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Stokabs view and comments on the public Consultation on BEREC common position on best practice in remedies in the market for wholesale (physical) network, BoR 12, 104

1 Summary

The member states of the EU are at different stages when it comes to the expansion of fibre and the development of new business models within the market for electronic communication. The development of the telecoms sector in Sweden and the business models for trading within the market for electronic communication differs essentially from the majority of other member states. The national regulatory authorities should therefore, according to Stokab¹, be encouraged to work out regulatory solutions in order to stimulate competition in the best way from existing conditions in each member state. Specific consideration shall thus be taken on how the act of will to invest best can be stimulated for out-building of fibre network as for IT-infrastructure and service development higher up in the chain of value. When drawing up the joint standpoints within the EU for BPR² analysis, conclusions and proposals must reflect all different member states' competition problems. If not, joint standpoints for all member states run the risk of prevent rather than promote investments in fibre networks.

Regulatory solutions which are based on prevailing conditions for the old generations' telecom networks restrain the market development and cement old business models detriment to the possibilities new technique and new business models facilitates. Hence, any obligation decisions shall therefore not at all be issued on markets where fibre exists on open and equal terms.

- Entry barriers and associated competition problems thereof, do not exist at all in business models where fibre exists on open and equal terms. Hence,

¹ AB Stokab is a Swedish limited liability company owned by the City of Stockholm and provides only dark fibre in the Stockholm region in Sweden. The public purpose of the infrastructure and the operation is to stimulate a positive development for Stockholm, by contributing to favorable prerequisites for the development of IT in the region.

² Best Practice Remedies

there are strong motives to treat copper and fibre differently (BP³⁴) in areas where non-vertically integrated operators supply open fibre networks on equal terms.

- FTTH⁴- products, with multiple fibre solutions with at least one fibre per apartment, must especially be considered in the BPR. They create whole new conditions with cost-effective solutions for *several* entering operators and freedom of choice for the consumer. This implies whole new conditions for the network infrastructure market and very good terms for the service development.
- BPR regarding the entering obligation to grant space in duct, (BP9, 12 etc.) has to be revised, emphasizing that the obligation is not motivated when there is access to fibre on open and equal terms.

It is widely accepted that price regulation creates uncertainty regarding which investment conditions that predominately will rule over a longer time period. With an investment in fibre networks a longer period of depreciation requires a long-term capital base. Price regulation thus jeopardizes further network investments. BPR must pay attention to this and discuss cost orientated prices for NGA network separately from what is applicable for copper. A price regulation on dark fibre supplied on open and equal terms would then not be motivated. Moreover, BPR has to reconsider:

- BPR must take into consideration the occurrence of other parallel and competing network infrastructures in access networks such as other operator's fiber networks, open fibre networks, cable (coaxial) and LTE⁵. The opinion that access to local access networks would constitute a bottleneck problem (BP47) in general is incorrect and has to be revised.
- BPR should allege that rules for cost allocation may not risk to reduce the factual cost a fibre network generates, so that the investment as such becomes unprofitable for an effective non-vertically integrated fibre supplier.

2 NGA networks creates whole new conditions for service competition

2.1 Open fibre networks stimulates investments higher up the chain of value

The member states of the EU are at different stages when it comes to the expansion of fibre and the development of new business models within the market for electronic communication. The development of the telecoms sector in Sweden and

³ Best Practice

⁴ Fiber To The Home = FTTH

⁵ Long term evolution

the business models for trading within the market for electronic communication differs essentially from the majority of other member states. A study brought out by Tefficient⁶, an international analysis company, compares the development of the mobile traffic in ten countries⁷. The two countries with the most data traffic per SIM are Sweden and Finland. The access to dark fibre has most likely been one of the crucial factors for the expansion of the mobile networks. The presence of open and competition neutral networks in Sweden thus creates good terms for private investors. This, although Sweden is proportionately sparsely populated and is a small market compared internationally.

National regulatory authorities should therefore, according to Stokab, be encouraged to work out regulatory solutions in order to stimulate competition in the best way from existing conditions in each member state. Specific consideration shall thus be taken on how the act of will to invest best can be stimulated for out-building of fibre network as for IT-infrastructure and service development higher up in the chain of value.

2.2 The competition problem in the "old" generations' telecom networks cannot be applied on open fibre net

Stokab agrees with BEREC that the roll-out of NGA creates prerequisites for the market from whole new dimensions. The European regulation is formed to master the competition problems around a vertically integrated SMP-operator, who originally built its net for own purposes and who's intention was not to facilitate for more than one operator to traffic the network. Entry barriers to the infrastructure are in those models, hence a competition problem which can injuriously affect other operators' possibilities to invest higher up in the chain of value. Entry barriers and associated competition problems do not exist at all in business models where fibre exists on open and equal terms.

It shall thus be especially noted that the existing regulation is formed out of solving competition problems characterized by "old" generations' tele networks:

- Nationally comprehensive copper network.
- Originally state-owned.
- The networks are already built and written off.
- The networks were built for one operator to traffic them.
- The networks owner supplies even today end customer services and because of that compete with its customers at end customer level.

