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Posts and Telecommunications Department
Ministry of Communications and Information Technology
Republic of the Union of Myanmar
Office No (2)
Nay Pyi Taw
Myanmar

Attention: Director General

Dear Director General,

Spectrum Roadmap

On 3 February 2015, PTD issued a draft Spectrum Roadmap document (Roadmap) as a consultation document. Interested parties are invited to submit comments by 29 February 2015. Ooredoo Myanmar Limited (OML) has reviewed the draft Roadmap and views it necessary at this stage to provide OML's initial views and observations concerning the draft Roadmap and the related consultation process.

OML is of the firm view that although the draft Roadmap is a commendable start, considerable analysis and refinements are still needed in order to meet the goal of enabling "operators, service providers and other stakeholders to plan future investment in telecommunications in Myanmar." (Roadmap, P. 6). OML believes that asking for detailed comments at this stage in the process is premature and would not advance the process toward arriving at a fit for purpose Roadmap suitable for guiding the regulator and the industry for the next five years. We strongly support further discussions on this topic prior to finalizing the Roadmap and will in the course of the next few days, contact the office of the Director General to schedule a meeting so that we can articulate some of these views and concerns. Below, we submit our specific comments and high level views on the draft Roadmap in anticipation of such a meeting.

The draft Roadmap is a very detailed document that provides a general inventory of spectrum issues around the world. The general topics it covers are what one would normally expect to find in a broad initial information document intended to set the stage for the development of a more structured and well-substantiated Spectrum Roadmap. However, some material parts are missing from the Roadmap. As PTD is still in the process of putting the necessary regulatory framework and associated processes and procedures in place, it is natural to have a very broad approach in order to finally arrive at the necessary level of detail. This is commonly done in order to ensure that all relevant issues are adequately covered in a future Roadmap.

A clear and coherent Roadmap is essential to create the necessary regulatory certainty for today and for the future in order to allow all stakeholders the possibility to plan with



confidence for future investment in order that they may effectively utilize available radio spectrum to meet current and future demand for wireless services. This is especially true for Myanmar given that mobile uptake happened much later than in most other countries of the world, with the introduction of 3G services a decade later than in most other countries. For this reason, it is not only expected but also highly likely that technology changes, such as the transition from 2G and 3G to LTE, will now occur much more quickly in Myanmar than elsewhere. These rapid changes make the business environment quite challenging since it will be difficult, if not impossible, to achieve a positive return on 2G or 3G investments, before the need arises to invest in the next new technology (e.g. LTE). This dynamic therefore puts a hefty burden on recent entrants to the Myanmar mobile sector.

In order for OML and other licensees to be able to plan and prepare for new technology development there is an absolute requirement that the spectrum allocation and management regime is well known in advance, *i.e.* that there is ample planning and a sound spectrum allocation framework that gives some certainty as to what spectrum will be available and when it will become available. Therefore, a detailed, well-crafted and agreed spectrum roadmap is one of the most critical tools providing potential entrants such certainty. Such a roadmap we hasten to add will also be a critical tool for PTD in ensuring that the scarce public resource that spectrum represents, is put to the most efficient use to the benefit of the people of Myanmar.

It is clear from the Roadmap that there is an array of different activities and concrete actions that must be concluded before a functional spectrum management regime is in place within Myanmar. For instance, spectrum rules are not in force, because they still have not been approved by the Attorney General, and they have been pending since December 2013. Currently, there is not a complete frequency register nor any established band planning by the regulator. Furthermore, there is no plan for dealing with the significant imbalance in current spectrum assignments. As the Roadmap notes, MPT holds more than five times as much spectrum in the valuable sub 1GHz mobile bands, and even after re-farming MPT will still hold four times as much spectrum in the 850 – 900 MHz bands when compared to other existing or planned mobile licensees.

In addition, since 2013, MPT has had access to 2x20 MHz of radio spectrum in the 1800 MHz band for special events (GSM) and LTE testing, without any plan communicated to other licensees as to when the spectrum in question will be returned. On the contrary, according to the draft Roadmap, future assignments of frequencies in that band might have to be made around the current “test spectrum” held by MPT. OML would object in the strongest possible manner to such a development. Indeed, OML is extremely concerned that after it submitted an application to PTD in July 2015 to use a small portion of spectrum in the 1800 MHz band for the purpose of time limited LTE testing, the application was denied without any explanation (December 2015).

In addition to these imbalances, there is also a heavy imbalance as regards assignment (or rightful usage) of microwave spectrum. While OML and Telenor Myanmar have received assurances dating prior to license issuance that they would have use of clean microwave spectrum for backhaul use, MPT has continued to make extensive use of several of the most valuable lower frequency bands (upper 6, 7 and 8 GHz) in the absence of funding of the agreed spectrum clearance process. As a result, OML and Telenor have been deprived of the use of spectrum they were assured during the ITT process would be available and MPT has benefitted from continued use with no transparency as to what if any spectrum fees are being paid the government.

