



**Solaris Mobile Limited response to
OFCOM's consultation on "Licence Exemption of Wireless
Telegraphy Devices" in relation to 2GHz MSS User Terminals**

16 June 2011

"Question 4) Do you agree with our proposals for the authorisation of 2 GHz MSS user terminals from licensing?"

General comments:

- Solaris Mobile Limited ("SML") welcomes the fact that the Decisions listed in section 6.3 of the consultation document were fully implemented in the UK by the Authorisation of Frequency Use for the Provision of Mobile Satellite Services (European Union) Regulations 2010, under which Ofcom has issued authorisations to both Inmarsat Ventures Limited and Solaris Mobile Limited.
- SML has contributed to the CEPT Report on the adjacent band compatibility of MSS with 3G mobile services below 1980 MHz and other services above 2010 MHz. SML expects CEPT to complete this report in early 2012.
- SML does not expect any requirement for an update of the ETSI standards EN 302 574-2 and EN 302 574-3 for the 2GHz MSS terminals that have been published late 2010 and are therefore considered up to date.
- SML believes that it will be in a position to operate user terminals in advance of the common technical conditions expected by OFCOM by late 2012/early 2013 (i.e. after completion of the CEPT report).
- SML concurs with OFCOM that it is appropriate to propose an "interim" basis for exemption now, which would exist only until the CEPT has completed its work and a European-wide approach has been adopted.



Detailed comments on interim conditions proposed by OFCOM

- SML's frequency assignments are in the band 1995-2010 MHz.
- The release of the band 2010 to 2025 MHz is still under review. Within this frequency band, user terminals of any license award are expected to operate up to a TRP of 31 dBm / 5 MHz; see Ofcom's 2010 to 2025 MHz Information Memorandum of 4th April 2008.
- SML does not concur with the interpretation provided by OFCOM that *"in practice, it is less likely for a terminal immediately above 2010 MHz to actually operate at that level (...) we consider that in practice the maximum operating power of any adjacent terminals above 2010 MHz are less likely to use the maximum 31dBm/5MHz and therefore operate nearer to 24 dBm / 5MHz"*.
- The proposed interim conditions consist in limiting the terminals using the last 5 MHz band (2005-2009.9MHz) to 24dBm power instead of 40dBm.
- The proposed limit (24dBm) effectively makes it almost impossible to use this 5MHz of spectrum via satellite, would only allow usage of MSS terminals in CGC mode and puts a significant restriction on the bandwidth usage.
- SML cannot accept the proposed interim limits in the band 2005-2009.9MHz, on the basis that:
 - As long as out of band emissions respect the given limits in Table 1, there is no rationale in putting a lower power limit to the edge bands;
 - Terminals in this band, 2010 to 2025 MHz, might radiate at about 31 dBm / 5MHz, so that at minimum 2GHz MSS terminals operated in satellite mode should be allowed to operate at 31 dBm / 5MHz.
- SML also has difficulties with the proposed interim limits for the maximum mean power in the range 5 to 10 MHz from upper channel edge, i.e. -27dBm (against un-synchronised TDD). SML believes that the maximum mean power in the range 2 to 5 MHz from upper channel edge should be the same as in the range 5 to 10 MHz from upper channel edge, i.e. -6dBm.

Summary of SML views on proposed interim technical limits:

- The analysis that led to the values proposed in Tables 1 and 2 are too conservative and would place undue constraints on the operation of MSS terminals in satellite mode in the 2GHz MSS band.
- There is no rationale for such an approach, especially when it comes to protecting services in the band 2010-2025 MHz, which is under review and is not used in the same way as the band below 1980 MHz.
- SML is of the view that the maximum mean power in the range 2 to 5 MHz from upper channel edge should be the same as in the range 5 to 10 MHz from upper channel edge, i.e. -6dBm.

SML would propose that Table 2 has the same limit, namely 40dBm, throughout the band 1980.1-2009.9 MHz, as the requirement of achieving out-of-band emissions limits specified in the proposed Table 1 (taking account of our above mentioned comment) is sufficient to protect services in adjacent bands.