Samsung Electronics UK

Additional comments:

Question 1: Do you have any comment on the proposal to apply the limits defined in Case A of Commission Decision 2010/267/EU for out-of-block emissions from base stations into all frequencies in the range 470 to 790 MHz, as set out in Table 4.4?:

Samsung supports these proposals.

Question 2: Do you have any comment on the proposal to set an in-block emission limit of 61dBm/(5 MHz) for base stations in the 800 MHz band?:

Samsung has an interest in the potential impact that new 800MHz mobile broadband services might have on the reception of DTT services. Samsung understands from the technical analysis carried out to date that viewers of DTT services may be required to fit (or have fitted) filter devices to their DTT receivers in order to continue to receive DTT services free from interference. Samsung recognises this as a very sensitive issue for all stakeholders concerned and believes that the extent of problems should be constrained to the best extent possible whilst retaining the balance for the delivery of mobile broadband services. At this time the full effectiveness of any mitigation measures may not be fully understood nor the impact on future DTT receiver design.

Therefore Samsung does not support a blanket in-block base station emission limit of 61dBm/(5MHz).

Samsung is following the considerable amount of technical analysis being undertaken to assess the scale of any interference issues and notes the technical conditions assumed in those studies (1) including a base station EIRP of 59dBm/10MHz (equating to 56dBm/5MHz which is the lower limit in EC Decision 2010/267/EU).

Therefore Samsung proposes:

a) A licence condition with a maximum base station in-block emission limit of 56dBm/5MHz across all 800MHz band blocks.

b) A review of this condition as experience grows in dealing with the interference matter. This may be a medium term step.

c) A review of this condition once industry has established new standards for TV receiver design and new receivers are prevalent in the market place. This may be a long term measure.

Samsung notes that other countries have adopted base station in-block emission constraints, e.g Sweden has adopted 56dBm/5MHz for Ch60 areas where other mitigation measures (like antenna cross polarisation) cannot be utilised.

In Portugal a blanket limit of 56dBm/5MHz has been proposed to minimise interference into Spanish DTT receivers.

(1) Ofcom Report: Technical analysis of interference from mobile network base stations in the 800 MHz band to digital terrestrial television.

Question 3: Do you agree with the proposed conditions on antenna placement that would permit the use of the alternative block-edge mask for restricted unpaired blocks? If not, please explain your reasoning and your alternative proposals, bearing in mind the need to remain consistent with the framework provided in Commission Decision 2008/477/EC.:

None

Question 4: Meeting the conditions on the use of the alternative block edge mask for restricted TDD blocks would require certain licensees to share information about the locations of their base stations. Do you agree with this proposed approach?:

None

Question 5: We welcome comments on stakeholders' preference for the dedicated or hybrid options for low-power shared access as discussed above.:

Samsung is neutral on this issue so long as it does not lead to a requirement for a specific handset/terminal device implementation (See response to Q8).

Question 6: We welcome comments on the appropriate frequency placement for low-power spectrum blocks.:

None

Question 7: Do you agree with our proposed technical licence conditions for low-power access?:

None

Question 8: We welcome comments from stakeholders on the additional restrictions and technical measures we have outlined for the management of interference under the hybrid approach, and the technical licence conditions that would be necessary to implement them.:

Samsung believes that the low power shared access proposals will be most interesting if they encourage new usage scenarios and innovative services delivered to the same standard handsets and terminal equipment used to receive the main "standard power" licence holder services. Samsung believes that any interference management requirements should not place specific additional requirements on user devices which may lead to a need for UK specific implementations.

Question 9: Do you agree that a Code of Practice on Engineering Coordination, as outlined, is the appropriate approach to manage the coexistence between low-power licensees?:

None

Question 10: Do you agree that we should proceed with the approach that terminal stations complying with the relevant technical parameters be exempted from the requirement for individual licensing?:

Yes.