CONSULTATION ON PROPOSED MACHINE-TO-MACHINE ("M2M") ACCESS CODE ALLOCATION FRAMEWORK

Submission by StarHub Mobile Pte Ltd to the Infocommunications Development Authority of Singapore

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General

StarHub Mobile Pte Ltd ("StarHub") appreciates the opportunity to provide feedback on the Authority's proposed machine-to-machine ("M2M") access code allocation framework.

StarHub believes that there is significant growth potential for M2M communication, as it offers important opportunities for M2M applications by business, Government and individuals. In the near-term, we believe that M2M communication and services are likely to proliferate with the use of pubic wireless networks and the Internet. Therefore, StarHub supports the Authority's proposal to develop a numbering / addressing framework to facilitate the development and growth of M2M communication and services over the next few years.

StarHub provides its specific comments to the consultation in the following section.

2. Specific Responses

Question 1

IDA invites views and comments if the M2M service definition is suitable for the current and future M2M service development.

The Authority has proposed, as a service definition for M2M: "M2M communication refers to the automated communication between machines and devices. In cases where M2M communication includes voice communication, these shall mean voice services within a pre-defined service feature and/or within an intended or a closed user group".

StarHub understands that M2M communication is generally seen as a form of data communication between entities. However, some M2M applications may require human interaction or intervention (i.e. voice or SMS communication) in some circumstances. Therefore, we are of the view that the proposed service definition is sufficiently broad to encompass current and future applications of M2M communication.

Question 2(a)

IDA invites views and comments on M2M technology and market development, particularly views on estimated number of M2M devices and machines, and types of applications and services in the next 5 to 8 years.

M2M communication has existed for a number of years, originating from the use of telemetry in several specialised industries. However, the emergence of public wireless networks, the Internet and enhanced computing capabilities has provided important opportunities for M2M applications by business, Government and individuals.

Therefore, M2M applications are expected to grow exponentially, as pointed out by the analyst reports cited by the Authority. In the near-term, we expect the use of M2M communication to appear in areas such as utilities performance monitoring and metering, traffic management, resource or fleet management, surveillance and security and connected consumer devices and appliances. These developments would mean that potentially millions of utility meters, motoring vehicles, security alarms, consumer devices and other machines will become networked in the coming years.

Question 2(b)

IDA invites views and comments on the estimated timeframe for the establishment of non-MSISDN identification and addressing standards (e.g., IPv6) for M2M services and when this option will become mainstream for M2M addressing purposes

StarHub agrees with the Authority's assessment that it is not clear, when non-Mobile Subscriber Integrated Services Digital Network-Number ("non-MSISDN") identification and addressing standards, e.g., IPv6, for communication amongst M2M devices will be finalised and become the mainstream for M2M addressing purposes. We are of the view that such identification and addressing standards would not be finalised or adopted in the near term.

We believe that M2M communication and services (using SIM cards) are likely to proliferate with the use of pubic wireless networks and Internet. Therefore, StarHub agrees with the Authority that it would be appropriate to develop a numbering / addressing framework in the meantime to facilitate the development and growth of M2M communication and services over the next few years.

Question 2(c)

IDA invites views and comments on IDA's proposed 5-digit M2M Access Code '144XX' (where 'X' is from '0 to 9'), particularly on any usability issues if 13-digit numbers are used for M2M addressing in the areas of domestic, international interconnectivity and international roaming

StarHub supports the Authority's proposal to assign a 5-digit M2M Access Code "144XX". StarHub is of the view that the 13-digit numbers used for M2M addressing should not pose significant usability issues and would be sufficient to cater for the demand for numbers by M2M applications.

Question 2(d)

IDA welcomes views and comments on the proposed charging arrangements for the M2M Access Code

StarHub does not have concerns with the Authority's proposed charging arrangements for the M2M access code.

On the Authority's proposed requirement that licensees allocated with M2M access codes are required to put the codes into service within 12 months from the date of assignment, we would suggest that the Authority consult the affected licensee (should there be a failure to put the codes into service within 12 months) prior to deciding whether the codes should be recovered.

3. Conclusion

StarHub appreciates the opportunity to provide feedback on the Authority's proposed M2M access code allocation framework.

Given the potential importance of M2M communication, it is timely and appropriate to develop a M2M access code allocation framework. StarHub supports the framework the Authority has proposed, and is grateful for the opportunity to comment on this matter.

StarHub Mobile Pte Ltd 10 May 2013