

Singapore launches Southeast Asia's first AR smart glasses and AI visual recognition technologies to empower the nation's civil defence with 5G



Singapore, 13 September 2023: The Infocomm Media Development Authority (IMDA), HTX (Home Team Science and Technology Agency), Singapore Civil Defence Force (SCDF), StarHub and IBM announced a new 5G project that will enable SCDF frontliners to enhance operational readiness through automating equipment inspection process and facilitating remote assistance using smart glasses, AI and AR technologies.

“ Singapore has pioneered many of the region’s first 5G projects in the areas of Industry 4.0, Holomedicine, Maritime and more. ”

The project, underpinned by 5G technology, will be test-bedded in SCDF’s Smart Fire Station, i.e. Punggol Fire Station, on its latest-generation fire emergency vehicles, and will feature the following:

- AI-powered visual inspection
 - o AI-powered visual inspection, voice-activated commands, step-by-step on-screen procedures and dynamic content display on 5G-connected smart glasses will save time needed for firefighters to inspect their equipment and enhance the monitoring of equipment inventory.
 - o Data from the inspections will flow into a centralised dashboard to capture defects and provide status updates of equipment in real-time. This will raise SCDF’s operational readiness to respond to emergencies.
- AR-assisted real-time remote assistance

- o The ultra-low latency and high bandwidth that standalone 5G empower SCDF to conduct AR remote assistance.
- o During a post-fire investigation, the technology allows commanders on the ground to have live access to fire investigation specialists through real-time augmented annotations video interactions to assist in thorough scene processing and analysis in a timely manner.

The next phase of this two-year project will see full integration of solutions with backend services and ongoing field testing. IMDA and IBM will support SCDF in integrating data governance and cybersecurity to the operations.

This project is supported by [IMDA's 5G Innovation Programme](#), which helps enterprise adopt and commercialise 5G technologies. As the tech arm of the Home Team, HTX offers its technical capabilities and guidance for this project to ensure that it meets SCDF's operational needs. IBM delivers the end-to-end solutions leveraging AI technology, automation and AR. StarHub provides secured 5G connectivity and hardware to ensure optimal performance of these solutions, with network technical expertise offered at every stage of the project.

"IMDA has been championing 5G innovation and commercialisation over the past four years and we have seen significant progress. As a leading regional hub for 5G innovation, Singapore has pioneered many of the region's first 5G projects in the areas of Industry 4.0, Holomedicine, Maritime and more. We will continue to support our industry and enable our partners to tap on 5G capabilities in enhancing their operations and service offerings," said **Dr Ong Chen Hui, Assistant Chief Executive, IMDA**. "As one of the first-in-the-world to achieve nationwide 5G standalone (SA) coverage and as the first country to extend public 5G SA coverage to sea for maritime operations, IMDA will continue to build a robust future-ready digital infrastructure that meets both current and future demands."

"Innovation is key to carrying out our mission in protecting and saving lives and property. SCDF has been piloting smart technologies to reshape the way frontliners are trained and operations are executed," said **DC Ling, Young Ern, Deputy Commissioner for Future Technology & Public Safety, SCDF**. "The 5G-enabled fire engine makes secure, real-time transmission of high-quality videos and images achievable. Working closely with IMDA, HTX, StarHub and IBM is pivotal in pushing the boundaries of data connectivity to enhance our operational readiness. We look forward to collaborating further to accelerate the use of emerging technologies and 5G in our emergency appliances and operations."

"StarHub 5G delivers ultra-low latency and greater bandwidth, which is crucial in data-intensive industries and mission critical operations where each millisecond counts," said **Tan Kit Yong, Head of Enterprise Business Group, StarHub**. "With our StarHub 5G technology, we are proud to play a pivotal role in this game-changing project and help SCDF enhance their operations through real-time information management, operations synchronisation, and AR remote assist. Leveraging our capabilities in 5G, AI, Cloud, and Green Tech solutions, we are committed to delivering enduring value to enterprise and government clients in the region, co-creating our digital transformation journeys together."

