

Opinion from the Stockholm region regarding the European Commission's Public Consultation on the Needs for Internet Speed and Quality Beyond 2020

Behind this opinion stands the Stockholm Region Association for European Affairs (SEF)¹, which represents one of Europe's most competitive and sustainable regions. The Stockholm region accounts for around 45% of GDP in Sweden and has a population of over 3.6 million people, representing nearly 38% of the entire population of Sweden.

The Stockholm Region welcomes the consultation of the EU Commission and the opportunity now given to communicate to the Commission our views and experiences on the broadband goals after 2020 for the EU and for the Stockholm Region – and also what measures that can be taken by the EU in order to ensure that everyone can profit from the digital economy and the digital society.

Summary

The EU and its member states are currently at a critical crossroads regarding how to enhance the incentives for increasing investments in fibre networks, and, not least, how to ensure that access to these networks can be provided on open and competition neutral terms in order to create a free and fair competition. The fibre networks can best be illustrated as the freeways of the future digital society and an increasing demand for higher speeds can be expected as the fibre networks are expanded and the accessibility to fibre network broadband is increased. EU's target after 2020 should be symmetrical high-speed objectives and 1 Gbit/s.

As only fibre technology fulfils the requirements of symmetrical speeds, the EU should reconsider its position on technological neutrality. This applies especially with regard to state aid, in order to ensure that publically financed network infrastructure is secured for the future and, when needed, can be used also by the public sector's future welfare services, such as transmitting high resolution images within telemedicine.

Access to high speed broadband is crucial for society and the matter is consequently no longer an issue in the interest of only a limited number of players within telecom. The fibre networks are yet insufficiently expanded in all of Europe and an expansion cannot be enforced through regulatory intervention. A main issue in connection with the escalating expansion of fibre cables and its gradual replacing of copper networks is how to avoid that a single player gains control of the fibre infrastructure, in the same way as has been the case with copper infrastructure. Infrastructural competition among local players in Sweden has shown to have a positive impact on the former incumbent's fibre expansion all over the country.

¹ The City of Stockholm, the Stockholm County Association of Local Authorities and the Stockholm County Council, as well as other members, Uppsala Regional Council, Sörmland Regional Council, Västmanland Association of Local Authorities and County Council, the Council for the Stockholm-Mälar Region and Gotland Region.



As new fibre networks are being expanded, a unique opportunity is provided to separate the basic infrastructure from the services. The EU should therefore support the emergence of non-vertically integrated players, such as municipalities and regions, and while reviewing the EU acquis, consider particularly the future finances of the public sector and the welfare profits in a digital society. The EU should therefore promote that municipalities and public sector as a whole can use one and the same fibre network on which digital services can be procured. Such a scenario would endorse the economizing of resources within publicly financed activity and would at the same time also serve the purpose of promoting competition, innovations and development of services by giving numerous players the opportunity to participate in the future digital production. It is also imperative that the information possessed by the public sector is not allowed to be "locked up" in the bundled offers of vertically integrated operators. The information within the public sector can most likely be expected to carry a great socioeconomic value by forming an impetus for innovation and service development. Accordingly, the EU should ensure that the control and disposal of public information remain in public possession so that everyone can access it as open data.

Electronic communications for a digital market and a digitalized society

Access to basic fibre infrastructure is a strategic prerequisite for the digital economy and the development of the digital society. Investments in fibre infrastructure will be imperative for the EU's global competitiveness during at least 20 – 30 years ahead. Experience from other terrestrial infrastructures has shown that such infrastructures have very long durability, sometimes between 50 - 100 years. The major investments required to accomplish a well-developed fibre infrastructure all over EU should therefore be regarded from a very long-term perspective. The EU and its member states are presently at a critical crossroads regarding how to enhance the incentives for increasing investments in fibre networks and, not least, how to enable the offering of these fibre networks on open and competition neutral terms in order to create a free and fair competition.

Fibre infrastructure will form the foundation of, not only the households' and businesses' use of broadband services, but also for the enabling of development of future smart services. The future fibre networks must accordingly be designed with the capability to carry the digital care and welfare services of the public sector, as well as other smart services, of both private and public nature. This requires that the speeds in the electronic communications are symmetrical, which means that the networks can carry the future's digital services with the same high capacity during downloads as well as uploads. The target of the EU's future updated digital agenda should therefore be that the broadband speed is symmetrical. Fibre meets the demand for unlimited capacity in respect of both downloads and uploads. Thus, it is only the fibre technique that fulfils the requirement of symmetrical speeds. The EU should consequently also review its position on technological neutrality. This applies especially with regard to state aids, in order to ensure that publicly financed network infrastructures are future-proof and when required also can be used by the public sector's future care and welfare services, such as transmitting high resolution images within telemedicine. The decisions made now can either create the foundation for good competition and diversity regarding



end user services, or they can risk leading to a monopoly situation for fibre infrastructure, which will then to a large extent be similar to the market in the area for copper.

Over the last 20 years, copper infrastructure has begun to gradually be replaced by fibre infrastructure. In Sweden, this was initially driven by municipally owned so-called city-networks, but more recently also TeliaSonera and players such as IP-Only, being driven by the competitive pressure from the city-networks, have made extensive investments in fibre.

