

Smart metering for utilities

Developing integrated smart metering solutions to enable remote reading of utilities and provide timely consumption feedback to consumers



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In Singapore, town gas, water and most electricity meters are manually read for billing purposes. To provide more timely electricity consumption feedback, the government has rolled out smart electricity meters for business consumers.

In line with Singapore's smart nation initiative, the Energy Market Authority (EMA), PUB and SP Group co-launched an initiative to explore integrated meter reading solutions. A joint Call-For-Proposal (CFP) was launched to solicit technical solutions which leverage SP Group's existing wireless platform operated by Silver Springs Networks. In addition, the CFP also crowdsourced for ideas such as design features and functionalities, which

could be incorporated by SP Group in the mobile application, and would enable consumers to access their consumption data easily.

In the third quarter of 2018, the technical solutions which were proposed and lab-tested by Mirai Electronics, TCAM Technology and ZH Technologies International will be deployed to a small group of residential and commercial premises as part of a pilot to assess their performance under actual conditions.

For the mobile application, EMA, PUB and SP Group received many good ideas for features such as utilities consumption comparison, notification functions and

bill display and payment (Fig. 1). SP Group has adopted some of these ideas in development of the integrated mobile application for the three utility services. The mobile application will be tested as part of the pilot.

This digitised and integrated metering platform for all utilities will enable streamlining of operations among agencies. Regarding the impact on end users, PUB officer Lim Wee Beng said, "a digitised metering platform with more granular and timely consumption data will empower consumers to better manage their utilities consumption."



FIG. 1: Examples of mobile application interfaces designed to facilitate the monitoring and analysis of utilities consumption