11 March 2013: Mobile telephony: network sharing and roaming

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Today, the Autorité de la concurrence is issuing an opinion setting out the conditions for network sharing by mobile networks and calling for the gradual and controlled termination of the national roaming arrangement enjoyed by Free mobile.

> Version française

Following a referral from the Minister of Industry and the Deputy Minister responsible for SMEs, Innovation and the Digital Economy, the Autorité de la concurrence is today issuing an opinion on the conditions under which network sharing between operators could be permitted without harming competition and on the roaming arrangement enjoyed by Free.

Network infrastructure competition is a model which must be preserved

Network infrastructure competition, which assumes that each operator relies on its own network, is at the heart of policies for the opening up to competition of the telecommunications sector in Europe and particularly in France.

This model actually makes it possible to pursue several objectives, including the establishment of continual competition between network operators, as well as fostering innovation and product differentiation. This is also the model which stimulates employment and investment the most. In principle, the Autorité de la concurrence is receptive to each network operator rolling out its infrastructure as quickly and as proactively as possible. In itself, this step constitutes a vehicle for merit-based competition.

Questions

At a time when the four mobile network operators are required to invest heavily in fourth generation networks, questions are being raised as to how to reconcile this competition model with the substantial investment requirements which are emerging:

- If a consolidation of the sector through acquisition or a merger of operators were neither possible nor desirable, would, on the other hand, a sharing of the required investment be possible?
- Does the roaming agreement between Orange and Free give the new operator a competitive advantage? Is there a risk that the latter will breach the rules governing true network infrastructure competition with the risk of unbalancing the market?

Network sharing saves costs and improves coverage. It may, under certain conditions, fall within the network infrastructure competition model.

Generally, horizontal cooperation agreements between companies can give rise to substantial economic benefits (cost savings, better coverage, faster roll out, etc.). However, such cooperation can encourage collusive behaviour. Strengthening the position of partners to the agreement may also destabilise the market structure and eventually lead to a competitor being driven out of the market.

Competitive risks vary according to the type of network sharing selected

There are several methods for sharing networks, all leading to a strong integration of the partners to one degree or another. Depending on the arrangement adopted (sharing of passive infrastructure - towers, buildings, roof terraces – or active – electronic "smart" equipment –, frequency sharing) operators' autonomy will be affected to one degree or another and this poses a risk, to a greater or lesser degree, to competition.

The three main criteria for risk analysis

In the first place, the Autorité found that the mobile market continues to display

intrinsic characteristics (degree of consolidation, transparency, stability, complexity, etc.) which present a risk of collusion. It therefore believes that any coordination or production agreement must be examined with great care.
In the light of European case law and guidelines, the Autorité has therefore compiled for this purpose a list of criteria for assessing the impact of such agreements on competition. The main ones are:

- The degree of cooperation between the parties to the agreement: the sharing of passive infrastructure involves little exchange of information between competitors. Conversely, frequency sharing severely limits partners' autonomy and their ability to differentiate themselves in terms of quality of service or coverage. Active infrastructure sharing is, in the Autorité's opinion, somewhere in the middle.

- Market power jointly acquired by partners, which depends on their size, strength and complementarity, as well as the ability of other market participants to respond either individually or collectively.

- The characteristics of the areas covered by the agreement and in particular their population density. In sparsely populated areas, network sharing leads to significant cost savings which enable better coverage of the area. In densely populated areas, however, fewer cost savings can be expected from network sharing.

The Autorité's recommendations

An examination of the different methods of network sharing, according to the criteria laid out above, may result in a number of recommendations. These vary depending on the area.

- Sparsely populated areas or priority deployment areas

  In these areas, and subject to a detailed examination on a case-by-case basis, which is always a requirement, the Autorité de la concurrence does not a priori exclude the possibility of any type of network sharing. However, it believes that frequency sharing agreements should be examined very carefully.

- Densely populated areas

  Densely populated areas are an arena where several operators can operate simultaneously, independently and profitably. The sharing of passive facilities entails little risk in terms of competition since it requires little exchange of information and does not compromise operators' ability to differentiate themselves. It therefore presents no particular difficulties.

  Frequency sharing which eliminates partners' ability to differentiate would undermine the principle of network infrastructure competition and causes the Autorité to have strong reservations.

  Active infrastructure sharing or RAN sharing – which gives operators the ability to differentiate themselves – involves the exchange of sensitive information: it must be controlled and in any case limited. It seems to be risky in very densely populated areas, where network sharing requires the frequent exchange of detailed information regarding subscribers' usage in order to properly size the network. It is, in all probability, less risky in "semi-densely populated" areas, where such exchange of precise information is not so important for rolling out a joint network.

The roaming enjoyed by Free has helped to encourage competition since its entry into the market. It must, however, be limited in time.

The advantages and disadvantages of roaming

Roaming can help to encourage competition, especially by lowering barriers to entry for a new operator. Given the time required to roll out a network, a new operator could not actually make competitive offerings after it had launched if it was only able to rely on its own network; this is due to a lack of sufficient coverage. This is why the Autorité de la concurrence had, in its opinion no. 10-A-13, stressed the need for Free to benefit quickly from roaming, for the time it took to roll out its own network.

