



Flow's Response to the SMA's:  
Proposed Spectrum Screen Consultation

## **Introduction**

Flow welcomes the opportunity to comment on the Spectrum Management Authority's (SMA's) **Proposed Spectrum Screen** consultation document. Flow's comments represent the views of both Cable and Wireless Jamaica Ltd and Columbus Communications Jamaica Ltd.

Flow reserves the right to expand on its comments. Kindly direct any questions that you may have to Charles Douglas, Senior Manager, Regulatory Affairs at [charles.douglas@cwc.com](mailto:charles.douglas@cwc.com).

## **Overview**

As indicated in our previous responses, Flow supports the approach of using a spectrum screen policy to ensure the efficient and effective use of spectrum in Jamaica. Equally important however, is ensuring that the framework underpinning such a policy is fair, transparent and strengthens regulatory certainty. As such, we trust that our good faith comments and questions, along with that of other Industry participants will help achieve this outcome.

## **Frequency Bands Listed Under the Cap**

In its 2020 November Position Paper, the SMA proposed removing the spectrum cap and utilizing a spectrum screen for assignments above 120 MHz of spectrum in the listed frequency bands: 700MHz, 850MHz, 900MHz, 1800MHz, 1900MHz, and 1700/2100 MHz (AWS Band). Flow considered this reasonable. We note with concern that the current proposal removes the 1800 MHz frequency band from the list of frequency bands under the 120 MHz trigger point. Flow asks that the SMA provides an explanation and justification for this proposal. Absent better information, such a policy proposal appears to materially favor one mobile service provider at the expense on others. Flow does not support this proposal.

## **Regulatory Certainty Matters**

Flow accepts that there is the need to revisit various regulatory policies from time to time. However, such changes should be justified and subject to an open consultation process. This approach is needed for regulatory certainty. It does not seem appropriate for spectrum bands to be added or subtracted to the screening process merely as deemed necessary by the SMA. A transparent process is best practice.

## Flow's feedback on the SMA's Spectrum Screen Evaluation Criteria:

### Efficient use of the spectrum (40 points)

#### **Population coverage and minimum download data rate as proposed by the operator (100/300)**

It is not clear in the document if the speeds and coverages are only to be considered for the specific range of spectrum requested or for the whole service from the mobile provider. Flow asks the SMA to clarify.

- I. The use of peak traffic conditions and population coverage favors low band spectrum; any nationwide high band spectrum will have problems reaching the total scoring of 100 due to coverage of the bands. As such, the SMA should confirm that this approach will not be used to evaluate high band spectrum assignments in the future.
- II. Is this number considering only the spectrum requested, considering all the spectrum in the band or considering all service (e.g. if 10 MHz would be requested to expand current carrier, it would not be a service by itself, but improvement of the current service)
- III. There is no mention on how it is supposed to be measured, as average speeds, border cell speeds, one measurement, over several months, etc.
- IV. There is no mention of any enforcement of these numbers after the award of the spectrum
- V. In case of low bands with a small carrier (e.g. 5 MHz carrier) the deployments are usually geared towards reaching broad technology coverage instead of speed, these cases are not being rewarded either by this scoring.

Flow looks forward to the SMA's clarification of the issues raised. This will facilitate our better understanding and additional comments.

### Cell Spectral Efficiency (CSE) (100/300)

As a general comment there is lack of information on the scoring about how to aggregate the different spectral efficiencies that can be found in the network, only one number is presented as score, maximum 2 Bps/Hz/Cell, when they mention the 3GPP table continuously.

There needs to be a better explanation about the 3GPP average number for spectrum efficiency per cell. It seems that the 3GPP is considering a fully loaded cell for this number, which is not comparable for when we consider a full functional network; due to the nature of the way customers are distributed is normal to have cells with little traffic, even within one congested site, this besides all the rural and road located cells. If we do the average of the network efficiency per cell then we will add plenty of cells that cannot have more traffic, not because of bad design by the operator, but because that's how live networks behave. We believe this number should be reconsidered only for loaded cells or to obtain a full network comparison.

