



## **BTG response on the public consultation on the Draft RSPG Opinion on the role of radio spectrum policy to help combat climate change, issued June 24, 2021.**

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### **Introduction**

BTG is an interest user group in the area of ICT and Telecommunications in the Netherlands. BTG represents since 1986 the interests of Dutch enterprises and organizations using communications services. BTG organizes network meetings for sharing knowledge and experiences. BTG counts 180 members from business and governmental organizations and represents these organizations nationally and internationally. BTG is member of the INTUG.

BTG interconnects organizations and performs active lobbying between government, suppliers and members in the area of ICT and Telecommunications. BTG realized already many years ago the strategic value of radio spectrum in the development of the digital society. For frequency spectrum matters BTG is lobbying to the Ministry of Economic and Climate affairs in the Netherlands.

BTG has established 5 years ago an expert group under their members, called KMBG: Critical Mobile Broadband Users. This expert group represents BTG member with business and mission critical mobile communications need. The expert group articulates the need for critical communications and bundles the interest of the users. The group shares knowledge of communications technology and contributes to policies for the government and mobile network operators. In the past years BTG in close cooperation with the Dutch MNOs have agreed on a specification for passive installations to provide mobile indoor coverage.

BTG recognizes a mismatch between the mobile mass market services and critical communications needs. Mass market services are in most cases best effort services. Best effort service are not good enough for critical needs. Critical needs communication can be provided by either private networks or by public mobile networks or both. It is however not known whether or not mobile operators can and will develop solutions that cater for all possible critical needs communications.

BTG has responded on many public consultations on frequency spectrum matters from the Dutch government. Since March 2021 BTG is also responding on public RSPG consultations.

### **The BTG response**

The RSPG (Radio Spectrum Policy Group) has launched a public consultation on June 24 2021 on the **RSPG21-027 FINAL** "Draft RSPG Opinion on the role of radio spectrum policy to help combat climate change". This Opinion subsequent to the RSPG Report on the role of radio spectrum policy to help combat climate change contains recommendations as to what concrete actions can be taken at EU level.

BTG consulted her members and composed the following response to this consultation.

**BTG's general observation.**

After reviewing the Draft RSPG opinion, BTG fully supports the goal of RSPG to contribute to the combat of climate change from radio spectrum perspective. BTG supports the recommendations stated in this Draft RSPG opinion.

**Additional observations.**

BTG also would like to address the following specific aspects in this area:

1. On the subject of Methodologies to assess the impact of ECS wireless technologies on climate change, BTG sees the need to develop such methodologies on equal footing for both public mobile operators and the operators of private mobile networks. Specific requirements on energy efficiency and circularity should be identical for all network types. Specific to spectrum allocations, this also implies that for private networks large, contiguous spectrum blocks should be allocated. For example, in The Netherlands the currently planned allocation for private spectrum in the 3.5GHz band is split into two portions of 50 MHz at either end of this frequency band, thus leading to significant inefficiencies and limitations in use. To BTG's opinion such unique fragmentation should be avoided.
2. Search for alternative ways for the allocation of radio spectrum. Spectrum allocation is the responsibility of each EU member state at the moment. The common way for allocating radio spectrum for public mobile networks by member states is via auctions, resulting in large financial sums. In the past years each member state has added its own national conditions that have to be fulfilled by the operators. The result is fragmented and sub-optimal division of radio spectrum. The mobile operators are spending their Euro's on spectrum instead on their future networks including energy efficiency and circularity improvements. Member states should give a higher priority to investments in energy efficiency and circularity than to the financial results of spectrum auctions. Solutions could be found in combining spectrum to large blocks and combining radio infrastructures resulting in drastic reduction of energy consumption. A future where operators are using combined infrastructures without upfront long term investments in spectrum auctions, combined with the introduction of an operational model based on pay-as-you-use for the radio spectrum might offer a way to significantly reduce the energy consumption and overall environmental load. BTG would like to see such a model further analysed on its merits and would like to actively participate in such activities.
3. To stimulate both energy efficiency and circularity of the products/components used for building public or private mobile networks, it may be worthwhile to consider energy consumption categories and introduce financial incentives, for example by reducing the applicable VAT percentage depending on the energy category or cost reductions for disposal of replaced equipment. This could be considered in addition to improved harmonized technical standards for such products.
4. Over the last several years the traffic handled by public mobile networks has significantly increased, with growth rates exceeding 50% per annum. This is created by the sheer possibility to e.g., use audio and video streaming on mobile devices due to technology improvements and cost reductions. This increase is combatted by the public mobile operators by adding network capacity and introducing 5G. However, it remains to be seen if the improved efficiency of the 5G technology indeed cancels out the increase in energy consumption due to the ever-increasing traffic loads. BTG suggests that in addition to energy efficiency measures, also the increase of traffic volume should be addressed by improvements in codecs, communication channel



protocols and possibly by defining guidelines on how applications should efficiently use those mobile communication channels. It is not uncommon to see mobile applications being developed based on wired LAN connectivity instead of taking into account the possibilities and limitations of a mobile channel, leading to significant overhead and inefficiencies in the transport of data. Furthermore, from an architectural perspective, there may be benefit of using local intelligence rather than transferring raw data to a centralized (cloud) intelligence when implementing applications.

5. The draft RSPG opinion already addresses the potential benefits of active or passive infrastructure sharing. BTG views the combination of sharing both active and passive infrastructure as a highly effective measure as it potentially reduces the number of physical mobile network structures to a single construct, reducing the total energy consumption as well as the demand on various resources.
6. RSPG also views the use of small cells for indoor use by building owners as potential possibility to reduce energy consumption. BTG believes that for such indoor use also an alternative spectrum policy is required that stimulates combining wireless indoor infrastructures to reduce energy consumption. For instance for indoor use, dedicated larger spectrum blocks can be assigned to create mobile operator independent solutions.
7. Unlimited mobile use propositions of operators in the consumer mass market in our view is a temporary unique selling point, ending the moment that all competing operators are providing this. It creates a traffic- and thus also energy-consumption increase that needs to be balanced. Introducing an energy tax for mobile traffic might influence the traffic growth, energy, and spectrum use. Of course, such mechanisms need careful considerations so as to only cap the excessive usage and not be detrimental to the smaller or less financially sound users.