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Mr. Leonard St-Aubin  
A/Director General  
Telecommunications Policy Branch  
Industry Canada  
300 Slater Street  
Ottawa, Ontario, K1A 0C8

**Subject: *Canada Gazette*, No. DGTP-002-07 dated February 16 2007;  
Consultation on a Framework to Auction Spectrum in the 2GHz Range  
including Advanced Wireless Services**

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Dear Mr. St. Aubin:

Nokia Siemens Networks is a leading global enabler of communications services. The company provides a complete, well-balanced product portfolio of mobile and fixed network infrastructure solutions through our service provider customers and addresses the growing demand for services with 60,000 service professionals worldwide. Nokia Siemens Networks, one of the largest telecommunications infrastructure companies globally, combines Nokia's Networks Business Group and the carrier related businesses of Siemens Communications.

Nokia is a world leader in mobile communications, driving the growth and sustainability of the broader mobility industry. Nokia connects people to each other and the information that matters to them with easy-to-use and innovative products like mobile phones, devices and solutions for imaging, games, media and businesses. Nokia provides equipment, solutions and services for network operators and corporations.

Nokia Siemens Networks and Nokia commend Industry Canada for the release of its consultation on a framework to auction spectrum in the 2 GHz range including Advanced Wireless Services ("AWS"). Nokia Siemens Networks and Nokia support the consultation's goals of supporting the release of additional prime mobile spectrum to the market so that Canada may keep in step with global developments, particularly in North America and Europe. We are inspired by the International Telecommunication Union (ITU)'s vision of a global mobile society and believe that action to encourage the introduction of next generation mobile communications services will bring important social benefits, facilitate economic growth and enable new jobs and new business creation.

### **Comments on the Further Consultation on the Auction**

#### ***Spectrum Bands***

##### *1710-1755/2110-2155 MHz*

Nokia Siemens Network and Nokia support the underlying principles of spectrum harmonization that underline Industry Canada's decision to allocate 1710-1755/2110-2155 MHz for AWS. This reflects the ITU's decision to identify this spectrum for IMT-2000 at the World Radio Communication Conference 2000 ("WRC-2000") and 2003 ("WRC-2003"). This paired spectrum is aligned with the AWS spectrum recently auctioned in the United States and the upper portion, 2110-2155 MHz, is aligned globally with the downlink band for IMT-2000 used in Europe, Asia and elsewhere.

Global harmonization of spectrum allows for the creation of global economies of scale that enable less complex and lower-cost equipment. A larger global eco-system for equipment tends to promote greater innovation and more feature-rich products. Finally, global harmonization facilitates global roaming which benefits service providers and consumers alike.

Nokia Siemens Networks and Nokia support the decision to utilize adoption of the proposed band plan for 1710-1755/2110-2155 MHz. This band plan makes use of 5 MHz spectrum blocks, which allow for the deployment of all advanced wireless

technologies and are the standard unit being used internationally for AWS spectrum blocks. As noted in the Further Consultation, 5 MHz blocks are aligned with the United States' AWS spectrum plan. We believe that the greatest possible harmonization of Canada's spectrum band plan with regional and international plans ensures that Canadian operators and consumers can benefit from easier international roaming and a greater choice of lower-cost equipment resulting from global economies of scale.

Industry Canada has asked if it could allow time division duplexing ("TDD") technologies in the 1710-1755/2110-2155 MHz band if proposed by operators and required to operate within the envelope of technical rules for frequency division duplexing ("FDD") systems. Like Industry Canada, Nokia Siemens Networks and Nokia support the principle of technology neutrality. We believe that licensees should have the right to select a technology provided it does not cause harmful interference or other public interests.

We also believe that global harmonization brings benefits in terms of affordable equipment and services that result from economies of scale provided by a large global eco-system. In the United States, the Federal Communications Commission ("FCC") decided to prohibit base and mobile transmissions in the 1710-1755 MHz band, effectively prohibiting TDD operations.<sup>1</sup> If Canada were to permit TDD technologies in this spectrum, this would create a unique market requiring a tremendous amount of equipment investment. This kind of customization would likely not be supported due to the limited scale of the Canadian market and could result in an insufficiently small eco-system of equipment providers.

## **Summary**

Nokia Siemens Networks and Nokia welcome this further consultation by Industry Canada as a positive step towards getting additional needed mobile spectrum to market. This spectrum will provide the basic building block for moving Canada towards greater participation in the global mobile society and its socio-economic benefits.

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<sup>1</sup> U.S. Federal Communications Commission, Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, 18 FCC Rcd 25162 (2003) (*AWS-1 Service Rules Order*), ¶110-111E.

We support Industry Canada's efforts to ensure that Canada's mobile spectrum is harmonized and able to take advantage part of a larger regional and global eco-system of equipment and service providers. We encourage Industry Canada to continue to keep this principle in mind as it sets the band plan and technical rules for this spectrum to be auctioned.

Sincerely,



Mark VanderHeyden  
President  
Nokia Siemens Networks Canada Inc.



Paul Chapple  
General Manager  
Nokia Canada