The competition problem this lead to, for example guaranteed access to the networks and advantage in service development cannot be applied on open fiber networks

⁶ Tefficient. Efficiency analysis 6, 2012.

⁷ Ten countries = Germany, France, Austria, the Netherlands, Lithuania, the USA, Finland, Norway, Denmark and Sweden.

which are supplied on equal terms by non-vertically integrated operators. Open fiber networks are characterized by:

- The networks are already from the start built for multiple operators and service providers to traffic them.
- The networks owner strives for as many entering customers as possible, as oppose to the "old" net structure which expects to be trafficked by the one building the network or by a few operators.
- Investors gives the opportunity to form their investment plans out of the knowledge that supply of fibre on equal terms can be guaranteed.

Hence, on places where open fibre networks are to be had on equal terms none of the proposed obligations can never be applied, as the competition problem which presumes to rule does not exist when applying these new business models. This condition has to be illustrated in the common position (CP) that BEREC aims to publish.

2.3 Open fibre network increases the freedom of choice for the consumers

By open fibre networks, the competition on the net infrastructure level becomes of subordinated significance from a consumer perspective since:

- a) Access to dark fibre is secured.
- b) Supply is guaranteed on equal terms.
- c) The networks are supplied by non-vertically integrated fibre suppliers.

The market dynamic is promoted by new actors being stimulated to enter in to the market, not only a few but hundreds, which pushes on the service development and stimulates the competition. In Stockholm the model has resulted in very low prices in comparison to international ones⁸ and attracted many operators, over 100 operators and service providers. In addition hereto, another customer segment approx. 700 customers (companies and organizations) whom wish to buy dark fibre from one operator and the services from other operators.

Hence, there are strong motives to treat copper and fibre differently (see BoR (12) 104, point BP4) in areas where non-vertically integrated operators supplies open fibre net on equal terms. The competition problems which can be identified in the copper networks do not appear in open fibre networks supplied on equal terms. Hence, it can therefore not be motivated to issue any obligation decisions at all on such a market.

Joint standpoints for all member states' obligation decisions, that do not consider the different conditions which after all do exist, run the risk of enforcing regulations that restrain fibre expansion and the development of competition promotional business

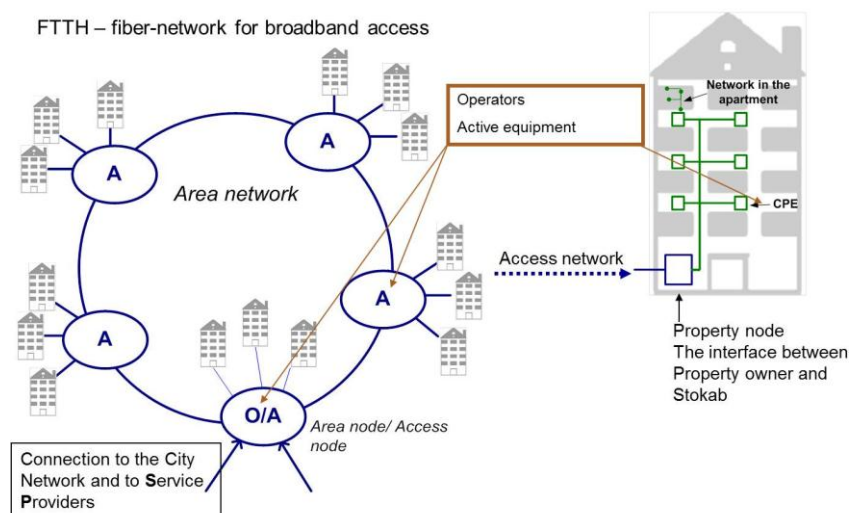
⁸ Company's cost for 100 Mbit/sec-connection. A comparative study between eleven cities by United Minds 2011.

models in member states where the development is far advanced than the average in the EU. If this shall be avoided, BPR must be revised and amended out of the conditions that exist at the presence of non-vertically integrated fibre suppliers who supplies open fibre networks on equal terms.

2.3.1 FTTH⁹-net allows the consumer to make direct choices

During 2012, the expansion of Stokab's fibre network all the way to each apartment building will be completed in the City of Stockholm. Approximately 90 per cent of the households in Stockholm will be able to be connected. The FTTH-connection makes it possible for multiple operators to operate in one and the same building. A connection point generally covers approximately 30-40 apartment buildings with approximately 1 000 – 1 500 flats, which creates whole new possibilities for service providers to reach more end users. The best possible conditions for competition in wholesale, in the service level, as well as for the consumers are created, by making the latter be able to make their own direct choices of both supplier and end user service.

FTTH, with a multiple fibre solution of at least on fibre per apartment in the access networks, thus admits cost-effective solutions for entering operators. The technique for fibre based vertical in-house wiring also differs from the older networks, by structural engineering and dimensioning are being adjusted to provide for *multiple* operators.



The existence of FTTH-products with multiple fibre solution with at least on fibre per apartment must especially be analyzed and paid attention to in the BPR. These modern fibre networks create whole new conditions for the product development within the network infrastructure market and thus very good possibilities for the service development on the end customer market.

