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Consultation publique sur l'attribution de licences 3G dans la bande 2,1 GHz en France métropolitaine

Chères Mesdames, Chers Messieurs,

Inquam Broadband remercie l'Autorité de Régulation des Communications électroniques et de la Poste de lui donner l'occasion de s'exprimer sur la consultation publique mentionnée ci-dessus.

Vous trouverez en annexe la réponse de la société Inquam Broadband qui s'articule en deux parties:

- Annexe 1: Un résumé de la réponse en langue française
- Annexe 2: La réponse en langue anglaise.

Je vous prie d'agréer, Mesdames et Messieurs, mes salutations les plus sincères.

Inquam Broadband GmbH

Andrzej Cwik
CTO

Annexes

N°1 Résumé de la réponse en langue française

N°2 La réponse en langue anglaise

Annexe 1

Résumé des réponses d'Inquam Broadband à la consultation publique « Consultation publique sur l'attribution de licences 3G dans la bande 2,1 GHz en France métropolitaine »

Inquam Broadband serait intéressé par l'obtention de fréquences dans le spectre apparié (FDD) si les conditions économiques d'accès au spectre étaient revues en profondeur.

Inquam Broadband propose de garder le spectre aux nouveaux entrants, p. ex. trois nouveaux entrants. En complément de ces nouveaux entrants, Inquam Broadband propose de recourir à une mise aux enchères comme méthode d'attribution. Ainsi les trois blocks FDD plus le bloc apparié en 900 MHz devraient être mis aux enchères avec un prix minimal d'acquisition du spectre relativement bas. Plus précisément Inquam Broadband suggère une enchère à tours multiples ascendants sur les quatre blocs identifiés ci-dessus. De plus Inquam Broadband propose qu'il n'y ait pas d'obligations spécifiques, en particulier des obligations de couverture pour les nouveaux entrants car les obligations de couverture imposent un modèle de compétition frontale et laissent peu de place à des modèles de compétition innovants. En plus, nous recommencent de permettre le commerce secondaire du spectre.

Cette nouvelle méthode d'attribution se justifie complètement car les conditions objectives sur le marché des communications mobiles ont changé radicalement et l'intensité compétitive avec seulement trois opérateurs de réseau n'est pas très forte comme constaté par l'ARCEP elle-même.

Concernant les attributions prochaines de spectre, et spécialement dans la bande 2,6 GHz, Inquam Broadband est d'avis que les besoins sont immédiats et préconise d'utiliser les fonds encaissés par les enchères ci-dessus afin d'abonder le Fonds de réaménagement du spectre et d'aider le Ministère de la Défense à libérer les fréquences au plus vite.

En ce qui concerne la bande 790-862 MHz, Inquam Broadband partage la majorité des arguments de l'ARCEP et aimerait souligner qu'au-delà de la décision de la Conférence Mondiale des Radiocommunications d'attribuer cette bande aux services mobiles, il serait également important d'intégrer l'ensemble de la bande UHF dans la cadre des réflexions de flexibilisation de la gestion du spectre commencées au niveau européen (WAPECS). Une attribution du spectre de manière flexible se ferait indépendamment des services offerts. De cette manière les opérateurs pourraient offrir parmi d'autres services d'accès sans-fil large-bande ainsi que d'autres services. En particulier les services de Télévision Mobile Personnelle seraient simplement un service BWA supplémentaire et n'auraient plus besoin d'être définis a priori. A cet égard, il est important de noter que les technologies pour offrir des services de Télévision Mobile Personnelle dans les bandes

UMTS sont d'ores et déjà disponibles et qu'elles sont en voie d'adaptation pour d'autres fréquences.

En ce qui concerne le bloc TDD, Inquam Broadband aimerait souligner que des équipements industriels sont disponibles et largement déployés dans cette bande. Par exemple le réseau mobile de T-Mobile en République tchèque s'appuie sur des équipements utilisant la norme TD-CDMA. Cette norme a été étendue au système TDtv qui permet d'offrir des services de télévision mobile personnelle dans les bandes UMTS. Cette technologie est actuellement déployée en un test commercial à Londres.

