

## **Response to Telecommunications Regulatory Commission Spectrum Management Framework Consultation<sup>1</sup>**

Response from: Digicel (BVI) Ltd

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<sup>1</sup> The comments in this response are not exhaustive and Digicel's decision not to respond to any particular issue does not necessarily represent agreement, in whole or in part with the Commission's position on these issues; nor does any position taken by Digicel in this document mean a waiver of any sort of Digicel's rights in any way. Digicel expressly reserves all its rights.

## Comments on Policy

The policy aim should be to carry out spectrum regulatory work that is most likely to maximise value to consumers and the economy in terms of the demand for, and delivery of, telecommunications services. With this starting point in mind the number one priority should be to decide on the bands that will be allocated to cellular mobile and broadband wireless access services, and then to make these bands available in whatever form determined as soon as possible.

While it would be helpful to put in place a complete National Frequency Allocation Table (NFAT) to help with spectrum allocations, and in furtherance of the above, we imagine that it could take months or years to complete it. The creation of an NFAT is a long term project that can be worked in the background and should not interfere with the primary goals of the Commission.

We note with concern the suggestion that a complete audit of all spectrum that is being used may be needed before allocating spectrum for cellular mobile and broadband wireless services. Again this could take months or years to complete depending on the circumstances. Spectrum policy and any system of charging for it for spectrum in the field of mobile and wireless broadband should be decided on as a matter of priority and not await an audit of the entire spectrum or even completion of a policy for other types of spectrum.

Within the category of spectrum farming and release at paragraph 3.1 we agree with the priorities listed.

We do not understand the basis for installing a fixed monitoring station for interference management. Given the BVI's topography it may not be possible to monitor interference in large parts of the BVI from a fixed station. We have not researched the options in terms of the equipment that is available but it seems to us that something like the equivalent of a Cell Site on Wheels (COW) is needed for interference management. If such equipment is available this could be moved and parked at particular locations for a period of days, weeks or months as the TRC requires, and would provide the flexibility needed to monitor interference across all the islands. In any event allocation of spectrum in the 700MHz band should not wait for this equipment to be made available.

Overall, as we understand the Commission's proposals, they seem, more or less, to indicate an intention to gather a great deal of information and put it together in complete documents to provide a complete policy and administrative framework before carrying out other work. While we agree that the work indicated should be carried out over time, we do not want that work to hold up the prospects for network and service development in fast moving areas of telecommunications. We ask the Commission to give more priority to enabling development to take place quickly, and to complete the full framework over time.

We now address the Commission's specific questions.

**Question 1: Do you agree with the TRC's proposal to follow Region 2 allocations unless it is in the territory's interest to do otherwise?**

Yes

**Question 2: Do you agree that the TRC should first concentrate on bands allocated to cellular mobile and wireless broadband access services when developing a NFAT?**

Yes, this is where the most immediate advantages to consumers and the economy lie. As indicated above subsequent allocation of spectrum for these services should not await completion of an entire NFAT.

**Question 3: Do you have a view on the band plans that should be adopted in specific frequency bands?**

For 700 Mhz we support the use of the US Band Plan.

**Question 4: Do you have any comments on the TRC's proposals for harmonisation of licence exempt allocations and for making CB radio licence exempt?**

No comments at this time.

**Question 5: Are there any specific issues you think should be raised in the proposed discussions with the FCC?**

No comments at this time.

**Question 6: Do you have any comments on the TRC's proposed assignment policy?**

For spectrum that may be congested or that is used to deliver services to the general public we do not support the use of a sealed bid auction, as it will in some circumstances automatically inflate prices. This is especially the case where certain spectrum is needed as a result of the technological evolution of the industry as in the case of the 700MHz bands. Automatic inflation of prices occurs because existing providers know that they must obtain that spectrum or face eventual destruction of their businesses through obsolescence. This means that they would be compelled to bid at the highest possible level they could afford to secure that spectrum. This means that even if they do obtain the spectrum, the company will then have a large debt repayment schedule, and will be forced to burn on debts revenues that could otherwise have been used to invest. They may also suffer financing difficulties in attempting to secure any loan they may wish to take out, as banks will be reluctant to lend to a highly leveraged business.

In contrast a bidder who is not committed to the market place can bid just the price it thinks is viable (bearing in mind a reasonable return) and simply walk away if the price is higher without fear of losing an entire existing business.

Instead of the approach proposed we therefore favour an allocation process which consists of an initial qualification stage followed by a beauty contest, and the allocation of spectrum at a price that recovers just the administrative costs of regulating it.

Where existing users are in the market, spectrum should be reallocated to them on request at the end of a licence period at administrative cost, unless there is an imbalance in the allocation of spectrum between direct competitors.

**Question 7: Are there any comments on the TRC's proposals to issue frequency authorisations to government users and unitary licence holders for their spectrum access and to take an incremental approach to spectrum trading?**

Digicel agrees with this approach.

