



November 13, 2000

Office of the Telecommunications Authority
29/F, Wu Chung House
213 Queen's Road East
Wan Chai
Hong Kong

Attn: Ms Sara Lam
Senior Regulatory Affairs Manager (Services Licensing)

Dear Ms Lam

RE: Response to 2nd Consultation Paper on 3G Licensing

Ericsson commends OFTA on its continuous effort to involve the industry and the public in the decision making process of establishing a world class telecommunications environment for Hong Kong.

Ericsson is pleased to submit its response to the TA's second consultation paper on 3G, "Licensing Framework for Third Generation Mobile Services – Analysis of Comments Received, Preliminary Conclusions and Further Industry Consultation", dated 3 October 2000.

Our views and comments are listed with reference to the paragraphs in the consultation paper.

Yours Sincerely,

Ulf Ewaldsson
Chief Operating Officer and Deputy Managing Director
Ericsson (Hong Kong) Limited

2.3.5 – 2.3.16 “Open Network” Requirement

With the number of licences limited by the availability of spectrum required for sustainable business, Ericsson supports the TA's proposal for enabling more players than the number of licensees to participate in the 3G market. But Ericsson recommends that the terms and conditions for this should be left to commercial negotiations between the involved parties.

With the high capability of the 3G system, a critical success factor will be the service and application creation, marketing and provisioning. It is indeed the success of these efforts that will help achieve the Government's policy objectives to promote the development of the telecommunications and related IT industries, and to maximise benefits to the economy as a whole. In order to contribute actively and successfully to the policy outcome, regulatory measures should encourage a multiplicity of players playing various roles and should not put unnecessary barriers towards its realisation.

MVNO and Capacity Reservation

Mobile Virtual Network Operator, MVNO, is often mentioned. We think the description used by Oftel, the U.K. Regulator, that “an MVNO is an organisation that offers mobile subscription and call services to customers but does not have an allocation of spectrum”, to be the best description for this purpose. This means that no ownership of any mobile network infrastructure is necessarily expected or prescribed.

An MVNO can be an entity that leverages its brand and customer relationship into the 3G market and uses its own excellent customer billing and care facility. It can also be a service organisation, which leverages not only its customer care, but also value-added applications ran on various application platforms and controlled by various gateways. Furthermore, it can be a full-fledged 3G mobile operator overseas who wishes to provide a Virtual Home Environment to its global customers, as well as having its own branded customers based in Hong Kong. All these described MVNOs and many more have different requirements for point-of-interconnection to, as well as capacity demand on, the licensee who provides the host mobile network.

In addition to a variety of technical relationships outlined above, a successful utilisation of the 3G capabilities often results in business relationships as well, brought about by first-to-market desire, recognition of each other's strengths or complementary business models. This can lead to service offerings designed to complement each other's different traffic or capacity demand patterns. A simple wholesale-retail relationship is no longer sufficient to describe the market or to be used as a basis for regulation.

Capacity reservation for MVNOs per se does not relate to, nor encourage the development of market driven applications. Different multimedia applications also require different bandwidth. The value of these applications is however not necessarily related to bandwidth. Some traffic like information-browsing are delivered using “best-effort”, automatically adjusted by the system depending on other application and services being offered. Capacity reservation is meaningless in this case.

In general, it is not the “capacity” but Quality of Service (QoS) that is critical to both the MVNO and the host network. It should also be noted that from QoS point of view, not 100% of the

radio capacity are useable. A margin for interference management is required. It is important to note that this is a network operation issue, not a regulatory measure.

From the network dimensioning point of view, the host network operator's own requirements are planned and met by a business control process of forecast and implementation. Similarly, the planning for the MVNOs' requirements is a business process, based on agreed service levels, processes and contractual obligations.

Our views and comments

The above discussion illustrates that the relationship between the MVNO and the Host Network Operator in a successful 3G market can be multi-faceted and based firmly on a commercial footing. However, this relationship is no longer based on a simple "wholesale pricing" business model. This highlights the difficulties of defining a point of measurement and of measuring the entity of "capacity", in the context of enabling a 3G market according to the Government's policy objectives. In short, a regulatory measure like percentage "capacity" reservation will not only divert participants' efforts from developing the potential of the market, but in fact inhibits the realisation of some of the potentials discussed above. Ultimately, this will not protect the consumers' interest as a whole.

