22 May 2000

Senior Telecommunications Controller (Competitive Services) Office of the Telecommunications Authority 29/F, Wu Chung House 213 Queen's Road East Wan Chai Hong Kong

Dear Sir

Nokia's Response to Third Generation Consultation paper

OFTA issued the document "Licensing Framework for Third Generation Mobile Services – An Industry Consultation Paper" in March to seek the views from the industry and the public on 3G licensing issues. As a player in the Hong Kong cellular industry, Nokia would like to respond to the issues raised in the consultation paper, mainly from a technological perspective.

With reference to the paragraph numbers in the consultation paper, I herein list Nokia's views and comments below :

Paragraph 2.9

Nokia believes that IMT-2000 is the basis for the emerging Mobile Information Society and supports TA's technology neutrality policy, with the provision that the standard(s) adopted by the licensees will be compatible to each other from the end-users' perspective.

In particular Nokia supports the WCDMA (IMT-DS) standard which can be built on the existing GSM system. It will be a USIM-based technology, offering all the benefits of network mobility and roaming offered by GSM networks of today. This technology can meet OFTA's objectives of allowing easy switching between networks and providing convenient roaming services without changing mobile terminals.

However, should multiple standards eg IMT-DS and IMT-MC be adopted in Hong Kong, guardbands shall be required if 2 different wideband systems are operating side by side in the IMT-2000 paired band in an opposite duplex direction.

If a narrow band technology is operating adjacent to a wideband technology in the IMT-2000 band allocation, guardbands will also be required.

Nokia notes that reserving guardbands from the 3G spectrum allocation may be a matter of concern.

Paragraph 3.4

FDD Spectrum Allocation

Nokia notes that in Mainland China, cdmaOne WLL services have been commercially launched in the 1900MHz band, specifically in the 1975-1977MHz band, which conflicts with the ITU band allocation. Nokia notes that as this service utilizes the FDD uplink band, this is a potential cause for interference which may result in the FDD band being unusable, especially in areas bordering the mainland, such as the northern New Territories. Nokia thus urges the TA to co-ordinate with Mainland on frequency allocation issues.

Paragraph 3.8

Nokia supports the evolutionary introduction of 3G services in 2G frequency bands. However, Nokia notes that typically this is expected to be a longer term issue because the traffic in the second generation bands is expected to increase due to the future evolution of GSM networks and services.

The initial IMT-2000 network deployment should take place in the initial IMT-2000 bands as identified by the ITU. The IMT-2000 extension bands which are to be identified by the WRC-2000 should be made available in due time. The extension bands are additional bands over and above the present second generation and IMT-2000 bands. The development of IMT-2000 equipment for 2G bands will depend on the market and standardization status.

Paragraph 3.12

Nokia supports the adoption of a 3G band plan that is in compliance with the ITU IMT-2000 spectrum identification.

Paragraph 3.19

Nokia can provide infrastructure that can support both 15MHz paired band or 10MHz paired band spectrum allocations. Nokia notes that GSM could act as one of the layers in a HCS network, and Nokia intends to provide infrastructure that will support intersystem FDD/GSM handovers by early 2002.

Paragraph 4.6

Nokia does not have a preference on a particular licensing option mentioned in paragraph 4.5. However, Nokia believes in a level playing field and feels that no distinction should be made between new entrants and incumbents in 3G licensing. History has proven in the case of PCS licensees, 4 newcomers were given PCS licences and they were able to rollout their networks in a timely manner.

Paragraph 4.14

Nokia supports the TA's consideration that applications for 3G licences should be considered on the basis of merit.

Paragraph 5.19

Nokia supports the TA's view on setting Mobile Number Portability (MNP) as a mandatory requirement in 3G licences. Nokia believes that it is beneficial to subscribers to enjoy MNP services both in 2G and 3G.

We would be glad if you can give favourable considerations to the above view points.

Yours faithfully

Jonathan Yip General Manager Nokia Networks Nokia (H.K.) Ltd