**Question 8: Do you have any comments on the TRC's proposals in respect of applying spectrum fees to all authorised spectrum use and on the proposed basis for setting these fees so as to promote efficient spectrum use (RSM13 and 14)?**

We agree that at least the administrative costs of managing the spectrum should be recovered (provided this is offset where providers are already paying sums of money to cover the cost of this regulatory work by way of royalties for example). On a general level we agree that congested spectrum should be priced between administrative and opportunity cost. We would encourage pricing towards the lower end of that scale where possible so that revenues that are available can be invested in networks and services rather than being consumed by spectrum fees.

**Question 9: Do you see more value in holding user meetings with the TRC on a regular basis or only as the need arises?**

An annual meeting plus meetings on an as needed basis is Digicel's preferred approach.

**Question 10: Is there interest in access to the 1800 MHz, 1900 MHz and 2100 MHz frequency bands (as indicated by Supply Option 1) or should alternative frequencies be considered for release? Answers should take account of later proposals to apply coverage obligations and offer the spectrum on a competitive basis.**

GSM 1800 MHz spectrum provides additional capacity to Digicel's GSM 900 networks. When GSM 900 spectrum is exhausted additional capacity can be achieved by deploying GSM 1800 cabinets at existing GSM 900 sites thus avoiding the need to build additional sites.

Digicel would require XXXXXXXX bandwidth of XXXXXXXX spectrum.

Digicel would also wish to obtain XXXXXXXX depending on the terms of the allocation to give us the option to build a XXXXXXXX network.

**Question 11: Do you have any comments on the benefits and costs of reassigning frequencies currently held by CCT in the 850 and 900 MHz bands to other operators seeking access to these frequencies? Please indicate the amount of spectrum in each frequency band, if any, you think should be reassigned.**

In order to level the competitive playing field, Digicel needs an allocation of spectrum in the 900 MHz band. The greater penetration characteristics of 900 MHz frequencies over 1900 MHz

frequencies will enable Digicel to improve the service offering to our subscriber base over and above what we are able to deliver currently with 1900 MHz spectrum alone. 900 MHz spectrum will improve in-building coverage especially in rural areas. The use of 900 MHz spectrum would act as an overlay network to the existing 1900 MHz network, thus avoiding the need for additional sites.

Digicel needs XXXXX bandwidth of XXXXX spectrum.

**12: What is your interest in the use of the 700 MHz, 2500MHz and 3500 MHz bands? In responding please indicate your views on:**

**a. Options for the band plan**

We agree with the proposal to use the US band plan for 700 MHz. Operators need to be able purchase equipment and handsets that have been mass produced for large markets in order to keep costs down an in turn to a/ make the business plan for a small country viable in the first place, and / to keep prices down for consumers in the second to make the service affordable universally.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

In any event, Digicel would ideally want to obtain as close to XXXXXXXXXXXXX spectrum as possible as this will enable us to deliver super high speed services and therefore give us the greatest chance of delivering profound advantages to people's lives through a fantastic service offering.

XXXXXXX spectrum is our greatest priority alongside an allocation of XXXXX spectrum. Digicel would also, depending on the terms on which it was allocated, wish to obtain for WiMax purposes 25Mhz of spectrum in the:

XXXXXXXXX ranges preferably

or in the

XXXXXXXX range

to give us the option to provide XXXXXXXX services.

**b. Alternative licence blocks and bandwidth that each operator would prefer for LTE and/ or other broadband deployment within this band plan, taking account of the obstacles to interoperability between the various band classes in the US band plan**

No comments at this time.

**c. Procedure and fees for acquiring these licences**

We believe that the spectrum should be offered to existing mobile providers first as they are the ones best able and most likely to follow through on build out of an LTE or other broadband network. If there remains spectrum available after that round, and demand is greater than availability then a pre-qualification stage followed by a beauty contest is the way to go.

**d. Obligations associated with these licenses, including those related to ensuring that the significant population centres are covered within a specified time after the licenses are awarded by mobile broadband networks.**

We do not agree with the imposition of roll out obligations for LTE or other new broadband technologies. Brand new technologies cannot be treated in the same way as rollouts of established technology.

The costs of rollout, the various directions in which technologies can develop, and uncertainty about the level of take up and the viability of a new technology are already risk factors enough for potential investors in new technologies. Any figure or target that could be arrived at in terms of a roll out obligation would be arbitrary in the sense that neither potential investors nor the TRC would know in advance whether that target is economically achievable (since none of us are able to predict the future evolution of a new technology).

We are not dealing here with a settled technology like GSM which has already proved universally popular and possible to deliver economically to the vast majority of the population in more than a hundred countries in the rest of the world. In respect of GSM it was only after viability seemed to be proven that coverage obligations became the fashion when granting licences to prospective GSM providers in other countries.

