Question 1: Do you agree with Ofcom's analysis of the benefit of identifying spectrum for IMT at WRC-07 and the general consideration that needs to be addressed for each band?

## Response:

According to the consultation, Ofcom's policy regarding WRC Agenda Item 1.4 is derived in the context of its high level objectives, which include "promotion of investment and innovation, promotion of competition where appropriate and using the least intrusive regulatory means to achieve objectives." [item 3.5]

In this context, Ofcom has further has stated that,

"The WRC-07 process in relation to IMT spectrum identification is driven by the view that there is a need to harmonise spectrum across nations for this kind of service. This is not inconsistent with a market-led approach favoured by Ofcom, since it does not stipulate the technology to be used, nor does it preclude the use of any spectrum band for other services, should the market allocate the spectrum to those services." [item 3.12]

Against this back drop, Ofcom's position has included:

- to support efforts to keep the IMT-Advanced family as open and flexible as possible;
- to support a non-binding identification of spectrum for IMT but keep this as generic as possible (i.e. for IMT rather than IMT-Advanced);
- to support changing existing identifications from IMT-2000 to IMT to foster greater flexibility in their use; and
- not to narrow down the list of candidate bands under consideration but to keep options open on all bands under consideration. [item 3.1]

Although we agree with the Ofcom's overall objectives, we believe that its analysis is somewhat flawed in that it fails to recognize that IMT-2000 is neither a service nor an application, but is in fact a discrete set of technologies that are included in ITU-R Recommendation M.1457, "Detailed specifications of the radio interfaces of International Mobile Telecommunications-2000 (IMT-2000)." From that perspective, the existing identification of spectrum for IMT-2000 is inconsistent with Ofcom's policy objectives since the footnotes assert a non-binding regulatory preference for the use of these specific technologies over others that can be used to support the same service or application. Despite the disclaiming text within them, the footnotes have the effect of providing certain technologies with priority access to the "IMT frequency bands' on a global basis.

Ofcom's analysis is incorrect where it asserts that the term "IMT" fosters greater flexibility in the use of the footnotes than does the term "IMT-2000". The

definitions of IMT and IMT-2000 are provided in the Draft "Naming Resolution". This draft resolution, which will be considered for adoption at the RA2007, resolves:

- 1 that the term "IMT-2000" encompasses also its enhancements and future developments3;
- that the term "IMT-Advanced" be applied to those systems, system components, and related aspects that include new radio interface(s) that support the new capabilities of systems beyond IMT-20004; and
- *that the term "IMT" be the root name that encompasses both IMT-2000 and IMT-Advanced collectively.*

That being the case, the term "IMT-Advanced" will correspond to a second, discrete set of technologies and the term "IMT" addresses the superset of technologies included in Rec. M.1457 and the in future recommendation for detailed radio interface specifications of IMT-Advanced. WP8F does not envision completing its evaluation of IMT-Advanced proposals until mid-2011<sup>5</sup>. Until such time, IMT and IMT-2000 are synonymous. More fundamentally though, just as with IMT-2000, the term IMT will refer to a discrete set of technologies and thus will fail to provide the degree of flexibility that Ofcom expects to have if this proposal is adopted.

The better approach to achieving the policy objectives Ofcom desires would be for the WRC to suppress all of the IMT-2000 footnotes and to adopt a Resolution or Recommendation on specific frequency bands for a service or application – *i.e.* to use Method 3 as described in the CPM-07 Report. We believe this approach is most appropriate since, as Ofcom accurately states in item 1.3,

"Such an identification does not prevent the use of other applications of the relevant radio service. It gives no elevated status, either with respect to other primary radio services or with respect to other applications within the same radio service and it does not prevent the application from being used in bands other than those with identifications."

Recognizing that Method 3 is known to be a rather unpopular approach with a number of ITU-R Member States and Sector Members, an acceptable alternative would be to modify the footnotes so that they identify the current and any future

As described in Recommendation ITU-R M.1645, systems beyond IMT-2000 will encompass the capabilities of previous systems, and the enhancement and future developments of IMT-2000 that fulfil the criteria in *resolves* 2.

As stated in 8F/1170 – Chairman's Report of the 21<sup>st</sup> Meeting of Working Party 8F (Yaounde, Cameroon, 17-25 January 2007); Chapter 7 - Meeting Report of AH-Circular Letter

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Draft Resolution ITU-R M.[IMT.NAME], "Naming For International Mobile Telecommunications"
The detailed specifications of the IMT-2000 radio interfaces are in Recommendation ITU-R M.1457.

IMT bands for an application, rather than a fixed set of technologies. recommend that the Ofcom support the modification of the existing IMT-2000 footnotes so that they identify spectrum for "broadband wireless access," including IMT". According to Recommendation ITU-R F.1399<sup>6</sup>, Broadband wireless access is defined as wireless access in which the connection(s) capabilities are higher than the *primary rate*, which is defined as the transmission bit rate of 1.544 Mbit/s (T1) or 2.048 Mbit/s (E1). Wireless access is defined as end-user radio connection(s) to core networks. Thus, unlike IMT-2000 or IMT, BWA actually denotes an application which, according to Recommendation ITU-R M.1801<sup>7</sup>, includes all of the current IMT-2000 technologies, along with a number of other radio technologies (including mobile WiMAX) and which by definition will include all of the future IMT-Advanced technologies. The assessment of what constitutes a BWA system is based solely on a simple technical benchmark - wireless access higher than the primary rate. We strongly urge Ofcom to support the inclusion of BWA in the bands to promote the flexibility it seeks in accordance with its overall policy objectives.

Question 2: Do you agree with Ofcom's proposal to seek a primary mobile service allocation in the band 470 to 862 MHz and a Resolution to initiate studies at WRC-07 for an IMT identification at WRC-11?

Response:

No comment

Question 3: Do you agree with Ofcom's proposal to support the development of a European Common Proposal for a co-primary allocation to the mobile (except aeronautical mobile) service and an identification for IMT in the band 3400 to 3800 MHz at WRC-07?

Response:

No comment.

Question 4: Do you agree with Ofcom's proposal to oppose any change to the allocations or an IMT identification in the band 2700 to 2900 MHz at WRC-07?

Response:

<sup>6</sup> Recommendation ITU-R F.1399-1, "Vocabulary of Terms for Wireless Access"

including mobile and nomadic applications, in the mobile service operating below 6 GHz."

<sup>&</sup>lt;sup>7</sup> Recommendation ITU-R M.1801, "Radio interface standards for broadband wireless access systems,

## No comment

Question 5: Do you agree with Ofcom's proposal to adopt a neutral position on whether the remaining bands are supported or opposed as candidates for a mobile allocation and IMT identification?

Response:

No comment