## CONSULTATION AND INFORMATION ON TECHNICAL LICENCE CONDITIONS FOR 800 MHZ AND 2.6 GHZ SPECTRUM AND RELATED MATTERS

11 AUGUST 2011

## **SUMMARY**

Cable&Wireless Worldwide offers a unified communications solution which consolidates fixed and mobile services for a better, more efficient working experience. Our customers' expectations of us are continually increasing as advances in technology raise the standard of service they could be receiving, so we will need to be able to provide our customers with 4G service once it is available. The conditions of this auction therefore will influence our ability to achieve that and the number of competitors in the mobile market.

A large part of this consultation is a detailed analysis of the feasibility of implementing low power RAN in conjunction with regular services. Given that low power concerns only a relatively small portion of spectrum allocation, the effort taken indicates that Ofcom recognise the technology's great potential, both to become a future asset to businesses internationally and to promote a new kind of competition in a market dominated by a small number of very large operators.

Our response is brief. We want Ofcom to go further in its efforts to stimulate competition than currently proposed, but we appreciate that it faces intense pressure from conflicting interests. We support its proposals to make specific provisions for low power spectrum and believe that at least 2x10MHz should be reserved for low power use, which will benefit consumers by improving competition by offering companies like Cable&Wireless Worldwide a chance to purchase vital spectrum at an affordable price.

## INTRODUCTION

Cable&Wireless Worldwide welcomes the opportunity to further engage with Ofcom on the question of appropriate spectrum allocation. The questions raised by the technical consultation are, we believe, the right ones to be asking, and our position for each is entirely in accordance with those Ofcom has reached through technical analysis and recognition that more competition is crucial for businesses and consumers.

In the previous consultation we outlined why this auction represents a great opportunity to stimulate the market for low power operators, and we maintain this position. We support Ofcom's proposals to help establish a strong fourth competitor, which can only have a positive effect on the industry. The competition this would bring about is excellent for consumers as well for businesses, which would benefit not only from the retail competition between these four but also from further retail competition underpinned by stronger wholesale competition.

This technical consultation has demonstrated that low power spectrum, dedicated and hybrid, is a sound proposition which can easily be made compatible with the current market.

Other responses will likely argue that the necessary safeguards to mitigate interference mean that the spectrum is better utilised by a mobile operator than a company such as Cable&Wireless Worldwide seeking to offer a low power solution. We want to tackle this argument head on.

- Many mobile operators are already exploring unified communications technology; they
  address the opportunity from the perspective of being experts in mobile technology.
  However there are many different fields of expertise that are relevant, and the most
  consumer value will be realised by ensuring a diverse set of businesses, with different fields
  of expertise, are able to address the opportunity in their own way.
- Low power technology used in this manner is only a recent innovation and it is therefore unreasonable to dismiss the potential of something that has yet to be properly explored, particularly when low power technology is also a focus for high power operators.

Given the modesty of our request and the benefit to both our customers and, in the long run, the industry as a whole, we strongly recommend that Ofcom carries these reasonable and rigorously thought out proposals through to the auction.

## **ANSWERS TO OFCOM'S QUESTIONS**

**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?

We agree with Ofcom's comments on the out of block emissions recommendation.

**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?

We agree with Ofcom's comments on the in-block emissions limit recommendation.

**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.

Agreed.

**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?

Agreed.

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

Our view on low power spectrum remains unchanged based on our response to the first consultation submitted on the 31<sup>st</sup> May 2011 where we set out our views on each of the options considered.

We believe that both dedicated and hybrid options will work and provide good outcomes for competition and end users. As such our preference cannot be separated from the amount of spectrum that will be available for low power use. Our preference (our favourite first) is therefore:

- 1. 2 x 20 MHz dedicated low power shared access
- 2. 2 x 10 MHz dedicated low power shared access with an adjacent 2 x 10 MHz shared between high and low power use, i.e. hybrid option
- 3. 2 x 10 MHz dedicated to low power shared access

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

We agree with the findings in the Real Wireless report on technical conditions for 2.6GHz. With this, we have no further comments on the placement for low power spectrum block.

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

Agreed.

**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.

The points raised in this consultation paper generally aligned with our answer to question 4.2 in the first consultation paper.

**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?

The points raised in this consultation paper generally aligned with our answer to question 4.2 in the first consultation paper.

**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?

It is important to ensure the LTE terminal stations are multi-mode and multi-band to drive economy of scale and mass adoption. Taking into account the overhead needed to manage and police all terminals in the market, we agree with the Ofcom approach to put these terminals under license exemption for individual licenses provided they comply with the relevant technical standards.