We are not at the same place with respect to LTE and other new broadband technologies. The new technology risk factor has to be taken in to account. There is no guarantee of returns or success at this stage. Business plans may prove to be incorrect, businesses can fail, and countries will suffer the consequences if that happens because they impose obligations based on a premise that the network will definitely be recovered. LTE and other new broadband technologies are not, must not be treated as, and are not, a one way bet. Investment and risk taking has to be encouraged. Roll out obligations would therefore be a mistake at this point in time.

The way to proceed initially is to let operators test the waters and to let competition be the driver of coverage. The TRC can be assured that if there is sufficient interest in the service to make it viable then competition will ensure that it is delivered wherever it is economically viable to do so. If it is proven that these technologies can be mass market successes, and the majority of the population can economically be provided with access to them, then delivery to the remaining few per cent who do not have access can be looked at further at a later time.

Competition in the BVI provides all the incentives that are needed and that are reasonable for building out networks involving new technologies especially given that there are already 3 mobile networks in an island chain with such a modest population.

**Question 13: Do you agree with the TRC's proposals to consider the potential release of**

**spectrum at 2300 MHz and 450 MHz after release of the 700 MHz and 2500 MHz bands? Are there other bands that should be considered? If you suggest additional bands should be released, please provide information for such bands according to the points outlined in Question 12.**

Yes to the first question. We have not had time sufficient to look in to the second issue at this time.

**Question 14: The TRC welcomes comments on its preferred sequencing of actions to meet the requests of operators for additional spectrum, namely (i) Release of 700 MHz, 2500 MHz and 3500 MHz (if there is demand expressed in this consultation) bands, (ii) Refarming of 850/900 MHz frequencies, and (iii) Assignment of vacant frequencies at 1800/1900 MHz/2100MHz.**

We agree with this order. In the short term, and until spectrum has been re-farmed, operators that are advantaged competitively and cost wise due to superior allocations of spectrum should have their cost advantages (which have now been in place for three years) taken account of in interconnection rates. Thus CCT in particular, but also LIME should have a lower mobile termination rate than that of Digicel until that time.

**15: Should TRC apply spectrum caps when releasing additional spectrum? If so at what level and for what frequencies should they be set? Should spectrum be set aside for a fourth operator? The TRC welcomes comments on the following proposals for spectrum caps and suggestions for alternatives with reasons: (i) 60 MHz for any one operator's total spectrum holdings in all bands below 1 GHz; and (ii) 170 MHz for any one operator's total spectrum holdings in all bands at frequencies up to and including 2.5 GHz.**

Digicel has not had sufficient time to consider whether a spectrum cap and in particular the cap level proposed by the TRC is appropriate. However in principle no operator should be afforded, to the extent reasonably possible, a commercial and cost advantage over its direct competitors in terms of the cost of rolling out a network in the BVI, by means of its spectrum allocation.

**Question 16: Do you have any specific comments on proposals for coverage and service obligations that may be attached to new spectrum releases? Are there any other aspects of service provision which TRC should consider as potential licence conditions?**

As a general rule coverage obligations should be avoided. Driving coverage is one of the roles of competition and there is plenty of competition in the mobile sector for example. Even in the fixed arena we have to question coverage obligations. If other operators are free to build fixed networks, but choose not to do so, that may indicate that it is not economically viable to do so, or that the real issue may be to do with things such as local loop unbundling or other access problems.

**Question 17: Do government users and other interested parties have comments about future technologies and frequency bands suitable for delivery of digital communications services (including broadband) for the emergency services in the VI?**

Not at this time.

**Question 18: Do you have views on whether government users should use commercial networks to meet their future needs for mobile broadband and the implications for the way mobile operators deploy their networks?**

To the extent possible we think it would make economic sense to do so.

**Question 19: Are better procedures required for obtaining licences necessary to implement international fixed links?**

Digicel is not clear on exactly how the current procedures are meant to work, perhaps these could be explained first then we can comment on if and how they should be changed.

**Question 20: Is there any interest from fixed link users in having access to block assignments? If so, which frequency bands would be preferred?**

We think that that this makes sense in principle. We have no specific suggestions on bands at this time.

**Question 21: Do you have any views on the frequencies that might in future be used in the VI to support smart meters and smart grids?**

Not currently.

**Question 22: Do you have any comments on the proposed approach to assigning AM and FM radio licences, including the nature and relative importance of the proposed award criteria?**

Not at this time.

**Question 23: Do you have any comments on the proposed approach to assigning spectrum for TV broadcasting services?**

Not currently.

**Question 24: Is there any immediate interest in providing satellite services through filings in the VI?**

Not currently.

**Question 25: Are there any comments on TRC's proposals to simplify the licensing of amateurs in the VI (RA1, RA2)?**

No Comments.

**Question 26: Is there any immediate requirement for test and development licences in the VI? If**



**so, examples of applications that might be tested would be appreciated?**

We have no such requirement currently.