

## **OPINION OF ANACOM** **on the request for the allocation of additional frequencies**

### **I – Background and Framework**

1. Optimus, TMN and Vodafone requested of the Minister for the Economy the allocation of additional frequencies, based on the following grounds:

#### **1.1 Optimus**

- Opportunity for a better planning of the UMTS network, namely in a long term perspective, having in view that the frequencies already allocated may turn out to be a limitative factor to the development of services based on that technology;
- Need to achieve from the beginning the best supply and development conditions of UMTS services, which shall allow innovative and quality services to be provided to consumers, enabling the development of improved services of transmission debts, which shall actually make a difference as to the present offer supported in GSM/GPRS and thus playing an important role in promoting and accepting the new services;
- Minimisation of the effects of interferences in the UMTS system, which may have been underestimated hitherto;
- The increased efficiency resulting from the allocation of an additional spectrum shall provide a positive outcome as to the general offer of services, promoting the interest of users and strengthening the importance of this technology regarding the development of the Information and Knowledge Society.

#### **1.2 TMN**

- Since the time of application to the UMTS public tender, the market evolution has shown that TMN has reinforced its leadership position, and the forecasts regarding the business market conditions indicate significant changes as to the distribution of market shares among operators;
- In this context, the market share taken into consideration by TMN at the time of application – 37,5% - is now regarded as highly pessimistic, being more likely a share of 50% in the new competitive environment, that is, with three mobile operators;

- Thus, the traffic value for the cells serving the urban high density areas is substantially higher than the one taken into consideration in the application;
- Having regard to environmental concerns, among others, it is becoming increasingly difficult to obtain approval for the instalment of stations in new sites; therefore, it is most likely that the new base stations for the UMTS (B knots) shall use existing locations, as recourse may not be had to the instalment of new B knots for the resolution of problems of traffic congestion.
- The recent GPRS experience, although still in an early stage, has proved that, in order to maintain a good service quality whenever there is a significant increase of data transmission, it is necessary to make available a higher bandwidth than previously expected.

### **1.3 Vodafone**

- The proposal submitted by Vodafone to the UMTS public tender, especially concerning the network structure and radio planning, was built on a set of premises, namely, on the fact that the market was to be shared among four mobile operators;
  - The deep changes of market conditions, with only three mobile operators, determines the need for additional spectrum, as the client potential for each operator increases from 25% to 33%;
  - The allocation of additional spectrum shall allow a significantly higher number of clients to gain access to effective transmission debts of 384Kbps instead of 144 Kbps (somewhat 44% more) and an even larger number to gain access to 144Kbps instead of 64 Kbps (somewhat 68% more) in all areas, including the ones with a higher traffic density;
  - The high debt services represent a crucial factor for the UMTS success, having regard to the fact that only these services shall make a difference as to the present offer supported in GSM/GPRS;
  - Only a high bandwidth may enable the establishment of a competitive supply with the fixed network for the data services, especially taking into account the emergence of the ADSL.
  - The effects of interferences in the UMTS system has been underestimated so far, and only a larger spectrum may provide a quality service.
2. The requests for additional frequencies submitted by the three operators in December expressly assumed beforehand the predictable repeal of the license of OniWay, with the consequent release of the spectrum it had been allocated.
  3. Oniway – Infocomunicações, S.A. (Oniway) requested of the Minister for the Economy the repeal, without carrying with it the imposition of any conditions or charges, of the administrative act which granted the License N. ° ICP – 03/UMTS for the operation of the International Mobile Telecommunications Systems (IMT2000/UMTS), performed in compliance with the Order of the Minister for Social Equipment of 19 December 2000, pleading subsequent reasons of public interest.

4. In case the act that granted OniWay a license is repealed, it follows logically and formally that the title of the operator expires. Thus the spectrum allocated to Oniway shall be available.
5. Pursuant to article 24 of Decree-Law n. ° 381-A/97 of 30 December, *the additional granting of frequencies within the scope of the alteration of a license already issued is dependent from a justified request from the licensed entity, which should include the following:*
  - a. *Justification of the request;*
  - b. *Detailed description of the business that is intended to be pursued, including the respective technical project, stating the characteristics of the technological system, the planning of the development of the system and following coverage plan, the system's management and exploitation and the quality levels of the service to be provided.*

Pursuant to paragraph 3 of this article, *it is the responsibility of the member of the Government responsible for the communications area to decide on the granting of additional licenses to licensed operators following a tender.*

6. The Minister for the Economy has solicited from ANACOM the analysis and information of the requests for the allocation of additional frequencies submitted by the three UMTS operators.

## II . Analysis of the requests

1. ANACOM takes the view that the situation of the UMTS development in most European Union countries must be taken into account, an analysis also carried out on the occasion of the opinion of ANACOM regarding the most recent extension of the beginning of the activity on the part of licensed operators.

