**China Telecom Shares 5G business models in Key Industry Categories**

Telecom industry in China are making progresses in 5G industry rollout at scales, says China Telecom Director, Industrial Internet Innovation and Development Center, Zhang Dong at Light Reading's Leading in 5G webinar series
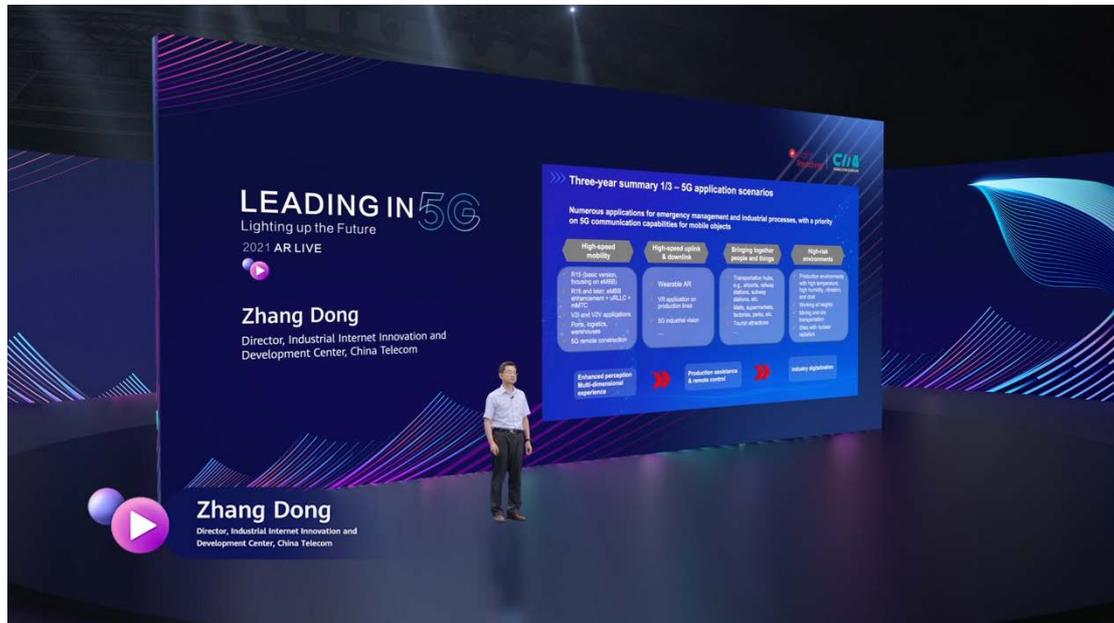
He said China Telecom began trials three years ago with half a dozen early adopter clients.

The base station cost was mostly paid for by the enterprises, while China Telecom sold O&M services and applications on top including big data, AI, and so on, he said.

While we see challenges like how to ensure lower latency and higher network assurance, and deal with problems like jittering, or how to simultaneously deliver 8K HD video from eight cameras, China Telecom is stills making important milestones on its 5G journey.

Zhang said that after deploying more than 1000 5G use cases, China Telecom experts have identified four key categories.

The first is using 5G to enable high-speed mobility, with applications such as autonomous driving, remote control of vehicles or remote management of ports and warehouses.

The second type is those leveraging the faster 5G uplinks and downlinks. This is mostly related to video and in the future will also include various other integrated media, like AR and VR, Zhang said.

The third type of 5G use case focuses on scenarios where people and things gather, such as transportation hubs, and places with large number of people or large objects moving around.

The fourth type is deployment of 5G in hazardous environments. For example, some working environments might expose personnel to toxic gas, loud noise or other safety hazards. 5G can play an important role in ensuring safety.

Zhang cited some of China Telecom's collaborations in the resource and utility sectors.

One was with oil and gas giant Sinopec, which was one of the first to trial 5G because it was willing to pay for the base station rollouts and services.

Another was the Shendong Coal Group in the mining sector, which had worked with China Telecom to roll out private networks under the wells, requiring investment of over 100 million yuan ($15.6 million).

China Telecom had also partnered with Qingdao Power Grid in a project where network slicing ensured the connectivity and lower latency to support precision power distribution.
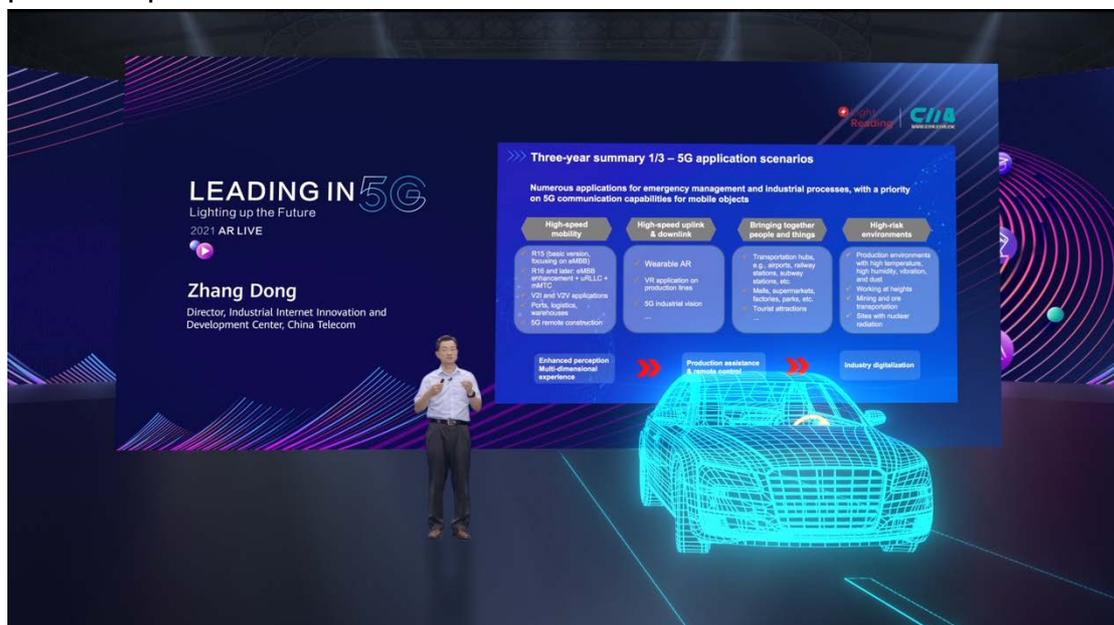
"I think this is a technology breakthrough," Zhang said.

He said for operators, 5G meant that now their business did not stop at the door of an enterprise but took them into the office and production networks.

"That change requires us to clarify the scope of work," Zhang said.

For instance, operators now have access to the data in production and offices, with the potential that operators and enterprises can gradually become closer partners as they deployed use cases enabled by that data.

But he cautioned that service providers needed new expertise to carry out modelling from the industrial data generated by the 5G network.

To learn more about China Telecom's 5G business use cases, register at the Delivering 5G Promises for the Success of Industry Digital Transformation on demand webinar.