Draft RSPG Opinion on spectrum related aspects for next generation wireless systems (5G)

NOS reply

29-07-2016

1. Introduction

NOS Comunicações, S.A. (NOS) welcomes the opportunity to present its comments on the draft RSPG Opinion on spectrum related aspects for next generation wireless systems (5G).

NOS is the biggest communications and entertainment group in Portugal. It offers latest generation fixed and mobile phone, television, Internet, voice and data solutions for all market segments. It is leader in Pay TV, new generation broad band services and in cinema exhibition and distribution in Portugal.

NOS has more than 4 million mobile, 1.5 million TV, 1.6 million fixed phone and 1.1 million fixed broadband Internet customers.

2. NOS' Comments

2.1. Primary 5G band: 3.4 to 3.8 GHz

NOS shares the view that the 3.4-3.8 GHz band is a strong candidate for the introduction of 5G in frequencies below 6 GHz.

It is important to mention that in some Member States, as is the case of Portugal, the band is not totally available. In Portugal there were allocations for FWA and BWA in very favourable conditions. The refarming of these frequencies for 5G should not be automatic. In the case it happens, the conditions must grant that such movement do not put at disadvantage the operators that currently do not have frequencies in the 3.4-3.8 GHz band, but are interested to access it for 5G deployment.

2.2. Frequencies below 1GHz

Although the 700 MHz band is best placed for mMTC applications, the imminent creation of NB-IoT networks over 2G/3G/4G infrastructures tends to decrease the 700 MHz band attractiveness in the short/medium term.

In what regards the advocated advantages of 700 MHz for coverage, in general, and indoor coverage, in particular, NOS highlights that, considering allocations of 10 MHz FDD, frequencies from the 800 MHz band currently used for 4G are, in practice, equivalent. So, NOS understands that the 700 MHz band does not add relevant interest compared to the 800 MHz frequencies already allocated. Important to mention that the latter were allocated in a neutral perspective which allow its use for 5G too.

2.3. The RSPG considers that there will be a need to ensure that technical and regulatory conditions for all bands already harmonised for mobile networks are fit for 5G use

NOS fully shares this RSPG opinion. It is important to grant that for the bands to which don't apply the technological neutrality principle yet, it becomes a reality as soon as possible.

We mention that this should not be confused with the defence of the automatic application of services' neutrality principle. As mentioned before about 3.4-3.8 MHz, the entities that have already frequencies in a specific band could not be put in advantage in what regards the use of it for 5G development in comparison with entities to whom frequencies from the same band are allocated later, and with very different conditions.

The awarding conditions of frequencies in a specific band aiming at 5G deployment, even if they are put in the market under neutrality principles, should grant that there is a level playing among all the entities that hold frequencies in such band independently of the moment of the frequencies allocation.

2.4. The RSPG stresses that there are many frequency bands above 24 GHz which are of potential interest for 5G in Europe

In NOS' opinion it is necessary to reserve a new band above 24 GHz for wireless services at a global level. The global harmonization allows the focus of the industry in a unique new band for 5G and promotes scale´s economies in equipment development.

Regarding the candidate bands identified in the WRC15, NOS considers that the bands between the 24 and 30 GHz should be preferred due its advantages regarding spread characteristics as well as the existence of hardware and radiofrequency solutions with some maturity concerning its development and production.