According to the mentioned analysis:

- Most National Regulatory Authorities (NRA) have decided not to alter the license conditions in the present stage of the 3G implementation. The changes/clarifications introduced by some of the NRA (Belgium, Finland, France, Italy and Spain) concern especially the following issues:
  - ✓ Dates for the roll-out of the UMTS networks and the commencement of the commercial offer of the UMTS services;
  - ✓ Dates for the compliance with the coverage obligations;
  - ✓ Sharing of infrastructures; and
  - ✓ Extension of the period of validity of licenses.
- In Europe, the number of mobile service operators of the 3<sup>rd</sup> Generation (3G) has increased compared to the ones already operating in the market of mobile services of the 2<sup>nd</sup> Generation (2G), **although not in the whole length of what was expected at the time of the license granting. Thus the general trend is towards fewer 3G operators than foreseen in the beginning.**
- The disclosures of operators reveal a delay of the implementation of UMTS systems throughout Europe. Operators expect the 3G launching to

begin as from the second half of 2003. Some of them are planning soft launches rather than a mass launching.

- The financial situation of UMTS operators is weak, in particular due to the large amounts invested which require high external financing at high costs.

In conclusion, there are significant differences as to the first prospects of implementation and development of the UMTS, namely regarding the number of operators, thus exposing a market structure other than the one foreseen in the beginning.

The table below summarizes the licensing situation in the European Union Member-States:

Country	2G Operators	3G licenses granted	Present number of 3G operators
Germany	4	6	6, possibly 4
Austria	4	6	Possibly 5
Belgium	3	3	3
Denmark	4	4	4
Spain	3	4	4
Finland	3	4	4
France	3	2	2, possibly 3
Greece	3	3	3
Netherlands	5	5	5
Ireland	3	3	3
Italy	4	5	5, possibly 4
Sweden	3	4	5
UK	4	5	5

From the table it is clear that the present number of licensed UMTS operators is lower to the number of licenses meant in some markets to be granted. On the other hand, it is predictable that some of the licensed operators shall not start the operation at all.

- In fact, in **Germany**, “QUAM”, of which “Telefónica” holds a 57% share and the Finnish company “Sonera” 43%, suspended its 3G operations in July 2002. According to the licence granted, that operator is obliged to ensure 25% of the coverage by the end of 2003. The German regulatory authority (RegTP) has shown some reluctance to change the license conditions.

Also in Germany, “Mobilcom”, of which “France Telecom” holds a 28,5% share, is facing financial difficulties. The German Government intends to ensure the necessary financial support to the operator, however the decision is subject to approval by the European Commission.

Thus, it is possible that the number of 3G operators in Germany falls to 4.

- One of the licensed operators in **Austria** – “3G Mobile” – owned by the Spanish “Telefónica”, stated that it did not plan on investing any further in the Austrian market, although it intended to maintain the license. It is

likely that it shall not begin the operation, and so the number of 3G operators shall fall to 5.

- Also in **Italy**, the entry of “IPSE 2000”, of which “Telefónica” holds a 46% share and the Finnish company “Sonera” 13%, in the 3G market is unsettled.
- In Finland, the concentration of the two UMTS licensed operators (“Sonera” and “Telia”) is currently under way. Since the incorporating entity cannot hold more than one license, the title granted to “Telia” shall revert to the NRA.
- In **Belgium, France, Ireland and Luxembourg** there were not enough candidates for the granting of all 3G licenses available.

In **France**, an invitation for the presentation of proposals for the granting of the remaining licenses was open in December 2001. Up to the deadline for the presentation of applications (May 2002), only one entity applied – “Bouygues Telecom”.

In **Greece** there were only three candidate companies, there being four licenses to be granted. The situation as to the remaining license is not clear, nevertheless the available spectrum may not be granted before five years have elapsed after the date of the auction.

In **Ireland and Luxembourg** only 3 licenses were granted, out of four available ones.

- In **Norway**, two operators gave their licenses back, and as above-mentioned, Austria, Germany and Italy may face a similar situation.

The described situation shows an environment quite different than the one existing at the time of the establishment of the process for the license granting.

It is the reflex of the economic, financial and technological international context, as acknowledged by the European Commission itself with regard to the implementation of the 3<sup>rd</sup> Generation.

The opinion of ANACOM, of 8 January, regarding the repeal of the license granted to OniWay, also emphasized the following:

By the end of 1999, ANACOM established the licensing conditions for the operation of the International Mobile Telecommunications Systems (IMT2000/UMTS), and in August 2000 the granting of licenses was put out to public tender.

The setting up of the tender model, involving the granting of four licenses, aimed at enhancing competition in the mobile market, assuming the possibility of a sustained development of operators, including potential newcomers, as well as the enlargement of choice on the part of consumers, having regard to a background of the information society development.

The setting up of the structure regulating the 3G market took place in an environment of expansion, common to all European countries. A sign of this state of affairs is the significant number of licenses granted throughout Europe, whether via public tenders or sale by auction.