Dans ce contexte Inquam Broadband manifeste son intérêt pour l'obtention d'une licence pour le bloc TDD encore disponible afin d'introduire des services similaires à ceux décrits ci-dessus en France.

S'il y a seulement un intéressé à l'obtention du bloc TDD, Inquam Broadband propose une attribution « au fil de l'eau » pour ce bloc. Si d'autres candidats souhaitent acquérir le bloc, Inquam Broadband propose une mise aux enchères du bloc TDD.

Annexe 2

Réponse d'Inquam Broadband en langue anglaise à la consultation publique « Consultation publique sur l'attribution de licences 3G dans la bande 2,1 GHz en France métropolitaine »

Answer to question n°1

Inquam Broadband would be interested in the available spectrum if the financial conditions were amended. Inquam Broadband believes that there is sufficient spectrum to support three operators, each using 2*5 MHz.

Answer to question n°2

Inquam Broadband agrees with ARCEP's analysis that all requests couldn't be satisfied. Further Inquam Broadband agrees on the necessity to offer the available spectrum as soon as possible in order to strengthen the competition in the Mobile Broadband Access market.

Answer to question n°3

As shown by the lack of applications for this spectrum last year, it appears that the financial conditions and the coverage obligations associated with these licenses are not acceptable for new entrants. The incumbent operators are in a much better competitive position due to their early market entry. New entrants can only increase competition to the benefit of consumers if they are able to access spectrum at a lower price and without coverage obligations. Therefore, Inquam Broadband supports ARCEP's view that the financial conditions should be changed before issuing a new request for applications. Furthermore, Inquam Broadband supports the use of an auction scheme to award the spectrum that excludes or otherwise conditions the participation of existing operators.

Answer to question n°4

As far as the 2.6 GHz band is concerned, Inquam Broadband prefers to allocate these frequencies sooner than currently planned. Given the current market demand for Mobile Broadband Services and supporting technology for the 2.6 GHz band, Inquam Broadband strongly recommends that this band be awarded in 2009. In order to accelerate the assignment process, Inquam Broadband suggests that the assignment fees collected with the 2.1 GHz award be used to compensate the Ministry of Defence for vacating the 2.6 GHz band.

With regard to the upper UHF band, Inquam Broadband agrees with ARCEP's analysis of the ITU's recent identification of the 790-862 MHz band for IMT services. Inquam Broadband recommends that the WAPECS concept be applied to these frequencies per the studies underway within the CEPT. Were the WAPECS concept applied, this spectrum could be allocated without specifying what services must be used, thus allowing BWA as well as broadcasting services. In this context Mobile TV could be considered as a BWA service. Please note that technology that provides both unicast and broadcast services is already available for current 3G bands and will in the near-term also be available for the UHF band.

Answer to question n°5

Inquam Broadband shares ARCEP's opinion that three network operators are insufficient to insure robust competition. Therefore, Inquam Broadband is in favour of measures that facilitate the entry of additional network operators. More favourable conditions for MVNOs are also welcomed.

Answer to question n°6

In order to be competitive and gain market share, a fourth operator will need to develop attractive service offerings along with a compelling and transparent tariff scheme. As a consequence, consumers will benefit from additional services options as well as lower prices.

Answer to question n°7

Under ideal conditions, a network operator would use spectrum in lower frequency bands (i.e. below 1 GHz) for coverage purposes and spectrum in higher bands (above 1 GHz) for capacity reasons. However, in some densely populated areas, use of higher frequency bands to support rapid market entry and the introduction of new services may be preferable to waiting for allocations in lower bands. Therefore, Inquam Broadband is in favour of maximum possible flexibility in frequency allocations as well as secondary spectrum trading.

