

## **Annex**



*Artist's impression of the TCOMS building at NUS (Credit: Technology Centre for Offshore and Marine, Singapore)*

### **About the Deepwater Ocean Basin**

Measuring 60 metres long, 48 metres wide and 12 metres deep, the Deepwater Ocean Basin (DOB) has a volume that is equivalent to over 20 Olympic-sized swimming pools. It will be equipped with a 50-metre ultra-deep centre pit, which is the deepest in the world to date, to simulate water depths of up to 3,000 metres deep and enable physical modelling for ultra-deepwater developments.

Using state-of the-art wave and current generation systems coupled with smart sensing and data analytics capabilities, the DOB will provide a controlled environment that is able to simulate extreme sea conditions to facilitate the development of innovative concepts, including intelligent floating platforms and ships, autonomous systems, marine robotics and subsea systems.

These systems will be developed to maximise the quality of generated waves and currents in the DOB with minimum power consumption.

The Ocean Basin will be able to support physical tests with numerical simulation in collaboration with A\*STAR's Institute of High Performance Computing (IHPC) and the National Supercomputing Centre Singapore (NSCC).