As acknowledged by the European Commission itself, especially regarding the implementation of the 3<sup>rd</sup> mobile generation, during 2001, economy worldwide suffered a recession, from which the telecommunications sector was not exempt.

It is widely acknowledged that the implementation of the 3<sup>rd</sup> mobile generation implies the intervention of several agents in the market, such as the operators themselves, manufacturers, software and contents suppliers, depending heavily on general trends at economic, technological and service levels.

Likewise, the financial context has influenced and constrained telecommunications operators, mobile operators included, forcing them to think their strategies over, also as a result of the indebtedness levels incurred.

The most immediate consequence to all this objective and subsequent alteration to the starting presupposition was the general delay to the implementation of the 3G, taking account of the scenario initially foreseen.

At the present time, it is not feasible to make the released spectrum available to a 4<sup>th</sup> operator, by virtue of the repeal of the license of OniWay, having regard namely to the following factors:

- ✓ Small size of the national market;
- ✓ High penetration rates of mobile services;
- ✓ Lack of interest on the part of economic agents to obtain an UMTS license, namely, lack of interest as to the purchase of OniWay;
- ✓ Acknowledgment of the fact that the first operators entering the market have a substantial competitive advantage, which immediately raises difficulties to the sustained entry of a new operator;
- ✓ Acknowledgment of the difficulty felt by small operators or operators whose market share is small to remain in the market;
- ✓ There are no evidences towards the fact that the entry of a new operator at the present time shall increase the total value of the market.
- ✓ The preservation of the 2<sup>nd</sup> generation market structure may allow a faster recovery of the investment, the increase of the cost-effectiveness levels and of the investment capacity of operators, which may have such reflexes as a faster offer of 3G services, potentially providing conditions for lower prices, as well as an improvement of the quality levels of the services rendered.

Having regard to the critical factors that contribute for the delay in the roll-out of UMTS networks and in the commencement of the commercial offer of the 3G services, such as the technological features, the absence of UMTS terminal equipment, the indebtedness of operators, the down-turn of the telecommunications market, the important role of measures tending to make flexible license obligations, infrastructure sharing and the renegotiation of financial commitments with the State is widely accepted.

In this respect, the Council of Ministers of the European Union has stated, at the meeting of 5/6 December 2002, the need to ensure the transparency of the obligation to launch the 3G systems and the need to start the debates on more flexible approaches as to the spectrum use and network infrastructure sharing, as well as to the possibilities of spectrum re-allocation, having in view a more effective market and an appropriate coordination at European level.

In Portugal, ANACOM took the view that an appropriate level of standards should be imposed for licensed operators, without prejudice to the delay of the commencement of the commercial operation of the UMTS and to the possibility of an infrastructure sharing in the conditions established.

Therefore, pursuant to the determination of ANACOM of 6 December 2002 and to the Order of the Minister for the Economy of 30 December 2002, all the obligations covered by the licenses granted should be maintained, namely, the strict compliance with the coverage levels set out therein, the amendments to be made to the licenses being restricted to matters concerning the extension of the time limit for the commercial offer of the UMTS systems.

Thus, licensed operators are still bound to standards that are appropriate to a launching of the UMTS services in competitive conditions.

There being no reasons for an invitation to tender for the granting of the available spectrum to a new operator and having regard to the requests submitted by Optimus, TMN and Vodafone, ANACOM takes the view that the spectrum should be allocated on the following grounds:

- It is undeniable that, for the sustained development of a UMTS market, it is fundamental that, at the start of the commercial operation, optimal technical conditions are gathered in order to allow licensed entities to offer solid services, coverage and quality levels, to which they were bound though the proposals presented to tender, and which are decisive for the development and penetration of services;
- The launching of the UMTS shall have to be based, inevitably, in an offer that, though different from the available offer in GSM/GPRS, ensures from the beginning the interest of users and the trust of the market;
- In this context, it is fundamental to guarantee that innovative services, with a high debt and appropriate bandwidth, are made available;
- The use of an additional spectrum shall predictably lower the costs of network implementation linked to a decrease of the number of base stations needed;
- At a level of network planing, the granting of additional frequencies may imply not only an improvement of the sustainability condition of the operators, but also the variety and quality of offers available, thus promoting the development of the Information Society.

In the light of the above, ANACOM puts forward for consideration the allocation to TMN, VODAFONE TELECEL and OPTIMUS, respectively, 2x5 MHz of additional paired spectrum between 1920-1980 MHz / 2110-2170 MHz bands, for the operation of International Mobile Telecommunications Systems (IMT2000/UMTS).

It must be emphasized that the allocation of the additional spectrum to TMN, VODAFONE TELECEL and OPTIMUS carries with it the obligation on the part of these operators to ensure the performance of projects already engaged, namely by making the spectrum accessible to the general public and through the contribution on the part of operators, in proportional terms, for the necessary projects to the development of the Information Society, established as such by the Government.

Lisbon, 9 January 2003.