

# CCT Responses to Spectrum Management Framework Consultation

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?

BVI operators have currently assigned Region 2 and Region 1 allocations for the most important business using frequencies, which is the cellular business. The reason for that is how and where the revenues are coming from for the multiple operators of this tiny market. That business should continue using the same resources in the future. We do not see how it would be possible to change that situation. Consequently, because of the legacy situation, we suggest to also continue with both Region 1 and 2 in future as needed.

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?

No. We fully disagree with that. We believe that the TRC should first concentrate on the assignment of bands for new services, like LTE, commercial broadcast, etc., rather than dealing with bands already allocated to services currently working properly, and do not innovate there.

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

See answer to Question 1. The band plans should not disturb the existing networks which are functioning without issues

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?

Special attention needs to be given to the proposed 900 Mhz exemptions and any possible impact on services currently provided by operator with assigned bands on these frequencies.

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

The main issues are related with interferences and high power signals reaching each other territory.

This should be the near-term focus for the TRC. There is little to be gained from managing spectrum, if there is no agreement with a neighboring country.

Current problems include:

- High cellular signals received in BVI from the USVI for both CDMA and GSM, which have an important impact on BVI operators: (i) reduction of roaming revenues, and (ii) local customers using US phones in the BVI territory as local US customers.
- Extremely high WiMax signals, apparently received from USVI, using the same frequencies used in the BVI, interfering with CCT's local WiMax service, which obliges CCT to migrate customers to different frequencies, temporarily assigned by the TRC, outside of the CCT assigned band. This has an impact on additional investment and costs to serve existing customer.

In order to solve these important issues, when dealing with the FCC, the TRC should focus on:

1. Spectrum Coordination at 800, 850, and 1900 Mhz
2. Spectrum Coordination at 2.5 and 3.5 Ghz for wireless broadband carriers.
3. Emission Level Agreements for mobile and broadband carriers trying to offer cross-border coverage

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

CCT believes that, in a so tiny market like the BVI, existing operators should also have the priority to get new frequencies for new services. In case the local operators don't show an interest in specific bands, then they could be assigned to new operators on a first come first served basis.

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?

It is CCT's position that its existing spectrum authorizations are valid and effective as provided in their licence and there is no need for reauthorization. To the extent that the TRC differs on this, it should simply confirm the current spectrum authorization and use by CCT. Any authorizations provided to government users should be delayed until a decision regarding government's potential use of commercial networks is reached. Any action on spectrum trading should be delayed and handled on an individual and mutually agreeable basis.

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)?

CCT is strongly opposed to the TRC charging spectrum fees. CCT believes that applying spectrum fees would have a huge impact on the financials of the existing operators, in an extremely difficult market like the BVI, which, due to its extremely small size, any measure implying the change of the current situation by further milking operators with additional fees, specially local operators like CCT, would have a disastrous consequences and would mean an additional burden for the survival of the company. In the particular case of CCT, the fact that everything in its network is wireless based, including 100% of intra-network links, would pose a special burden to the existence of the company.

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

Only as needed.

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 an 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.

CCT would in principle have an interest on 1800 and 2100 Mhz bands.

The document states in item paragraph 10.5 that: “The pricing of broadband services offered in the Virgin Islands is high by international standards, even allowing for its relatively high cost of living and small size and topography. This may reflect a lack of competition to date in broadband services (mobile as well as fixed). For example, multinational providers should be able to exploit operational and purchasing economies of scale to operate profitably with broadband prices in the Virgin Islands that are comparable to those in other Caribbean countries”

CCT fully disagrees with this statement. As it has been pointed out several times to the TRC, CCT strongly believes that the reason for the current high broadband end user prices in the BVI has to do with the extremely high cost of bringing the wholesale bandwidth to the BVI (roughly 30 times the cost in Florida), a cost element that has a tremendous impact when setting up the pricing to the end users. The TRC is also well aware that there is only one provider of wholesale international connectivity in the BVI, which should be declared as dominant and the wholesale prices regulated as soon as possible. That measure, rather than bringing additional competitors to the broadband market in the BVI, would immediately solve the issue. Bringing additional competitors would not help to solve the issue, since the wholesale prices would continue to be high, but would eventually force CCT to get out of this extremely tiny BVI market.

**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.**

CCT strongly opposes any proposal to reassign spectrum in the 850 and 900 MHz bands to other licenced operators. Historically, CCT has operated its mobile service using primarily frequencies on these two bands. This represents the bulk of CCT’s business, which has suffered substantial losses due to liberalization of the telecommunications sector with 2 other operators being licenced for mobile coupled with the loss of market shares attendant to the revocation of its exclusivity regarding mobile and the unfair and illegal practices employed and deployed by Digicel and LIME, which are the subject of the Sanction Notices circulated by the TRC after investigating the complaints made by CCT. Any reassignment of spectrum within these bands from CCT to the other two operators or reservation for a 4<sup>th</sup> operator will result in further substantial damage to CCT and its business. CCT’s losses and damages will have to be compensated by the Government and the TRC under section 93 of the Telecommunications Act, 2006. While these losses were readily apparent as a consequence of the cancellation of CCT’s previous licence and licence agreement with the Government and the removal of its exclusivity in respect to mobile services in the Virgin Islands, the full impact of such actions on CCT’s business and revenue could not be properly assessed and measured for some time after liberalization has been effected and the practices of the other 2 operators taken into proper account.