Ericsson therefore strongly advocates the TA to mandate the access of the licensees' network to the access seekers, but the terms and conditions should be achieved by commercial agreements between them. The TA should only intervene if such negotiations fail, or market behaviour contradicts the set principles. This means that the regulator does not involve itself in the design of the market and the related services. But it endeavours to offer maximum flexibility for the players to do so and provides a safety net against anti-competitive behaviour.

Many telecommunication regulators, particularly in those markets that have been deregulated have adopted this process. In Finland, arguably one of the most successful and innovative mobile markets, and the first one to allocate 3G licences, the regulator has taken the unknown 3G market development into account. It has not imposed specific regulatory rules, but reserves the right to do so in case of market imperfections, in order to afford the best opportunities for the market to develop.

In Sweden, legislation states that operators with their own network for mobile telecommunications services are obliged to grant access to network capacity to undertakings that do not have their own networks. Fair market terms shall apply. This obligation only applies to the extent that capacity is available.

In terms of economic principles to be adopted in making a TA determination, various approaches have their pro's and con's for different services, based on the nature of service, its maturity and dependency / relationship between the service provider and service consumer. It is vitally important, however, that the pricing model should encourage the economically efficient use of, and continuous investment in, the infrastructure so that innovative 3G mobile services are provided.

2.4.2 Hybrid auction approach

Ericsson fully supports the objectives enunciated by the TA in paragraph 2.2.1. Therefore, the elements of the approach should not countermine these objectives, and financially overburden the licensees to meet them. Excessive pricing and conditions on licences may drain the 3G licensee business cases and its service creation. This could affect the local IT industry's development of 3G related content and service applications which is envisioned to take off with the introduction of 3G. Large down payments at the time of licence award or in the beginning of the deployment process will lead to a slower build-out of the networks.

2.6 Auctioning Rules

OFTA has rightly viewed auction as just a method of allocating the licence. Therefore the auctioning processes and rules should be designed in such a way that the outcome reflects the value of the licence in the context of the objectives, and not the effects of the bidding mechanism to artificially extract the maximum price. This will be helped by having a well-defined bidding spectrum lot representing the licence, rather than having spectrum aggregation during the auction.

It is also essential to conduct training and testing of the chosen auctioning method before its start.

3.3.1 Spectrum Width per Operator and Number of Licences

Ericsson strongly supports the TA's proposal to award licences of 2x15MHz paired spectrum including 5 MHz unpaired spectrum, as this is considered necessary to provide the flexibility to deploy a full bandwidth 3G services, in a sustainable business operation.

4.2 3G Standards in Hong Kong

Ericsson supports the TA's technology neutral licensing view that the prospective operators should be permitted to use any IMT-2000 standards adopted by the ITU within their assigned 3G frequency bands for 3G mobile services.

4.3 Availability of 3G Spectrum in Hong Kong

Ericsson notes that much work is being done in ITU-R post WRC 2000 on the deployment of the bands identified and agrees with the TA's view that allocation of additional spectrum for 3G services in the 2,500 – 2,690 MHz band should be subject to further discussion and consultation. The ITU-R decisions should naturally be taken into account.

4.4 3G Services in 2G Spectrum

Ericsson agrees with the TA's view of the existing 2G operators making use of their 2G spectrum for 3G services. Ericsson is of the view that the 2G spectrum owners should not be deprived of an opportunity to upgrade their technology in order to meet market demands.

4.5 Mandatory 3G Mobile Number Portability

Ericsson agrees with the TA's view in mandating 3G Mobile Number Portability (MNP). As discussed in 4.6 below, this should be done on the same basis as in 2G using E.164 numbering at this stage.

4.6 Numbering Requirement

3G services will be deployed using E.164 numbering as in 2G. With the introduction of multimedia in third generation networks, it will be possible for users to obtain separate numbers (MSISDNs) for their multimedia subscriptions. This contributes to early number depletion and may complicate portability. In the future all-IP 3G network, translation and mapping between numbering and naming will also have to be done. Work is being done in the standardisation bodies to consider these issues. These should be taken into account by the Numbering Advisory Committee to be convened by OFTA.

4.7 Domestic Roaming between 3G and 2G Networks

Domestic roaming between 2G and IMT-2000 operators is favourable to the end user. Ericsson supports the TA's proposal that all 3G operators, if they do not have 2G networks, should have the possibility to conclude domestic roaming agreements with existing 2G operators, but that it should be achieved by commercial negotiations by the parties involved.

- End of Response -