Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

02-Dec-2014

English - Or. English

DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE

DAF/COMP/WP2/M(2014)2/ANN3/FINAL
Unclassified

Working Party No. 2 on Competition and Regulation

EXECUTIVE SUMMARY OF THE ROUNDTABLE ON FINANCING OF THE ROLL-OUT OF BROADBAND NETWORKS

16 June 2014

This Executive Summary by the OECD Secretariat contains the key findings from the discussion held during Item IV of the 57th meeting of Working Party No. 2 held on 16 June 2014.

More documents related to this discussion can be found at http://www.oecd.org/daf/competition/financing-of-roll-out-of-broadband-networks.htm.

Please contact Ms. Cristiana Vitale if you have any questions regarding this document [E-mail: cristiana.vitale@oecd.org].

JT03367728

Complete document available on OLIS in its original format

English - Or. English

EXECUTIVE SUMMARY

By the Secretariat[*]

1. Considering the discussion at the roundtable and delegates' written submissions, several key points emerge:

(1) Nationwide broadband coverage is considered essential for the economic and social development of a country. Ubiquitous access to broadband is therefore a key element in many OECD (and non-OECD) countries' digital agendas and national broadband plans.

2. Widespread high-speed internet access is seen as crucial to economic growth and social inclusion. The World Bank, for example, estimates that a 10% increase in broadband penetration in developing countries brings a 1.3% rise in GDP. Consequently, given the role of broadband as a trigger for social and economic development, many countries across the world have adopted national broadband plans and digital agendas to stimulate the deployment of broadband. Digital agendas regularly stress that broadband should be available to all citizens, not only to those in urban centres with comparably higher incomes. National broadband plans, which tend to have narrower scope than digital agendas, typically focus on a national blueprint for the roll out of infrastructure. Often, such agendas and plans set rather ambitious targets that are typically expressed in terms of population or household broadband internet coverage, as well as in terms of minimum speed to be guaranteed. For example, the European Commission's digital agenda aims for 100% population coverage with a broadband connection of at least 30 Megabits per second by 2013 and at least 50% households coverage with a broadband connection of at least 100 Megabits per second by 2020 in each EU country.

3. It is important to stress that there exist strong regional variations with respect to the definition of broadband. For example, the baseline definition used by the OECD refers to an internet connection that allows the transmission of data with a rate of 256 Kilobits per second, which is rather low considering what technology can now achieve. But this definition was developed more than a decade ago. While some countries are keen to revise this definition and increase the baseline speed, at the moment such revision is unlikely. This is because of the cost that providing widespread access at a higher speed would imply for many countries, especially in the developing world.

(2) The roll out of optical fibre to deliver fast broadband is commercially viable only in very densely populated high-income areas. Hence its nationwide deployment is likely to require some form of government funding. Accordingly, the key challenge that countries have been facing is how to ensure broadband roll-out across all of the country, while preserving private incentives to invest.

[*] This Executive Summary does not necessarily represent the consensus view of the Competition Committee. It does, however, encapsulate key points from the discussion at the roundtable and the delegates' written submissions.

4. The roll out of optical fibre broadband by private investors is commercially feasible only in dense urban areas with high income and high demand. Even so, as the example of the Netherlands suggests, it may take 20 to 30 years before the investments in fibre-to-the-home (FttH) are recovered. In order to limit the risk involved in such long term investments some private operators may try to actively "build" and stabilise demand, e.g. by gaining commitment from customers through long-term contracts.

5. In areas where demand is low, the roll out of broadband by private investors is unlikely. Consequently, other forms of financing are being used to ensure that these areas are not left out, such as:

- direct subsidies (i.e. the EU, the U.S, Chile);
- indirect subsidies, like favourable interest rates or tax breaks (i.e. Japan);
- public private partnerships (i.e. Mexico, this option is also being evaluated in Italy), and
- publicly built (wholesale) networks (i.e. Australia).

5. When subsidies are provided the main question is how to ensure their best allocation without adversely affecting the incentives of private firms to invest. For example, granting a subsidy to an operator to build a second infrastructure where a first one has already been deployed with private funds may seriously reduce the value of the investment already incurred. Also the provision of subsidies for building an infrastructure may crowd out private investments.

6. Some jurisdictions have developed rigid criteria for granting subsidies to ensure that the public sector gets involved only when necessary. One example is the EU. The EU broadband guidelines have clearly set out rules that limit the provision of subsides for broadband roll-out. The Guidelines distinguish 3 types of geographic areas that the national authority granting subsidies needs to identify:

- White areas, where subsidies can be provided. These are areas that have no broadband services and where network expansion by private investors is not expected for at least 3 years.
- Grey areas, where subsidies can be granted but only under specific circumstances. These are areas where one network operator is present and another network is unlikely to be developed in the near future. State support in grey areas is justified if no affordable or adequate services are offered to satisfy the needs of citizens or business users and if there are no less distortive measures available (including ex ante regulation) to reach the same goals.
- Black areas, where no subsidies are allowed. These are geographic areas in which at least two broadband network operators are active.

7. Furthermore, the guidelines contain a number of other conditions that seek to limit the distortion that subsidies for broadband roll-out can cause to competition. For example, subsidies have to be granted through an open tender process, technological neutrality has to be respected, and wholesale third party access has to be allowed at regulated prices.

8. The Chairman of the Roundtable considered that the impact that subsidies can have on incentives to invest as well as the asymmetry of information that exists between regulatory authorities and market players should be taken into greater consideration when deciding about public intervention in broadband.

9. Another example of public intervention that has been extensively discussed is that of publicly funded broadband networks. In Australia, for example, the government has established and is financing a company whose aim is to roll out a broadband network that would reach all citizens. This network should

simply provide wholesale connections, while retail services to consumers will be provided by competing private operators. This model is different from the old-style vertically-integrated monopolistic provider of publicly funded services, which would have also provided retail services.

(3) As technology evolves the cost of providing broadband access also in more remote and/or less densely populated areas may decline. This means that subsidies and other forms of state intervention that seek to ensure the deployment of broadband may become unnecessary to achieve the objectives set in national broadband plans and digital agendas.

10. Due to technological progress high speed broadband access can now be provided through a variety of means, such as optical fiber and wireless networks. For example, a DSL copper network can be upgraded by rolling out fibre to sub-loops (or further) and by 'vectoring'. Cable networks can achieve higher speeds through special transmission techniques such as DOCSIS) or 'node splitting'; where new elements are added to the existing infrastructure in order to serve subscribers through multiple nodes.

11. Since high speed could be achieved through a variety of technologies, objectives regarding the level of access to high-speed connections are increasingly formulated without reference to any specific technology. Indeed, the experts present at the Roundtable have stressed that governments should be cautious when deciding whether to commit public funding to the roll out of a specific broadband infrastructure as they may not be able to pick the "winning" technology.

(4) Infrastructure competition is likely to lead to better market outcomes than when only one network is available. However, the presence of several parallel infrastructures can in many instances be unprofitable.

12. The presence of parallel competing infrastructures usually stimulates investment. For example, in the Netherlands the existence of two networks with national coverage has led the Dutch incumbent KPN to roll-out an optical fibre network (next to upgrading its existing copper network). This, in turn, has pushed the cable operators to further upgrade their networks. Similar examples have also been brought by Switzerland and Germany. It is interesting to note, however, that only recent technological changes have made this kind of competition between infrastructures possible.