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

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ANNEX 1: M1'S RESPONSE TO IDA'S CONSULTATION PAPER ON PROPOSED MACHINE-TO-MACHINE ("M2M") ACCESS CODE ALLOCATION FRAMEWORK

1. M1 is a leading full-service provider of info-communication services in Singapore. Since commercial launch in 1997, M1 has made significant inroads into the info-communications market, and achieved an outstanding track record in innovation, service and technical excellence.

(a) General Comments

2. It is expected that the development of M2M services will have an impact on national numbering plans due to its nature which requires unique identification and addressing to enable communications between machines. Considering the current status of the M2M market and technology developments, we welcome IDA's initiative for a review of numbering and addressing for M2M services.

3. While the implementation of Internet Protocol "No Islanding" principle on the Internet Access Service Providers can ensure that the systems, equipment and networks within its control and operation of internet access services are IPv6 ready, the adoption of IPv6 is highly dependent on the IPv6 readiness of devices or machines. Since M2M services is at its infancy, we propose that IDA set requirements (e.g. type approval, certification, etc) on devices or machines provisioned for M2M services to ensure IPv6 readiness. This will encourage the adoption of IPv6 addressing in Singapore in view of the depletion of IPv4 addresses.

4. Accordingly, while IPv6 addressing will become important as identification and addressing solution for M2M services in the long run, we are fully supportive of IDA's view that there is still a need for a solution during the interim period. We propose E.164 numbering as it leverages the existing capabilities e.g. billing, routing, authentication, etc of existing networks.

5. In addition, it will be helpful if IDA could conduct a periodic industry review if it chooses to revise the framework under the National Numbering Plan ("NNP") after the pilot phase

(b) Clarifications

6. For clarity, we seek IDA's confirmation on the following:-

- The proposed framework will allow for commercial flexibility. Specifically, it

  i) will not restrict the M2M service providers' choice of using existing M2M identification and addressing solutions currently available and implemented in the market e.g. IP Addressing, 8-digit number levels, etc; and

  ii) will not require the migration of existing solutions to the proposed M2M Access Code.

  For service providers to implement changes, extensive configuration are required to back-end infrastructure and system interfaces e.g. reporting, provisioning, Customer Relationship Management systems and billing systems. It is also not practical to request that service providers change the existing SIM cards in the widely dispersed devices/machines in Singapore for the implementation of the proposed Access Code.