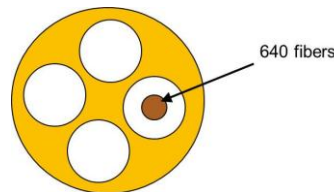
⁹ FTTH = Fiber To The Home

2.4 The regulation prevents new actors to enter the market

BEREC describe the apprehensions about competition problem based on that SMP-operator not supplying suitable wholesale products results in that operators cannot connect their net to the access network of the SMP-operator. Among BPR it is suggested access to duct (BoR (12) 104, point BP9, 12 etc.).

Granting of space in duct limits the number of operators and service providers that can supply services to end customer. The wholesale product, hence, prevents new actors to enter in to the market. The granting of duct gives access to a very limited number of operators and service providers. As maximum a pocketful of four in a duct cable (for reference see figure below) to be compared with, on the same conditions set forth, dark fibre which admits that 1 280 dark fibre pair can be leased out.

Duct that holds four cables of 640 fibres.



Hence, a bottle-neck problem arises when granting access in duct. The space is filled and the last entering operator, i.e. the fifth, is thus denied access. This as opposed to dark fibre based wholesale products in open fiber networks, which in general can be secured for access to all operators on the market, on short and long term. This shows that wholesale products, which were considered suitable in the old tele networks as they can offer access to an additional one or more operator in the access networks, thus are not suitable in the NGA-networks.

Regulatory solutions, based on prevailing conditions for the old generations' networks, will restrain the market development and cement old business models detriment to the possibilities the new technique and the new business models facilitates. BPR, inter alia BP9, 12 etc. must thus be reconsidered, since it is stated that in the NGA-networks with access to dark fibre it can never be motivated to claim access to space in duct.

3 Fair and coherent access pricing

The regulation for cost orientated price determination aims on creating equilibrium between SMP and other alternative operators who compete on the service level. The regulation is formed mainly out of the competition problem, which applies on the old copper networks. Proposed BPR, hence, is not about that non-vertically integrated fibre suppliers can act and compete with the SMP-operator. It brings about effects,

intentionally or unintentionally, for the competition on the network infrastructure market detriment to pure fibre suppliers who supplies open net on equal terms. This is not acceptable and must of course be paid attention to.

According to BP46, cost orientated prices shall *send out right economical signals* to the actors who invest on the fibre net market. This must reasonably apply also in connection to non-vertically integrated operators. Hence, BPR must be amended essentially out of the direction that service competition and investments shall be promoted in the expansion of fibre networks as well as in infrastructure higher up the chain of value.

In BP47 it is stated "*Since local access in most cases causes a bottle-neck...*". The proposal lacks an analysis and conclusion at the presence of other parallel net infrastructures such as other actors' fibre net, open fibre net, cable (coaxial) and LTE (Long term evolution, a standard for wireless communication of high-speed data).

It must be noted in BEREC's joint standpoints, that when the expansion of fibre net takes place under present competition with other network infrastructures, cost orientated price determination never can be motivated;

- a) SMP-operators' fibre and copper network,
- b) Cable (coaxial) network, and not the least,
- c) Mobile operators' LTE.

In areas where multiple parallel infrastructures support the stationary and mobile broadband networks there are very good conditions for competition on the service level and the consumer's right of choice is very well satisfied. On the Stockholm market there are *four terrestrial IT-infrastructure*s which support stationary broadband net, *there wireless LTE-net* which support the mobile broadband net. This gives wholesale access to all in all seven net infrastructures for offers of broadband services. The assertion that access to local access network would constitute a bottle-neck problem (BP47) is thus incorrect and has to be revised.

Stokab would like to point out that fibre infrastructure initially is expensive. The same has in the past applied to other terrestrial infrastructures, such as water- and sewer networks, copper networks and district heating. The cost is, and always has been, high to establish important essential social infrastructure. The investment requires financing, if the establishing of said infrastructure shall be successful. When it comes to fibre networks this is best accomplished, according to Stokab, by competition neutral open networks on the market. In principle, the investment will then be shared by many different parties. This should be noted and accounted for as an example on how spreading of risk can be done in the BPR.

Establishment of fibre-infrastructure in the access network is a heavy investment for the network owner. It should be pointed out in the BPR that joint deployment with other terrestrial infrastructures exist to a very marginal extent in densely populated areas, especially in the access network and in any case in Sweden. The conditions for joint deployment exist only when several parties at on and the same time have the

need of and the financial possibilities to co-ordinate their works. In densely populated areas other basic infrastructure as e.g. central heating, water and streets etc. already exists when fibre based networks have to be built. Therefore, the need for joint deployment – other than to a very marginal extent and then foremost when it concerns areas which are under construction – does not exist. The cost for the expansion of fibre networks can therefore not be reduced to any considerable extent due to joint deployment with other terrestrial infrastructures. It should be noted in the BPR that rules on cost allocation may not run the risk of reducing the factual cost a fibre net generates so that the investment as such becomes unprofitable for an effective fibre supplier.

Analysis, conclusions and proposals in forthcoming BPR shall reflect all member states' competition problems. If that is not the case, joint standpoints for all member states run the risk of preventing, rather than supporting, investments in fibre network.