However, such roaming must be temporary as it also constitutes a risk to competition. Roaming helps to bring together the services offered by the guest

operator and those of the host operator, based on important competition parameters such as quality of service, rates and coverage. In doing so, it reduces differentiation between operators.
It can also lead to risks to the market structure. In fact, the parties to the roaming agreement are strengthened and the competitiveness of other network operators is, in relative terms, impaired. This can eventually unbalance the market, even more so when the host operator is a major player in the market and when the agreement is entered into over a long period of time and covers a large part of the territory.

The Autorité therefore believes that it should pay particular attention to national roaming agreements, particularly with regard to duration. Close supervision and monitoring of these agreements are necessary, since it is not necessarily in the interest of either the guest or the host operator to terminate a national roaming agreement.

Recommendations of the Autorité in the case of Free

- Regarding 3G roaming

Free signed a national roaming contract with Orange for a six-year period; it therefore runs until 2018. This contract allowed it – and continues to allow it – to complement its own network in terms of coverage and/or capacity. This roaming contract was necessary to allow Free to spark market competition in situations where the coverage of other 3G network operators was already very advanced.

However, if national roaming was a necessary and proportionate response to the problem posed by a new operator, it can only serve such a purpose if it is subject to strict time limits. Roaming costs, coupled with the coverage commitments recorded in the Free licence agreement (75% of the population by 2015 and 90% by 2018) should, in principle, lead to the guest operator themselves requesting termination of the roaming arrangement upon contract expiry, or even before that, without anyone having to intervene. However, the cost-benefit ratio of roaming for the guest operator is not limited to a financial equation and there are a number of reasons why Free may wish to maintain this

arrangement (see paragraphs 223-227 of the opinion).

This is why the Autorité believes the joint intervention of the competition and regulatory authorities is necessary to control roaming: to specify its duration and to establish the methodology for termination.

National roaming must not be extended beyond a reasonable deadline: 2016 – the date of expiry of the right to 2G roaming and opening of the window for termination specified in the roaming agreement between Orange and Free – or 2018 – the expiry date specified therein.

To ensure that this deadline is honoured, the Autorité de la concurrence proposes two initiatives:

- The first, within ARCEP's (French telecoms regulator) scope, is the use of the power conferred on it by State Council case-law[1] , to check without delay whether Free is investing at a sufficient rate to meet its licence obligations.
- The second consists in defining a methodology for the gradual termination of national roaming: this should link the termination of roaming with Free's planned coverage. The Autorité has made concrete proposals to this end (see paragraphs 233 and 234 of the opinion).

- Regarding 2G roaming

Currently, about half of the terminals used by the customers of network operators in the metropolitan market are 2G; this rate varies slightly according to the different operators. Today, the date by which the existing stock of 2G terminals will become residual is not known.

Given the fact that it makes no economic sense to roll out a 2G network, the (controlled) continuation of 2G roaming may appear to be an appropriate response to enable Free to make attractive offerings to consumers with 2G terminals. It must not, however, limit Free's incentive to roll out a 3G and 4G network sized to cover all of its customers' needs: the risk is, in fact, that the fourth operator might use 2G roaming when there is an "overflow", that is to say, when the network has reached its capacity, to meet the voice and SMS

requirements of customers with 3G or even 4G terminals.

The Autorité de la concurrence believes that if 2G roaming should be continued beyond the 2016 licence date, it should be restricted to customers having only 2G terminals.

- Regarding 4G roaming

In the context of the 4G 800MHz spectrum auction, Free put in a bid which was not accepted. However, a failure to obtain such frequencies is a handicap because it increases the cost of roll out, particularly in sparsely populated areas. This is why Free has roaming rights with SFR in priority deployment areas. As of today's date, Free has not yet concluded a 4G roaming agreement.

Subject to an analysis of the facts of the case which is to be carried out, the Autorité de la concurrence would be prepared to accept that roaming could proportionately offset such a handicap in priority deployment areas.

However, the extension of 4G roaming to densely populated areas poses a much more serious problem. Certainly, Free must in all likelihood bear additional costs when rolling out in densely populated areas because it only has high frequencies (2.6 GHz) with a limited ability to penetrate buildings. This handicap, however, results in part from the arbitrage undertaken by Free at the auction of the 800MHz spectrum blocks: if its bid was not successful, it is because it was the lowest bidder in financial terms.

The Autorité de la concurrence is of the opinion that it is undesirable for roaming to be used to compensate for an inadequate frequency acquisition strategy. If it should be found that Free's lack of frequencies meant that it was at serious risk of marginalisation, the Autorité would deem it preferable to compensate for this handicap by reallocating frequencies rather than allowing roaming in densely populated areas.

(1) EC, 10 July 1995, TF1, No. 141726

> Full text of opinion no. 13-A-08 of 11 March 2013 on conditions for sharing and roaming on mobile networks (in French)

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