Answer to question n°8

MVNOs could contribute to competition through innovative services and bundles. An important precondition for a successful MVNO is easy and fair access to network capacities. Inquam Broadband believes that a wholesale model improves access conditions for MVNOs.

Answer to question n°9

On the one hand, existing mobile operators use the same technology platforms and therefore benefit from economies of scale. Furthermore, existing mobile operator have comparable cost structures and thus little incentive to innovate. For the purpose of stimulating competition it is therefore not advisable to assign the frequencies to existing operators

On the other hand, if new entrants are required to pay substantial sums for access to spectrum and also face burdensome coverage obligations, it will be difficult for them to provide meaningful competition to incumbent operators. Imposing coverage obligations on new entrants will not result in demonstrable benefits to consumers, but will hamstring new entrants in realizing their business model objectives. As such, it is important to adopt conditions for new entrants that will stimulate, not hinder, competition.

In sum, Inquam Broadband suggests an auction scheme that reserves the spectrum for new entrants, and includes moderate minimum bid amounts and no coverage obligations. In addition, Inquam Broadband believes that permitting secondary trading of spectrum will also stimulate competition.

Answer to question n°10

See Inquam Broadband's answer to question 9.

Answer to question n°11

See Inquam Broadband's answer to question 9.

Answer to question n°12

Inquam Broadband is in favour of reserving the 2.1 GHz spectrum for new entrants as the preferred means to strengthen competition.

Answer to question n°13

There is no impact, since the deployments of new services in the 2.6 GHz band will have their own dynamics (availability of equipment, broad development perspectives ...).

Answer to question n°14

If new entrants come into the market, there is no need to reserve a part of the spectrum for deploying femto-cells.

Answer to question n°15

Inquam Broadband has no comment on this question.

Answer to question n°16

As outlined above Inquam Broadband is convinced that coverage obligations are not conducive for encouraging competition, especially in mature markets. Mobile services are already widely accessible throughout nearly the whole French territory. New coverage obligations will not provide any advantage to customers, but will hinder new entrants significantly in realizing their business models.

Inquam Broadband strongly recommends that no coverage obligations should apply to i) avoid any market distortions as well as to ii) ensure a fair and competitive environment and for iii) utilizing the full benefits of a technology and service neutral assignment approach.

Answer to question n°17

Inquam Broadband suggests an auction scheme for three paired spectrum assignments of each 2*5 MHz. This procedure would determine the value of the spectrum. Moreover to ensure a large participation of new entrants a low minimum bid amount should be determined.

Answer to question n°18

It is apparent that the market conditions have changed since 2001 (new technologies, availability of new frequency bands, etc.), therefore there is no reason to align to the former conditions for the new assignments. In some countries, like the Czech Republic and the UK, spectrum award conditions have been changed accordingly. Also the failure of the last assignment process in France in 2007 proves that different market conditions exist today.

Answer to question n°19

See Inquam Broadband's answer to question 18.

Answer to question n°20

See Inquam Broadband's answer to question 17.

Answer to question n°21

See Inquam Broadband's answer to question 17.

Answer to question n°22

See Inquam Broadband's answer to question 17.

Answer to question n°23

The access to the 900 MHz band should be reserved for a new entrant. The paired 5 MHz blocks in 900 MHz band should be awarded together with the three paired blocks in the 2.1 GHz band.

Answer to question n°24

Inquam Broadband suggests an auction scheme with a low minimum bid amount and recommends that the duration of the licence should be a minimum of 20 years.

Answer to question n°25

Inquam Broadband disagrees with the proposal to impose coverage obligations for new entrants. See also our comments to question 9, 16 and 18.

Answer to question n°26

Ideally, the ARCEP should favour the entry of MVNOs without regulatory intervention. Inquam Broadband recommends introducing a wholesale model for MVNOs, which would allow MVNOs to offer network capacity under fair and transparent conditions.

