"World IPv6 Day": Orange plans ahead and prepares for the new internet protocol

- On 8 June Orange will take part in "World IPv6 Day" as part of preparations for the move to IPv6 and to encourage the internet industry and web users to use the new protocol.

- As a result of the continuing growth of the internet, the stock of available IPv4 addresses has been gradually depleted: the transition to IP version 6 is the only lasting solution to make up this shortage.

- In 2008, faced with the shortage of IPv4 addresses, Orange launched a plan to introduce IPv6, covering network hardware, service platforms, the information system and address management rules, thus becoming the first operator to launch an IPv6 VPN solution for businesses, in May 2009.

Orange takes part in "World IPv6 Day"

On 8 June, Orange will take part in World IPv6 Day, sponsored and organised by the Internet Society (ISOC). This event, designed to motivate the internet industry and web users to use IPv6, will provide an opportunity to assess the maturity of IPv6 deployment on the internet in real conditions. It will give the industry a chance to implement tools to measure IPv6 traffic on the internet network, quantify the number of requests for access to servers hosting content accessible via IPv6, and so on.

Orange will be making a range of contributions to the trial day, including providing content accessible via IPv6, deploying IPv6 networks and conducting initiatives to raise awareness of IPv6 use, both internally and externally. For example, Orange Business Services will provide IPv6 access to its website dedicated to business customers for the entire 24-hour duration of the "World IPv6 Day".

IPv6 is the cornerstone of internet service development at Orange. For this reason, the Group's IPv6 strategy (deployment as part of a programme launched in May 2008) is central to the development of the Group's networks as part of its "Conquests 2015" project.

Orange's IPv6 programme to plan ahead and prepare for the change of protocol

IPv4 addresses, which have been used by network-connected devices (such as ADSL routers and smartphones) since the early days of the internet, have now almost all been allocated. This depletion has driven the transition from IPv4 to IPv6 (Internet Protocol version 6), the latest version of the internet protocol (a protocol is the language which machines use to communicate with each other).

Over two years ago, in order to anticipate the global shortage of IPv4 addresses and prepare for the deployment of IPv6, Orange set up a dedicated programme to define and implement the Group's strategy for the roll-out of the new protocol across its network and service infrastructures. The IPv6 programme covers fixed and mobile environments, and the residential and business markets, in all Orange countries worldwide. IPv6 is already operational in the business market, and a three-phase deployment schedule is planned for the residential market (introduction: 2008-2009, service migration: 2009-2012 and live release: 2012 and beyond) depending on the estimates of address shortages made by the Group's different entities.

The introduction of IPv6 is complex, both in terms of the technology involved and from a project management perspective. As with other far-reaching programmes, such as the transition to 10-digit phone numbers in France in 1995, and the introduction of the Euro, there is a vast array of hardware and IT applications to check and modify. It is therefore necessary to conduct trials and to take stock of the hardware and applications concerned.

IPv6 deployment on the internet is complicated because the IPv4 and IPv6 protocols are not compatible with each other. A transition phase is in progress using hardware capable of processing IPv4 and IPv6 traffic interchangeably. This phase will last several years because, unlike other major projects, the move from IPv4 to IPv6 is not scheduled to take place across the board at a precise date and time.

Deployments and tests under way at Orange

The Group began IPv6 activity in 2010 in Belgium, France, Moldova, Poland, Romania and Senegal, and pilot deployments in these countries will continue throughout 2011. France performed a trial in collaboration with around one hundred internal testers equipped with prototype IPv6 Liveboxes. In terms of mobile technology, Orange France has also successfully tested IPv6 connectivity. Other Orange countries will conduct tests throughout 2011, including Cameroon, Côte d'Ivoire, Mauritius and Spain.

For business market customers, who need to plan ahead for this new protocol, in order to facilitate their business development (especially for the Asian market), Orange Business Services launched an IPv6 VPN (Virtual Private Network) service in May 2009. These services comprise six stages: inventory, technical design, security, transition strategy, setting up a project team, and implementation.

The benefits of IPv6

By using 128-bit rather than 32-bit addresses, IPv6 offers many more addresses than IPv4 (billions of billions instead of four billion).

As such, the new IPv6 version of the internet protocol is characterised not only by almost unlimited addressing capacity, but also by automated configuration capabilities (plug&play) making internet access simpler and more effective.

In addition, IPv6, which also offers security benefits, can be regarded as a catalyst for the development of new services. These include machine-to-machine communications, which will make it possible, for example, to monitor a domestic lighting system remotely or quickly detect movement or smoke at home.

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for business customers:
Orange Business Services will provide IPv6 access to its *www.orange-business.com* website
for the entire 24-hour duration of the "World IPv6 Day"!

About Orange

France Telecom-Orange is one of the world's leading telecommunications operators with 170,000 employees worldwide, including 102,000 employees in France, and sales of 11.2 billion euros in the first quarter 2011. Present in 35 countries, the Group had a customer base of 215.9 million customers at 31 March 2011, including 141.6 million customers under the Orange brand, the Group's single brand for internet, television and mobile services in the majority of countries where the company operates. At 31 March 2011, the Group had 156.7 million mobile customers and 13.9 million broadband internet (ADSL, fibre) customers worldwide. Orange is one of the main European operators for mobile and broadband internet services and, under the brand Orange Business Services, is one of the world leaders in providing telecommunication services to multinational companies.

With its industrial project, "conquests 2015", Orange is simultaneously addressing its employees, customers and shareholders, as well as the society in which the company operates, through a concrete set of action plans. These commitments are expressed through a new vision of human resources for employees; through the deployment of a network infrastructure upon which the Group will build its future growth; through the Group's ambition to offer a superior customer experience thanks in particular to improved quality of service; and through the acceleration of international development

France Telecom (NYSE:FTE) is listed on Euronext Paris (compartment A) and on the New York Stock Exchange.

For more information (on the internet and on your mobile): www.orange.com, www.orange-business.com, www.orange-innovation.tv

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For further information about IPv6 solutions for businesses by Orange Business Services: *http://www.ipv6.orange-business.com/*

Press contact:
Elizabeth Mayeri, Orange Business Services, elizabeth.mayeri@orange-ftgroup.com, +1 212 251 2086
Héloïse Rothenbuhler, Orange, service.presse@orange-ftgroup.com, +33 1 44 44 93 93