A central issue in connection with the escalating expansion of fibre and its gradual replacing of copper networks is how to avoid that one single player gains control over the fibre infrastructure in the same way that has been the case with copper infrastructure. The fibre networks are insufficiently expanded throughout Europe and an expansion cannot be enforced through regulatory intervention. Access to broadband with higher speed is crucial, no longer only to a limited number of players within the telecom sector, but rather has the character of an issue for society in general. The infrastructural competition from local players in Sweden has shown to have a positive impact on the former incumbent's fibre expansion all over the country. Market models focused on ensuring access to fibre-based wholesale products on equal and competition neutral terms have proven to, in addition to stimulating competition on service level, also stimulate the former incumbent to invest in fibre to the buildings, unlike other former incumbents in other member states. In that way, the coverage ratio of the fibre networks has increased substantially in Sweden. It should be noted that a consolidation of the European telecom market as such might increase investments in NGA-networks, but at the same time risks that fibre infrastructure becomes dominated by a few vertically integrated players whose intentions are not primarily the securing of fibre based wholesale products on equal and competition neutral terms. Such a scenario would result in a lower degree of competition on service level and have a negative impact on the households' and businesses' freedom of choice.

The role of the public sector

The fibre networks are the freeways of the future

A long tradition of co-using terrestrial infrastructure has moulded Swedish municipalities' views on fibre networks. They are regarded as any other terrestrial infrastructure, such as roads and railways. The fibre networks can thus best be perceived as the freeways of the future digital society. Expansion of fibre networks is, like all other terrestrial infrastructure, initially expensive. Long-term actions aimed for networks to be co-used by multiple players, private as well as public, consequently creates good conditions for the financial challenges that the entry into the digital society initially poses. Especially the public sector's financial challenges should be noted. It is whilst entering into the digital society that it is possible to create the very structures that will eventually limit the costs.

The market model established by the Swedish city-networks is aimed at having as many users as possible of the same basic fibre infrastructure on equal terms. By leaving the fibre infrastructure open, the investment costs can be shared by all players using the infrastructure (Asset sharing).



When new fibre networks are being expanded, a unique opportunity is provided to separate the basic infrastructure from the services. This way, the same basic fibre infrastructure can be "frequented" by everyone, which also enables a lower cost for digital services that are publicly financed, compared to multiple players supplying these services on their own networks, alternatively, that a private monopoly is established. It should be noted that if this type of competition should be achieved through regulatory measures, substantial cost and practical difficulties often arise, since the network design is not adapted to meet the needs of a large number of players. The EU should therefore promote the emergence of non-vertically integrated players, such as municipalities or regions, and whilst reviewing the EU acquis it should particularly consider the future finances of the public sector and welfare profits in a digital society.

The buying power of the public sector should be used to stimulate the development of the digital society

The public sector is a large buyer of services, which also means that its procurement of smart services can be a stimulus for the development of services and innovations during the emergence of the digital society. The development of smart services in the public sector requires efficient use of resources. To bundle the public sector's welfare services and other smart services with the infrastructure is not efficient and will basically result in all services being supplied by only a few large vertically integrated players. If the digital services are procured separately the purchaser will pay for the infrastructure at every purchase. Experience from the Swedish city-networks show that supply of fibre-based wholesale products on equal and competition neutral terms, enables a variety of players to offer niche services. The EU should consequently promote municipalities and public sector as a whole to use one and the same fibre network where the digital services can be procured. Such a scenario would support good economizing of resources within the publicly financed sector, whilst also serving the purpose of promoting competition, innovations and service development by giving numerous players the opportunity to participate in the future digital production on an open platform.

It is also imperative that the information held by the public sector is not allowed to be "locked up" in the bundled offers of vertically integrated operators. The information within the public sector can most likely be expected to carry a great socioeconomic value by forming an impetus for innovation and service development. The EU should thus ensure that the control and disposal of public information remains in public possession so that everyone can access it as open data.

Future need of broadband capacity

A strong demand for high-speed broadband subscriptions is particularly characteristic for Sweden. Sweden is also one of the best nations when comparing prices between EU's member states as regards measuring the use of high speed broadband. A major contributing reason for this is that Sweden has a comparatively large supply of fibre infrastructure from other players than the SMP. The access to fibre has, through local political initiatives and the establishment of Swedish municipal



district networks (city-networks), promoted competition on both infrastructural level and on service level. A multitude of broadband operators have established themselves on the market and are offering their services for reasonable prices. This means that consumers and businesses have gained an increased freedom of choice between services and suppliers enabling them to choose the best solution for themselves, taking into account the ever-increasing demand for accessibility.

It can be expected that even higher speeds will be demanded as the fibre networks are expanded and access to fibre based networks increases. The EU target after 2020 should be symmetrical broadband speed, in order to be able to meet the society's needs in respect of care and welfare services, and also to meet the new needs that are starting to emerge as broadband speed increases. 1 Gbit/s is thus a realistic goal for the time after 2020. On the Swedish market it is apparent that an increasing number of households are turning to fibre-based broadband, which is now more common than the copper-based xDSL. The Swedish market also shows that those who have access to fibre-based broadband to an even greater extent tend to purchase higher speeds. 68 per cent of this group use 100 Mbit/s or more. Even the Swedish mobile phone market is unique from a European perspective in so far as four operators with three well-expanded 4G-networks operate it. A crucial cornerstone of this development has been the easy access to fibre infrastructure.

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On behalf of the Stockholm Region Association for European Affairs

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