Answer to question n°27

Secondary trading should be allowed in all of the frequency bands for which mobile services are authorised. Future access to spectrum resources is necessary for the justification of current investments in the network infrastructure. Secondary trading allows introduction of new services and applications when an extension of the current spectrum holdings would be required.

Answer to question n°28

As mentioned above, the priority should be given to new entrants. Inquam Broadband suggests an auction of three paired blocks in 2.1 GHz, together with the paired block in 900 MHz. A well designed auction would transparently determine the real spectrum's value. No further obligation should be imposed upon the new entrants and secondary trading of the spectrum should be authorised.

Answer to question n°29

See Inquam Broadband's answer to question 28.

Answer to question n°30

It is very likely that additional spectrum in other bands will be made available medium term, therefore an allocation of 2*5 MHz would be sufficient in a first step to launch services. Therefore Inquam Broadband is in favour of auctioning three blocks.

Answer to question n°31

As stated above, the remaining spectrum should be left for new entrants with maximum 3 new entrants each with 2*5 MHz in 2.1 GHz together with the option to acquire 2*5 MHz in the 900 MHz band.

Answer to question n°32

As stated above an auction would determine the value of the spectrum under the current market conditions.

Answer to question n°33

See Inquam Broadband's answer above.

Answer to question n°34

Block 1: 4.9 MHz (one guard channel of 100 kHz)

Block 2: 5.0 MHz (two guard channels, one at each end of the allocation)

Block 3: 4.9 MHz (one guard-channel at the end of block 3)

Answer to question n°35

Inquam Broadband suggests a multi round auction for the three paired blocks of the 2.1 GHz band together with the paired block in the 900 MHz band. This is the most efficient and transparent means for assigning the spectrum.

Answer to question n°36

Inquam Broadband believes that there will be a sufficient number of new interested parties for the spectrum if following the suggestions as provided above so that a scenario like in 2007 should not occur.

Answer to question n°37

Inquam Broadband is in favour of reserving the spectrum for new entrants as stated above.

Answer to question n°38

The paired block in 900 MHz band should be auctioned as well, see our comments to question 35.

Answer to question n°39

See Inquam Broadband's answer above.

Answer to question n°40

See Inquam Broadband's answer to question 38.

Answer to question n°41

In the past TDD-equipment was scarcely available for various reasons. Since the rapid change from voice centric networks to data centric

networks, together with their inherent asymmetrical traffic distribution between Up- and Downlink, TDD equipment becomes more popular. This comes along with advanced signal processing and coding schemes to control and limit the interference in the network very efficiently.

As one of the major providers of TDD equipment, NextWave Wireless is currently working with various operators in Europe and in the United States on deployments of TD-CDMA networks. For instance in the Czech Republic, T-Mobile operates a TD-CDMA network in the same band being subject of this consultation, the same technology is used for the wireless safety network in New York City.

NextWave's has extended its TD-CDMA platform by a complete end-to-end mobile broadcast solution, called TDtv. This solution is fully compliant with the MBMS standards as defined by 3GPP and enables the operator to deliver high-quality TV, video, and audio content on a mobile basis.

The TDtv system and its underlying infrastructure can be integrated into an existing TD-CDMA network even when just deployed on a fraction of the sites within the network.

Summing up, TDD equipment is already available for 2 GHz bands and will be also available for other bands.

Answer to question n°42

Inquam Broadband likes to express its interest in the remaining unpaired spectrum block to deploy in France similar networks and services as described above. Therefore Inquam Broadband encourages the ARCEP to award the remaining unpaired spectrum together with the paired spectrum.

Answer to question n°43

If there is only one party interested in obtaining the unpaired license, Inquam Broadband suggests a direct attribution of this spectrum. If several parties express their interest in the unpaired spectrum, Inquam Broadband suggests that this block be auctioned together with the paired spectrum under the same auction rules.