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FACTSHEET
TV White Space Technology Deployment in Singapore

Background

TV White Spaces, or TVWS, refer to unused radio spectrum in the TV broadcast bands that could potentially be utilised for alternative wireless broadband communications. Recent advances in TVWS technology have enabled regulators to adopt new ways to optimise the use of TVWS spectrum, by allowing opportunistic access to the unused spectrum in Singapore's TV broadcast channels to be used, without causing interference to existing operations. This innovation has opened up the use of more spectrum to meet the demand for high-speed wireless broadband Internet access, machine-to-machine communications, smart metering and outdoor environment monitoring services.

In June 2013, the Infocomm Development Authority (IDA) issued a public consultation to seek inputs from the industry on a set of proposed technical parameters and regulations for the use of TVWS in Singapore. After taking into consideration inputs from the industry, the regulations will take effect in November 2014. These regulations will set out the TVWS equipment requirements, spectrum channels to be made available for TVWS use, and how TVWS equipment should communicate with geo-location databases in order to identify the available spectrum channel to use, among others. The new regulations will make available an estimated 180 MHz of spectrum for TVWS operation.

Geo-location Databases

To ensure that TVWS applications do not interfere with the TV broadcast signals, IDA will mandate the use of Geo-location Databases to ascertain the available channels for use, before services can be broadcast over those channels.

Companies interested in developing and managing a Geo-location Database service in Singapore will be required to apply for a Service Based Operator (Individual) (“SBO”) licence. Through the licensing framework, IDA will be able to ensure that the geo-location database operations comply with the technical parameters and regulatory requirements prescribed by IDA. Further, to facilitate and encourage the adoption of TVWS technology, IDA will waive the SBO (I) licence fees for the first two years for companies interested in managing a geo-location database service.

Licence-exempt use of TVWS spectrum

To facilitate the adoption of TVWS, businesses that wish to deploy or use TVWS technology may do so without applying for a licence from the IDA, subject to technical parameters and regulations for the use of TVWS. Consumers too can also look forward to services provided over TVWS, through various service providers. This licence-exempt approach has also been adopted for Wireless Local Area Networks such as Wi-Fi to encourage widespread use and wireless technology innovations. Adopting this approach for TVWS will similarly facilitate the deployment of new wireless technologies and help drive greater innovation.

Licensing of TVWS equipment

Manufacturers and suppliers of equipment that will be able to access the TVWS technology and services will be required to register such equipment under an existing IDA’s General Equipment Registration (“GER”) scheme, similar to manufacturers and suppliers of handsets and communication devices.

Consumer products will only be available at a later stage as when the chipsets become available for the manufacturers to include into their products.

For media clarification, please contact:

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