Nortel Response to
Public Consultation by ARCEP on the Challenges Tied to New Frequency Bands for Electronic Communication Services Access Networks (July 2007 – 26 September 2007)

Introduction
Nortel is a global leader in providing fixed and mobile telecommunications solutions, particularly WLAN, wireless backhaul and base stations for 2G and 3G mobile equipment using IS-95, CDMA-2000 and GSM. Nortel is also actively engaged in 4G technologies, such as WiMAX, LTE, UMB - and their development.

Given its prime experience, Nortel will focus its comments to this consultation on the recent technology and deployment developments in the low frequency bands (Chapter 4 of this Consultation).

Impact on Industrial Policy of Early Identification of Low Frequency Bands
Nortel is of the view that spectrum planning must provide sufficient certainty for long-term commercial investments while ensuring that, as a scarce resource, spectrum is used efficiently. Today’s trend of hyper-connectivity will drive the wireless revolution even faster.

Nortel believes that spectrum should be proactively released for commercial use and that inefficiently used spectrum should be re-planned and released. There is an array of potential services that can be offered and a large number of innovative radio technologies that can be exploited. The technology is available today to allow customers to use spectrum more effectively if spectrum is made available for multiple uses. Nortel therefore believes as a governing principle that spectrum licenses should afford flexibility and not be overly restrictive of technology and services. Nortel therefore stresses that technological and service neutrality should be the default rule.

Nortel supports promoting technology neutrality as a high level guiding principle in selected bands and increased flexibility for licensees in harmonized bands to evolve the technologies that are being used to
provide services. This will both encourage and enable diversity and innovation whilst reducing the regulatory burden.

The radio spectrum is a delicate ecosystem. It must therefore be a fundamental premise of any spectrum management regime that it ensures the mutual compatibility of the various usages to which the radio spectrum is put. It also must be flexible enough to accommodate new services and new technologies, including the higher bandwidth requirements of multi-media applications.

**Industry Developments in the Low Frequency Bands**

Given the continued explosion of broadband devices and applications, Nortel believes that opening the Digital Dividend band (470-862 MHz), which will be a discussion item at WRC07, offers excellent opportunities to meet the future demand of broadband wireless services and applications in France, as well as an in Europe.

Nortel believes that the bandwidth attributed to mobile services should be as large as possible and in blocks of sufficient size and notes that for FDD technologies, as a minimum two blocks are needed.

As discussed in detail at the ARCEP CCR Digital Dividend hearing on 12th September 2007, in addition to the opportunities of LTE in the current GSM and in IMT-2000 extension bands, we believe that the 800 MHz band has great potential for the roll-out of 4G services and applications within an acceptable timeframe.

As such, the use of BWA in the 800 MHz band would be particularly useful to make cost efficient broadband available in the ‘white’ (uncovered) areas thereby closing the broadband gap in France. In particular, Nortel sees great value of this band for municipal operations, public safety, consumer services and universal access to broadband overall.

In addition, Nortel believes that this band will allow deployment optimization (e.g. re-use of existing cell site assets) in this band.

Thanks to its global presence and expertise, including providing solutions bands adjacent to 800 MHz, Nortel is also able to offer its customers products in the short term (less than one year) assuming a predictable regulatory approval and large-scale availability of handsets.

To conclude, given the important role of low frequency bands for the broadband access objectives in France and the ever-increasing need for more spectrum due to the continued growth of broadband demand, Nortel stresses the need for WRC07 to allow mobile services in the Digital Dividend/800 MHz band.

Nortel is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world’s most critical information. Serving both service provider and enterprise customers, Nortel delivers innovative technology solutions encompassing end-to-end broadband, Voice over IP, multimedia services and applications, and wireless broadband designed to help people solve the world’s greatest challenges. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at [www.nortel.com](http://www.nortel.com).