

## APPENDIX 1

### DIALOG TELEKOM'S COMMENTS ON TELECOMMUNICATIONS REGULATORY COMMISSION OF SRI LANKA'S CONSULTATION ON SPECTRUM ALLOCATION FOR 3<sup>RD</sup> GENERATION (3G) MOBILE SERVICES

#### COMMENTS AND OBSERVATIONS

07 December 2005

#### A. INTRODUCTION

This Submission details Dialog Telekom's comments on the Telecommunications Regulatory Commission of Sri Lanka (TRCSL) Consultation on Spectrum Allocation for 3<sup>rd</sup> Generation (3G) Mobile Services [Consultation Ref: 2005/TRCSL/SM-01] ('Consultation Paper'), which proposes the methodology for allocation of frequencies among operators for ostensible reasons of facilitating the introduction of 3<sup>rd</sup> Generation Mobile Telephony in Sri Lanka.

Dialog Telekom welcomes the proposed Spectrum Allocation, which will serve as a major step for future telecommunications development in Sri Lanka. A similar futuristic step adopted by TRCSL in the past (e.g. Introduction of Digital mobile telephony ahead of regional countries) has paid rich dividends to the consumer and country as a whole as witnessed today.

The comments and observations noted below are provided with the objective of optimising the proposed Spectrum Allocation for 3<sup>rd</sup> Generation Mobile Services, which would result in expeditious roll out of 3G Mobile services. These comments are categorised as follows:

1. General Comments
2. Specific comments in response to TRCSL Consultation

#### B. GENERAL COMMENTS

The primary focus areas for discussion would be as follows:

1. Insofar as the legal basis of spectrum allocation is concerned, the following aspects need further clarification:
  - (a) Confirmation that in the case of a mobile operator, spectrum allocation would be accompanied by a spectrum license issued under Section 22 of the Sri Lanka Telecommunications Act, No 25 of 1991 as amended by Act, No 27 of 1996 and not involve or require an amendment to the license possessed by the operator issued under section 17 of the above mentioned Telecommunications Act
  - (b) License period
2. A process based on a beauty contest is strongly recommended considering regulatory precedents and failure of previous auctions in Europe. However, if spectrum allocation is in fact done based on a beauty contest, it is not clear if there will be a price element attached to it. Dialog Telekom's position with respect to this is further elaborated in Section C.A3 below.

3. Clearing the proposed 3G band by vacating incumbent users of spectrum
  - (a) A clear policy and method to vacate incumbent users by relocating them to other suitable bands is required
  - (b) A Time frame should be specified for the above
  - (c) Clarification is required with respect to the impact of the spectrum clearing timetable on the payment of fees (if any).
  - (d) Clarification is required with respect to the exact locations/paths with respect to incumbent usage and the TRCSLs policy with respect to permitting co-habitation of spectrum (on localised or global basis) during the period leading up to the clearing of spectrum.

### **C. SPECIFIC COMMENTS IN RESPONSE TO TRCSL CONSULTATION**

#### **Q1: TRCSL would like to invite comments as to the choice of IMT-2000 standard being proposed for adoption of 3G mobile telephone services in Sri Lanka.**

A1: Dialog Telekom agrees as to the choice of IMT-2000 standard to be adopted for 3G in Sri Lanka. In particular, Dialog agrees with TRCSL on the view that, CDMA Direct Spread and CDMA TDD standards (W-CDMA) will offer 3G evolutionary upgrades for all the existing 2G mobile networks in Sri Lanka, which offers both interoperability and lowest cost system upgrades.

Despite the 5 approved standards, there are effectively only two main competing standards: W-CDMA and CDMA2000. For Dialog, it is important to note that the typical migration path from GSM is to W-CDMA which is projected to account for 80% of all global 3G subscribers. (*OECD, Development of Third Generation Mobile Services, Paris 2004: <http://www.3g.co.uk/PR/Feb2003/4927.htm>*).

It should also be noted that close to 100% of Sri Lanka's mobile subscribers are served using GSM technology, accentuating the Importance of a direct migration path from GSM. UMTS Implementation In Sri Lanka would ensure seamless coverage between 2G and 3G systems and maximum benefits to consumers of 2G and 3G services.

As noted above, though there are 3G networks worldwide utilising different standards, there is a higher degree of uniformity with W-CDMA worldwide than seen on any other network which will make securing international roaming revenues easier for Sri Lanka. Therefore, as far as roaming arrangements are concerned, given that 3G networks continue to be prolific across Europe, with the availability of multimedia services enjoyed in their home 3G networks, international travellers of the future will similarly seek seamless availability of these 3G services, as enjoyed in their home country. The adoption of the UMTS band plan by Sri Lanka would secure healthy foreign exchange inflows from these countries through the provision and support of 3G roaming.

