



16 April 2021

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Director-General (Telecoms and Post)  
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Infocomm Media Development Authority  
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By Email


Dear Ms. Chia,

**MYREPUBLIC'S RESPONSE TO IMDA'S CONSULTATION PAPER ON IMPLEMENTATION OF IP-BASED INTERCONNECTION IN SINGAPORE**

1. MyRepublic Limited ("MyRepublic") refer to the Consultation Paper on IP- Based Interconnection in Singapore issued by the Infocomm Media Development Authority issued on the 1 March 2021.
2. MyRepublic attaches hereto its comments to the Consultation Paper in Annex 1.

Thank you.

Regards,

DocuSigned by:  
  
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cc.

- 1) Mark Chen  
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*Encl.*

ANNEX 1

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## 1 STATEMENT OF INTEREST

- 1.1 MyRepublic is a Facilities-based Operator (“FBO”) licensee who is providing fibre, IP-based interconnection voice, data and mobile services across the residential and business markets in Singapore.
- 1.2 MyRepublic would like to thank the the Info-Communications Development Authority (“IMDA”) for responding to the respondents’ call for a separate in-depth consultation on IP-based interconnection in view of technology and market developments and possible implications to the industry.

## 2 EXECUTIVE SUMMARY

- 2.1 MyRepublic supports a majority of IMDA’s proposals in this Consultation Paper. MyRepublic considers the proposals in this Consultation Paper would improve the IP-based interconnection operational efficacy with cost savings across the industry. In fact, MyRepublic has already implemented certain proposals herein for its IP-Based Interconnection services, such as SIP based on IETF and 3GPP at its POIs.
- 2.2 MyRepublic considers Singtel RIO arrangement is in dire need of review. SS7 signaling links are expensive, inefficient and outdated, in light of the more economical IP-based interconnection. MyRepublic hopes that any consultation with regards to Singtel RIO could be carried out soonest so that operators could proceed towards the Transition Period and then full SIP signaling. Further amendments to the proposals are required to allow the RIO to function in a more future-proof manner.
- 2.3 MyRepublic also understands that this Consultation Paper voice service related. MyRepublic hopes that IMDA can also explore the IP-interconnectivity of local data traffic in future.

## 3 SPECIFIC COMMENTS

**Question 1:**

*IMDA invites views and comments on whether operators should follow a standardised set of technical requirements to implement IP-based interconnection at the domestic Points-of-Interconnection across all operators’ networks that are interconnected to provision voice services.*

- 3.1 MyRepublic supports IMDA’s proposal that operators should follow a standardized set of technical requirements to implement IP-based interconnection for voice services, with aims to increase flexibility, redundancy, improve voice call quality and reduce overall cost.

**Question 2:**

*IMDA invites views and comments on whether the Proposed SIP, based on IETF and 3GPP specifications, is appropriate and suitable to be implemented at the Points-of-Interconnection.*

- 3.2 MyRepublic submits that the Proposed SIP based on IETF and 3GPP specifications, is likely to be a commonly deployed approach for most Singapore carriers based on MyRepublic interconnection arrangements with them. If SIP-I were to be adopted, this would incur additional costs across the local carriers.

**Question 3:**

*IMDA invites views and comments on the proposed approach to finalise the offerings of the RIO services related to IP-based interconnection, before commencing the migration to IP-based interconnection*

- 3.3 Whilst MyRepublic appreciates the importance of having the specific details of interconnection arrangements to facilitate migration planning and to prepare industry players who are directly interconnected to Singtel through its RIO, MyRepublic urges that Singtel's RIO services to be reviewed to address market relevancy soonest, in this case with regards to IP-based interconnection. As there are no other competitors for SS7 signaling links, MyRepublic and other carriers have to continue bearing high costs in relation to Singtel's relatively expensive, outdated and inefficient SS7 links while IP interconnection is underway.

**Question 4:**

*IMDA invites views and comments on the feasibility of IMDA's proposals to revise the technical implementation of FNP service in an IP-based interconnection environment*

- 3.4 MyRepublic believes that the FNP could be easily implemented with standard SIP.
- 3.5 Operators could adopt a SIP message "410 Gone" as the appropriate response when a user is ported away from the receiving carrier, leaving the sender then to carry out the look-up and send the call to the correct carrier. MyRepublic has adopted this interconnection method in a few of its arrangements with other operators without problems to date. If required by IMDA, extra SIP headers could always be inserted, for example to convey the original N2 number in a ported number out-call, however this data is hardly used.

**Question 5:**

*IMDA invites views and comments on IMDA's preliminary views on network security and Quality of Service under an IP-based interconnection environment.*

- 3.6 MyRepublic agrees with IMDA's proposal to have a set of baseline network security requirements that are aligned to best industry practices, for securing IP-based networks.

- 3.7 In relation to how a network should be connected to another network, MyRepublic believes that the incumbent will continue benefit from its ability to arbitrarily charge for direct physical transmission links in the RIO arrangement. There is no option for other operators to IP-based interconnect via public internet with encrypted tunnel in the RIO. MyRepublic believes that that option for connectivity via public internet should be made available in the RIO. If the affected operator still elects not to use that option in the RIO of connecting over the public internet, then that operator and incumbent are to discuss the appropriate arrangements to be put in place between them.

**Question 6:**

*IMDA invites views and comments on IMDA's preliminary views on the broad migration approach.*

- 3.8 MyRepublic opines that an industry-wide "trial" migration is unnecessary as there are a number of local operators who already have IP interconnection in place. The main stumbling block is that the larger operators are reluctant to make the switch based on interactions and requests made to them.