As mentioned above, the issue of microwave spectrum availability has been ongoing since August 2013. Even though OML and Telenor Myanmar (and subsequently MPT) have



invested both time and resources engaging expert consultants in the identification and clearance of the different microwave bands needed for mobile backhaul, the process has now been stopped because PTD is unable to approve the necessary funding to perform the required clearance of the relevant bands. It has also rejected a proposal by all the licensees to fund the effort themselves through an advance payment of their spectrum fees. This despite the Roadmap identifying the need for a “full time industry sponsored group to plan microwave spectrum and to manage inter-user coordination”.

The Roadmap mentions the issue of interference which OML welcomes together with the recognition by PTD of the urgent need to deal with any forms of interference. However, again, this is an issue for which there is currently no process in place and no real suggestion in the Roadmap for how such interference issues should be handled. Given the continuing interference suffered by OML in its 900 MHz and 6 GHz bands, such an omission is clearly unacceptable. Moreover, OML requested assistance from PTD more than a year ago about cross-border interference from China and Thailand. Since there is currently no set process for handling such interference, no concrete action has been taken to remedy these problems either.

Given the contents of the current version of the Roadmap it would seem that the comprehensive responses that OML, and presumably other licensees, provided to the MCIT in response to the “Questionnaire for Facility-based Operators” consultation in November 2015 have not been taken into account. The same can also be said for the consultation document entitled “Framework for the 2600MHz Spectrum Auction Broadband Data Services” issued on 3 February 2016. In response to questions in the Questionnaire, OML outlined in considerable detail its spectrum needs for the near and medium future as well as its views on current spectrum management in Myanmar. Furthermore, OML’s response provided some high level forecasts with regards to traffic growth and the resulting need for future spectrum. Again it would seem that these views and the relevant information have also not been taken into account when drafting the Roadmap.

One of the main reasons a fair spectrum allocation regime and the broader Roadmap are key to any market is the competitive advantages that can follow with the right to use certain frequencies. As noted above, there are major imbalances in current spectrum holdings. To some extent the Roadmap identifies the existence of these imbalances but it does not analyse the competition problems that arise due to these imbalances and more importantly, it does not put forward any type of plan or action to remedy this important issue. A Roadmap that does not include a detailed plan to address and resolve these imbalances is ultimately not useful, as the overarching problem will still be present and thus, both the market in general and the services provided to the people of Myanmar more specifically, will be negatively impacted.

Regarding the proposed assignment process, we are extremely concerned that MCIT and PTD are planning to auction spectrum in the 2600 MHz band in the very near future. As noted above, having a final and agreed Roadmap is absolutely critical for all stakeholders in terms of foreseeability and regulatory certainty, which is also noted as an important reason for the Roadmap in the document itself. Consulting on and seeking expressions of interest for an auction at the same time in which there is an overall Spectrum Roadmap consultation process underway presents a major conflict in terms of planning and prioritization and brings into question the orientation and usefulness of a final Roadmap.

As noted above, OML views this draft Roadmap as a first broad document which needs to pass through at least one, if not two, additional consultation rounds before becoming a fit for purpose document.



With this in mind, we offer the following specific high level comments on the Roadmap:

- Priority should be given to auctioning spectrum that is needed for additional wide area coverage in conjunction with capacity spectrum to facilitate efficient technology change.
- Proposals for re-farming of bands that are either inefficiently utilised now or unfairly distributed should be included in the roadmap.
- The auctioning of sub 1GHz spectrum and of recognised next generation bands such as 1800 MHz should take priority to purely capacity bands such as the 2.6 GHz band.
- The imbalances of spectrum holdings must be addressed as a matter of priority, both for mobile spectrum (850, 900 and 1800MHz) as well as microwave spectrum in order to ensure a sustainably competitive marketplace.
- A commitment to clearing interference in spectrum that has been auctioned and paid for and specific proposals to do so is a necessity.
- The roadmap must include a commitment to and plan of implementation for assessing the state of the wireless market including its competitiveness in order to properly assess which types of operators should be entitled to participate in future auctions, to assess the utility and extent of new entrant participation and the appropriate mode of actual spectrum assignment, whether auction or otherwise.
- The Roadmap should consistently refer to and follow international best practice so as to avoid demonstrably failed approaches.

We look forward to having a more detailed discussion in the near future about the issues presented above. Thank you again, for the opportunity to comment on this important initiative.

Sincerely,

A handwritten signature in black ink, appearing to be "Chris Peirce", written over a horizontal line.

Chris Peirce
Chief Regulatory and
Government Affairs Officer