"As a global technology provider, IBM has brought the power of AI-based IBM Maximo Visual Inspection, through 5G-connected AR smart glasses, to automate equipment inspection and ensure frontliners' equipment readiness. Equipment tracking and maintenance data aggregated into real-time single dashboard will also equip

SCDF firefighters with data-driven operations and decision making, which is crucial for a safe and successful operations,” said **Ronald Castro, Vice President, IBM Supply Chain**. “IBM is committed to support Singapore in its Smart Nation efforts and will continue to help organizations and partners explore new possibilities brought by cutting-edge technology like AI to drive process efficiency, augment labour productivity and transform IT automation.”

This 5G use-case will be showcased at Think on Tour Singapore, an exclusive, invite-only, in-person event experience hosted by IBM, taking place on 14 September 2023.

#

About IMDA

The Infocomm Media Development Authority (IMDA) leads Singapore’s digital transformation by developing a vibrant digital economy and an inclusive digital society. As Architects of Singapore’s Digital Future, we foster growth in Infocomm Technology and Media sectors in concert with progressive regulations, harnessing frontier technologies, and developing local talent and digital infrastructure ecosystems to establish Singapore as a digital metropolis. For more news and information, visit www.imda.gov.sg or follow IMDA on Facebook (IMDAsg) and Twitter (@IMDAsg).

About HTX

HTX is the Science and Technology agency in Singapore that integrates a diverse range of scientific and engineering capabilities to innovate and deliver transformative and operationally-ready solutions for homeland security. As a statutory board of the Ministry of Home Affairs, HTX works at the forefront of science and technology to empower Singapore’s frontline of security. The mission is to amplify, augment and accelerate the Home Team’s advantage and secure Singapore as the safest place on planet earth. Singapore’s Home Team Departments include Singapore Police Force, Singapore Civil Defence Force, Immigration and Checkpoints Authority, Singapore Prison Services, Central Narcotics Bureau, etc.

About SCDF

The Singapore Civil Defence Force (SCDF) is a uniformed organisation under the purview of Ministry of Home Affairs (MHA). The main role of SCDF is to provide firefighting, rescue and emergency medical services; mitigating hazardous materials incidents, as well as formulate, implement and enforce regulations on fire safety and civil defence shelter matters.

About StarHub

StarHub is a leading homegrown Singapore company that delivers world-class communications, entertainment

and digital services. With our extensive fibre and wireless infrastructure and global partnerships, we bring to people, homes and enterprises quality mobile and fixed services, a broad suite of premium content, and a diverse range of communication solutions. We develop and deliver to corporate and government clients solutions incorporating artificial intelligence, cybersecurity, data analytics, Internet of Things and robotics. We are committed to conducting our business in a sustainable and environmentally responsible manner. Listed on the Singapore Exchange mainboard, StarHub is a component stock of the SGX iEdge SG ESG Leaders and Transparency Indices and included in ESG-focused FTSE4Good Index Series. StarHub is ranked as the world's most sustainable telco in the Corporate Knights Global 100 2023.

About IBM

IBM is a leading provider of global hybrid cloud and AI, and consulting expertise. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. More than 4,000 government and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and consulting deliver open and flexible options to our clients. All of this is backed by IBM's legendary commitment to trust, transparency, responsibility, inclusivity and service. Visit www.ibm.com for more information.

For further information: Olivia Lee, External Relations Leader, IBM Singapore Email: Olivia.lee1@ibm.com | Aung Thi Ha, Senior Manager, Communications and Marketing, IMDA, Email: aung_thi_ha@imda.gov.sg | Shermane Lim, SO Media Relations and Branding, SCDF, Email: shermane_lim@scdf.gov.sg Contact No.: +65 9688 9589

<https://asean.newsroom.ibm.com/Singapore-launches-ASEANs-first-AR-and-AI-with-5G>