- I. It is not clear that the number to be compared is coming from the 3GPP table or is coming from the scoring table, the 3GPP table has 10 different average scenarios, but the scoring table only has 2 as maximum number
- II. it is not clear if we should add uplink and downlink efficiency numbers into one number or test them separately
- III. There are several scenarios where the spectrum efficiency would vary, from indoor to rural, should all be compared to the scoring or should each scenario be compared vs the 3GPP averages.
- IV. Should we just use the current spectrum efficiency of the same band we are requesting or the full network, what if only same band is required and the operator is requesting a new band, should the current CSE be zero and then having reduced scoring?

- V. We are not sure if the requested spectrum efficiency has to consider only loaded cells or all cells that use such spectrum, using all cells result in a very reduced spectrum efficiency due to the network normally has part of the a site that is underutilized because of the way people move.

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### **Consideration of Alternatives (100/300)**

We request the revision of the scoring, the total individual score adds up to 125, not 100.

In general, these questions aren't clear about the feasibility of each action, they request if certain activities were made to make the network more efficient, but most of them can't be fully executed without incurring in large capex investment; it is not clear the extent of each alternative should be pursued before getting a positive score

**I) *To utilize other / new spectrum not under the screen for which the spectrum under consideration is to be assessed***

Not clear if it considers the feasibility of spectrum, some bands could be not appropriate for the level of service required or not having fully handset compatibility

**II) *The deployment of more spectrally-efficient wireless technologies and the migration of customers to these technologies***

Not clear what's the level of investments in new technology should be to this be considered done, e.g. a network could migrate fully to 5G, including handsets in order to be more efficient, but the investment is prohibitive

**III) *Increased reuse of available radio frequencies enabled both by cell site splitting (considering Open RAN, which helps to reduce cost) and LTE-A support for enhanced small cell and Wi-Fi integration***

This point requires technical revision, Cell splitting is not beneficial all the time for extra capacity, in cases like ours where they are required on low bands it can cause interference and reduced service.

Open Ran is an initiative focused to reduce cost, not to increase spectrum efficiency, our experience has shown that there is no cost reduction in the Jamaica environment, we would suggest removing them from the options

This point requires clarification regarding the feasibility of using Wi-Fi making economic sense, since the network could also be covered with Wi-Fi spots, but that is not feasible from a service or investment point most of the time

**IV) *Tighter packing of offered data into available transmission capacity, etc.***

Not clear if this suggest the change of commercial structures, but Jamaican mobile market is very competitive and constraining the offering is not feasible without negative reactions of the customers

**VI. *The deployment of more stations / Network upgrade - hardware upgrade to network.***

Does this question have any financial or practical consideration? All networks could duplicate or triplicate the number of sites present in the market to solve all capacity issues, but deploying a new site has high capex and logistic concerns. How many new sites are required to obtain this score?

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### **Competitive Analysis (30 Points)**

### **Contestability Index (6/30)**

- I. What is the definition of free usable spectrum, does it consider spectrum that's colliding with other bands, guard bands, or spectrum in the band range, but not standardized like 700 MHz Will a table of used and unused spectrum will be provided for this point?
- II. What if more than one company is requesting new spectrum, is this score done once each per each provider or all at the same time

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**Rapid Entry Potential (9/30)**

No comments

**Competitiveness (10/30)**

No comment.

**Consumer Behavior (5/30)**

- I. It is required to clarify if the "number of subscriptions" is referred to total market subscriptions or only the carrier subscriptions applying for the spectrum
- II. It is required to clarify if they are only referring to postpaid subscriptions

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**Public interest (30 points)**

**Expansion of coverage in unserved and or underserved areas (100/200)**

- I. Coverage areas are not defined, cities and towns are not a good indicator of the limits to cover. Polygons should be included within the request
- II. This number is highly dependent of the band and the amount requested, lower bands reach better coverage and bigger amounts give better capacity, it should consider that penalizes requests for high spectrum and future mm wave spectrum

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**Improved coverage quality (100/200)**

- I. It is not clear if this rate should consider all spectrum bands, just the spectrum band in which the request is being done or just the spectrum range being requested
- II. It is not clear if this rate is the increased throughput after adding spectrum to the service or the target throughput of the service
- III. IF it is only about the band, this rate should be normalized by spectrum quantity, since for LTE / 5G technologies bigger spectrum blocks allows bigger peak rates. In this form it is penalizing smaller spectrum requests

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**End of document**