used 3G network could not meet the requirements for mobile broadband service development, so in December 2006, Orange Romania decided to swap its 3G network. As the sole supplier, Huawei changed and constructed thousands of 3G base stations in more than 30 cities for Orange Romania.

Upon completion of the whole network, multiple KPI values of the Orange Romania network surpassed those of the former network (e.g., the success rate of 2G/3G handover in the new network was up by 5%). The customer satisfaction rate was also markedly higher. The new 3G network elevated the subscription base up to 10 million in March 2008 for Orange Romania, which reinforced the Group's trust in Huawei.

Similarly, the second largest operator Mobistar (Orange-owned) in Belgium also faced the problem of having to relocate the former 3G base stations. The focus was especially on Brussels, capital of Belgium, home to the European Union, and HQs of multiple international organizations. Many high level international meetings of all sorts are

held in Brussels each year, so ensuring high-quality mobile communications service is a top priority for Mobistar.

Based on a detailed survey and a careful plan, Huawei implemented the new radio network conforming to the local environmental conditions. Older network equipment was replaced with the new distributed base stations, lowering the call drop rate, enhancing the network stability, and improving the throughput capacity of the system bandwidth.

For the first time, Orange Belgium realized end-to-end All-IP after the new 3G network was set up. The end-to-end All-IP provided users with abundant services, such as mobile broadband, VoIP, and CMMB, and met the requirements for high-speed mobile data service during the F1 Belgian Grand Prix.

The NExT strategy has been successful from the beginning and Orange has officially started the strategic partnership with Huawei.

Pursuing green

Environmental protection, energy conservation and emission reduction lower operational costs while showing social responsibility. Besides new services for the high-quality network users, Orange is also actively responding to the EU's Green Action Plan and diligently taking green actions.

Because of its large number of users and sizeable income, the sub-network in Poland ranks among the top four in the Orange Group (the others:



England, France, and Spain).

The old mobile network created a lot of pressure for Orange Poland due to the large sizes of base stations, high power consumption, and high total cost of ownership (TCO). The CEO of Orange Poland attached great importance to technical innovation and wanted development of the 3G network and HSPA. Nevertheless, the former equipment simply could not satisfy their needs in terms of HSPA performance and network evolution.

Orange started to test the RAN10.0 with Huawei in 2007. Comparing the former base stations with Huawei's with the same configuration, Orange found that the power consumption of Huawei's base stations was 30% lower than the base stations they were previously using. Then the news came that Huawei had successfully swapped this kind of base station for Vodafone Spain and the KPI substantially rose. Orange chose Huawei to adjust and expand its 3G network in Poland.

During construction, advantages of the distributed base station were obvious. The large-sized micro base stations of the old network must be installed by using a crane which costs EUR1800 each time. The distributed base station features a small size (1/3 of the former base station) and is lightweight, making it portable, easy to install by hand.

Meanwhile, prices started soaring after Poland joined the EU. Leasing costs for the equipment

room and electricity also rose. It was a timely implementation as the small size and low power consumption of the distributed base station effectively lowered the construction and O&M costs.

All base stations adopt the same type, configuration, and software. The BBU of the distributed base station can be integrated to the cabinet of the 2G base station, which integrates the resources, eases the O&M, and lowers the operational expenditure (OPEX).

The newly constructed 3G network is also outstanding in the HSPA capacity. Orange is the first operator to provide commercial HSUPA services. In a few months, Orange quickly took the leading position for 3G data service providers in Poland. User numbers increased by 20%, ranking first in Poland and the ARPU for data downloading doubled, strengthening their competitiveness.

Thereby, Orange Poland's CTO specially sent a thank-you letter to Huawei's project team. And Ms. Grazyna Piotrowska Oliwa, Chairman & CEO of Orange Poland highly lauded Huawei. "We believe that Huawei can enable us to implement the most modern telecommunications technologies and provide high quality networks and services, while significantly reducing the total cost of ownership," said Ms. Grazyna Piotrowska Oliwa. "This contract recognises Huawei's commitment to helping PTK Centertel to achieve its strategic objectives."

Orange is pretty confident about the network's smooth evolution in the future. With the open modular structure, the distributed base station of Huawei features rich functions, easy upgrades and respective evolution between the baseband and the RF. Meeting the LTE development requirements of the 3G network and ensuring advancement of the network in Poland should not be a problem in the future.

The Orange dream of providing a whole lot more advanced communications services to more people all over the world is coming true. The color orange is bright, warm, and optimistic; the popularity of the brand shows the positive response from users. Huawei is an important partner and has co-operated with Orange in constructing 17 sub-networks. With development of the Orange brand all over the world, the successful partnership between Orange and Huawei will surely grow as fast as orange blossoms on a sunny day. 