CCT previously made a written claim for compensation under ad within the time specified in section 93 of the Act, which claim remained unresolved. It now intends to pursue that claim against the Government and will produce its quantification of losses and damages suffered as a result of the revocation of its previous licence and its exclusive right to offer mobile services for the duration of its licence agreement. That claim will include losses resulting from any of the steps proposed by the TRC as regards spectrum refarming, reallocation and caps.

**Question 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

700 LTE  
2500 WiMax  
3500 SDH links

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

Rather than alternative blocks, we believe that TRC should also consider to assign not only US LTE bands but also European LTE bands.

c.Procedure and fees for acquiring these licences

Priority for existing operators. No fees

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.

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.

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.

Yes, except that we strongly oppose the so called refarming of 850/900 frequencies.

Question 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.

No spectrum caps should be applied. Again, the TRC has to take into consideration the extremely small market of the BVI. Imposing spectrum caps would imply that more operators would be allowed to enter to cream on specific and lucrative business, leaving existing operator exposed and eventually forcing them to get out of the business.

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?

No. CCT does not consider that any of the types of conditions proposed by the TRC are warranted.

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?

No

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?

In a country of the size of the BVI, the Government should make use of the commercial networks available rather than allowing the possibility for the Government to deploy its own networks. Given the relative big size of the BVI Government, it would drain substantial revenues from the commercial operators, compromising their future and paving the way for a potential additional competitor in the market. The Government, as a big customer, has enough negotiation power to negotiate with the commercial operators the best possible service terms.

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

In addition to any coordination with the FCC to establish procedures to implement international fixed links, in our opinion, the condition to obtain licenses to implement international fixed links should at least: (i) contribute to substantially bring current international connectivity prices down and (ii) offer international wholesale capacity at non discriminatory prices to local competitors.

See also our response to Question 10.

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

The current fixed links are already handled in block fashion informally by the carriers.

CCT currently utilizes the 7 GHz and 18 GHz licensed bands for the majority of our links. We also operate a few 5 GHz spread spectrum fixed links. Again, the three carriers co-ordinate and co-operate and we've experienced no fixed link interference to date.

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?

No

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?

No

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

No

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

No

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

No

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?

No

**General comments:** Apart from ruling on bands and frequencies to be used for future services, the TRC should be very slow to and very careful when applying other rules to the spectrum management that could work well in other much bigger markets (refarming of 850/900 blocks, spectrum fees, frequency auctions, spectrum caps, licensing new operators, etc.), but which will have disastrous consequences on an extremely tiny market like the BVI where, especially for local operators like CCT, the line between being viable and not viable is highly dependent on the introduction of this kind of "innovations".

At present licenced operators are required to pay 3 percent of annual turnover to the TRC. This represents an increase of 1 percent over the obligation under CCT's previous licence. The current level of fees represents a significant part of CCT's revenue and is not linked to whether the company is making a profit. As the TRC is aware, CCT has suffered very significant loss of market share in the mobile business which translated into a major loss of revenue and, furthermore, the company has experienced substantial losses annually over the last 3 years. To impose another substantial fee or tax in the form of spectrum fees would severely impact on the viability of CCT as a small local telecommunications company, operating in a small and limited market, in competition with two other operators who have a multijurisdictional base and are much larger telecommunications companies.

There seems to be some general assumptions running throughout this document that deserve further discussion.

Assumptions:

1. Despite there being 3 operators in a country of 30,000 people there isn't enough competition in the mobile wireless market.
2. Operators are being intentionally "inefficient" with spectrum because there is no incentive to conserve spectrum.
3. There is going to be a new set of fees imposed for the usage of spectrum.
4. These fees will impact each of the existing carriers equally
5. These fees are going to be absorbed by the carriers with no corresponding impact on the subscribers.

#### Concerns:

1. The three operators in the BVI have created a highly competitive marketplace- almost every move by a single operator is answered by the other two. Prices for the individual continue on a downward trend as service levels and product selection increases. These would appear to be signs of a competitive environment.
2. Due to the location of the BVI and its popularity as a tourist destination, the mobile operators have positioned themselves to serve many different types of subscribers from both Europe and North America which are necessary, because the 30,000 inhabitants alone makes for a very small market. In the future, when many 4G services are harmonized in the rest of the world, the carriers in the BVI may find themselves no longer needing to operate multiple standards in multiple frequency bands and will be able to consolidate many of their networks. This is another area where the TRC should focus: clear the way from a regulatory position for the license holders to migrate to 4G networks over the next 5-10 years.
3. A primary concern is regarding the fees themselves. The fees the TRC has offered as examples would almost certainly have direct impact on subscribers. BVI has a situation where there are 3 carriers trying to sustain operations off of a universe of 30,000 subscribers. This isn't happening anywhere else in the Caribbean and attempting to fund the expansion of a government department through additional taxation may introduce unintended consequences.
4. Due to the monopolized ownership of fiber infrastructure, any taxation on spectrum is going to affect that owner much less than the other two operators who have been historically denied competitive access to fiber facilities.
5. Has a study been undertaken to understand what impact a price increase on a 1 minute call will have on the market? What will happen to teledensity and service growth if the price to the end user increases 1%, 5%, 10% or, more?