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September 24, 2001

Ms. Magalie Roman Salas  
Federal Communications Commission (FCC)  
The Portals, TW-B204  
445 12<sup>th</sup> Street, SW  
Washington, DC 20054

Re: Notice of Ex-Parte Presentation – ET 00-258 /

Dear Ms. Salas:

This letter is being filed to notify you that on September 21, 2001, Mr. William Plummer, Mr. Stuart Cooke, Mr. Ed Ehrlich and Ms. Cecily Cohen of Nokia, Inc. met with staff from the Office of Engineering & Technology (OET), the Mass Media Bureau, the Wireless Telecommunication Bureau and the International Bureau to discuss issues related to the above captioned proceeding.

During the meeting, Nokia discussed its view that the most important criteria in selecting a frequency band plan for new advanced wireless services, including Third Generation (3G) services are: the timing of availability, sufficient amount of spectrum and global harmonization. Nokia shared its thoughts on the particular advantages and disadvantages of the most likely band plans for new advanced wireless services in light of these criteria. Attached please find Nokia's slide presentation outlining these views.

If you have any questions regarding this matter, please contact Cecily Cohen at (202) 887-5210.

Sincerely,



Cecily Cohen  
Manager, Government & Industry Affairs  
Nokia, Inc.

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**US Spectrum Options**  
**Nokia Views**  
**September '01**

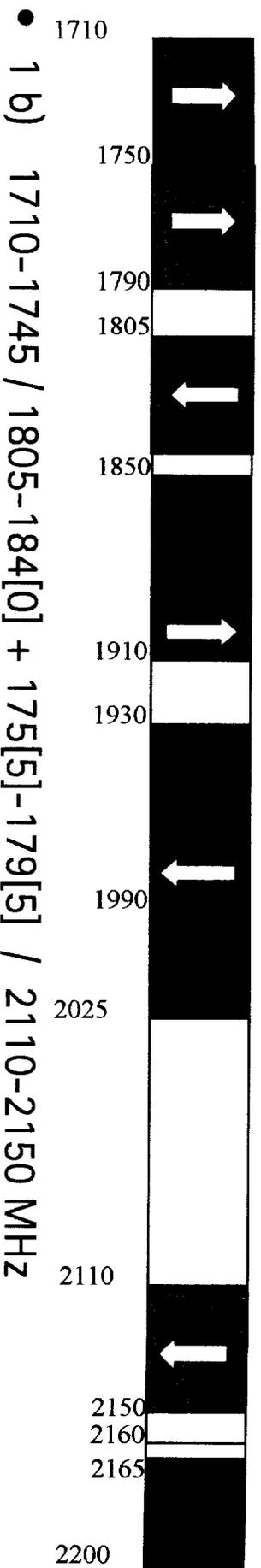
Stuart Cooke

Head Telecoms Standards Policy

# 'Realistic' Options

## Option 1

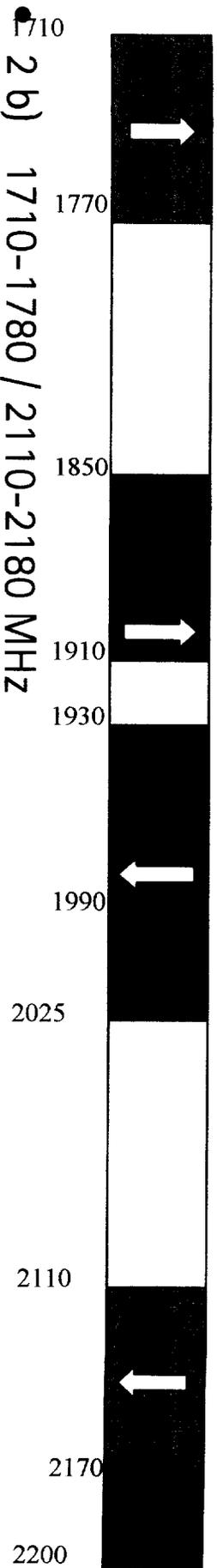
- 1 a) 1710-1745 / 1805-184[0] MHz



- 1 b) 1710-1745 / 1805-184[0] + 175[5]-179[5] / 2110-2150 MHz

## Option 2

- 2 a) 1710-1770 / 2110-2170 MHz



# Option 1

- 1 a) 1710-1745 / 1805-184[0]
  - Guard band between new downlink and PCS uplink needs to be resolved
  - Longer term global harmonisation with GSM1800 freq arrangements
  - Longer term benefits from globally competitive sources of equipment (range of products, time to market of innovative features etc)
  - Europe not anticipated to refarm from GSM until next decade
  - Spectrum per operator ranges between 2x10 – 2x20 MHz in other regions
  - 2x3[5] MHz insufficient for North American market (no. operators / spectrum per operator)
  - Spectrum considered to be unavailable for considerable amount of time
- 1 b) 1710-1745 / 1805-184[0] + 175[5]-179[5] / 2110-2150
  - Guard band between uplink and downlink needs to be resolved
  - Provides upto 2x7[5] MHz
  - Introduces additional freq band / complexity
  - Spectrum considered to be unavailable for considerable amount of time

# Option 2

- 2 a) 1710-1770 / 2110-2170
  - 'Next best' in terms of global harmonisation
  - In terms of complexity could be considered to be equivalent to option 1b)
  - Contiguous freq band (i.e. one additional freq band in a terminal)
  - Globally common uplink and downlink arrangements (GSM1800 freq arrangements uplink and 'IMT-2000 core band' downlink)
  - 2x60 MHz
  - Balance required between number of operators and spectrum per operator (Six operators with 2x10 MHz or four operators with 2x15 MHz)
  - Requires 'compromise' with incumbents vacating 'less' spectrum (1755-1770, 2150-2160 & 2160-2170 MHz) compared to option 1 and 2.5 GHz
  - Spectrum considered to be available sooner than option 1
- 2 b) 1710-1780 / 2110-2180
  - Introduces additional 2x10 MHz
  - Unclear if global terminals would incorporate 1770-1780 / 2170-2180 MHz – depends on market / sharing / regulatory issues outside of North America – ITU action ?

# Summary

## Priorities

- Amount of spectrum (no. operators / spectrum per operator)
- Spectrum availability
- Global harmonisation

## Views

- Option 1a provides long term harmonisation, insufficient spectrum, unavailable for considerable time
- Option 2a is next best in terms of global harmonisation, provides significant commonality, sufficient spectrum, potentially available much sooner
- Option 2b requires global / ITU discussion