#### **Q2: TRCSL would like to invite comments on the proposed band plan.**

A2: While Dialog Telekom is in agreement to the band plan proposed by TRCSL, it is also important to define the extension band for 3G mobile services in years to come. The GSM Association recommends that the additional spectrum will be sub bands within 698 to 806 MHz, 2500 to 2690 MHz and 2700 to 2900 MHz (<http://www.gsmworld.com/using/spectrum/imt2000.shtml>)

Requirement for this additional spectrum could be evaluated based on the following:

- (a) Demand for advanced 3G applications and services
- (b) 3G subscriptions and forecasts during the first few years after initial allocation
- (c) Optimum use of infrastructure

Dialog would like to point out that the Indonesian government is also engaged in a 3G spectrum allocation exercise which is targeted to be concluded by end 2005. In a related development, the Indonesian government is also cleaning up the spectrum allocated in the 3G bands where existing fixed wireless CDMA operators in the IMT-2000 band will be migrated to 800 MHz by 2007 with the vacated spectrum forming the basis for a secondary 3G spectrum auction in 2008: Policy Framework for 3G, Kominfo, Indonesia, 1 September 2005 –

**Q3: TRCSL would like to invite comments on the methodologies proposed for the evaluation of suitable candidates for the provision of 3G mobile services in Sri Lanka**

A3: On the auction vs beauty contest debate, Dialog believes that an auction will delay and limit the roll out of 3G services and adversely affect the economic development of Sri Lanka. This auction methodology is widely considered to be one of the major contributors to the slower than anticipated deployment of 3G services in Europe. With spectrum cost being on average, 60% of total investment costs, the cost which consumers have to pay is significantly higher. Dialog submits that the cost to secure the spectrum must be reasonable.

As such, auction will not be the appropriate vehicle to ensure network development and service deployment. Japan and Korea have been able to generate large installed bases of 3G users through a ‘beauty contest’ allocation of spectrum, directing resources to network coverage and business development rather than spectrum fees. Singapore, Hong Kong and Malaysia have all adopted similar approaches to the successful markets of North Asia.

**Q4: TRCSL would like to invite comments on the proposed Spectrum Allocation Plan.**

A4: Within the Asia Pacific region, there are regulatory precedents for such an allocation, with spectrum sold in blocks of 2x15MHz in Hong Kong, Malaysia, Singapore and Taiwan and in blocks of 2x20MHz in Japan.

Dialog Telekom also welcomes the principle of Staggered Approach - Stage I and Stage II to ensure that only serious players with the right background and experience are selected to spearhead the initial foray into 3G. Dialog also supports the consultation process prior to Stage II specifically to determine whether there is a need to proceed with Stage II and to ensure that the lessons from the Stage I are taken into account before the selection process for Stage II begins.

With respect to band allocation, Dialog Telekom is of the view that the Bands available should be “rated” in terms of their immediate useability and/or the ease of relocation of incumbents. The operators scoring higher in the beauty contest should accordingly be assigned bands with higher rating/useability.

Dialog Telekom is however of the view that the spectrum resources identified by the TRCSL for UMTS should be primarily recognised as spectrum to support mobile operations and therefore that eligibility for Stage 2 should initially exclude fixed (or other) operators who have been granted spectrum in recent times to support their operations, (for example recent allocations of 800 MHz Spectrum). The latter exclusion should be applied especially in the case of operators who have been granted spectrum, which can be utilised for the provision of 3G services (e.g. EVDO services on CDMA 800 spectrum). As such Dialog is of the opinion that spectrum requirements of incumbent mobile operators (subject to performance and adherence to license conditions) should be addressed prior to the implementation of an open auction involving non-mobile operators.

Should there be any pricing attached to Stage 1 allocation (irrespective of the Method of allocation), the reference pricing must be used as minimum pricing levels for the Stage 2 allocation.

Dialog also agrees with TRCSL that the 3G spectrum allocation process should take into account the past and future performance based principles.

Notwithstanding the spectrum blocks available, Dialog would also like to seek clarification on the number of assignees and to determine the tenure of allocation. Dialog submits that the tenure must be period of sufficient duration (typically 15-20 years) to provide operators with the required level of investment security and potential to derive adequate returns on investments.