

**Press release**

18 November 2022

**SCG-AIS 5G-Huawei develop autonomous vehicle systems powered by 5G**

**Remote control for industrial zones sets new standard to level up BCG economy**

**First ever full deployment in Thailand**

* SCG-AIS5G-Huawei have come together with Yutong and Waytous, partners from China with technical expertise in autonomous EV systems. They have jointly innovated a full system to be inaugurated in real time at SCG’s remote industrial locations, powered by AIS’ 5G network, for the first time in Thailand, which have been the focus of continuous development since 2020.
* Unmanned electric trucks can transmit commands between each other on the AIS 5G private Network (5G Smart Autonomous Vehicles Solutions for Sustainable Industrial Advancement). The smart platform manages routing for shipments of material and equipment in the industrial zone. There is continuous mutual connection to minimize downtime.
* Unmanned EV Truck & Remote Control Vehicle innovations on AIS 5G promote productivity remotely and reduce risk to personnel. It is also an environmentally favourable system using electricity instead of hydrocarbons.

**The president of SCG, Mr. Roongrote Rangsiyopash,** declared: "New digital technology is advancing us into an intelligent industrial era. to effectively manage all available resources, including workforce, raw materials, finances, and time. As a result, SCG has kept up with technological advancements and expanded on this collaboration, such as the creation of long-distance forklifts powered by 5G networks.

SCG via Circular Plus by CPAC Green Solution combines expertise from AIS, a 5G technology leader in Thailand, Huawei, a leader in ICT technology, as well as Chinese partners Yutong, an electric vehicle operator, and Waytous, a specialist in industry's wireless vehicle systems driving force developing a self-driving transportation system to improve transportation capabilities in planning the route of transporting raw materials to connect between vehicles continuously, quickly, and safely, especially in hazardous jobs and environmentally friendly by using precise travel planning technologies and EV truck, CO2 emissions are reduced by more than 35% annually compared to the traditional method.

According to the ESG 4 Plus (Set Net–Zero – Go Green – Reduce Inequality – Embrace Collaboration plus harnessing good governance) principles, which call for a reduction of greenhouse gas emissions to zero by 2050. SCG believes that this partnership will support and strengthen Thailand's Industry 4.0.

**Mr Somchai Lertsutiwong, CEO of AIS** said this collaboration was, “all about deploying 5G technology to upgrade industry, which is at the heart of the nation’s progress. We are able to provide the most bandwidth in many frequency bands, with a total 1420 MHz of spectra solely dedicated to 5G, for the use of our customers and industrial partners. In 2020, we cooperated with SCG to trial the 5G Solutions Remote Controlled Forklift system on our 5G network, controlling the system at SCG’s plant in Saraburi from SCG’s Head Office in Bang Sue, Bangkok. While being physically separated from the vehicle, the operator was able to move material from one location to another in real-time with great accuracy. This achievement led to the cooperation on the present-day 5G Smart Autonomous Vehicles Solutions for Sustainable Industrial Advancement. We are partnering with Huawei, our long-term strategic partner, who has installed the AIS 5G Private Network. This can minutely control the command signals between Siam Cement’s many remote sites, due to the unsurpassed capabilities of 5G: speed, low latency of less than 20 milliseconds, and connections with a very large array of sensors, working with a smart platform of route management for shipments of material and equipment in the industrial zone. There is continuous mutual connection to minimize downtime, to provide yet another boost to productivity for the industrial sector, while also promoting work safety in risky situations.”

**Mr. Alan Liao, President of Carrier Business Group, Huawei Technologies (Thailand) Co., Ltd.** said, "As a world-leading technology company, Huawei is honored and pleased to contribute to the development of the "solution. 5G Smart Vehicles for Sustainable Industrial Advancement in Thailand." The partnership will bring practical application of 5G technology in the management of running route planning for local equipment transport. This is a huge benefit to the industry, helping to develop a safer, more agile and digitally transformed electric truck transportation system. Huawei will use its knowledge expertise and experience to advance the SCG Automotive Intelligent 5G Solution Project. (Smart Autonomous Vehicles Solutions for Sustainable Industrial Advancement) We will work with industry partners to enhance our capabilities to be more efficient and reduce carbon emissions, such as Green Manufacturing. to all industries operating in Thailand, sparking the adoption of 5G technology and setting new standards, promoting green industry. This will be the main engine to drive Thailand's economy to be progressive, sustainable, and a leader in ASEAN's low-carbon society."

**Mr. Yu Zhiqiang, CEO of YUTONG Mining Equipment** said this collaboration was, “to open a new era of smart and green mining in Thailand and Southeast Asia. YUTONG GROUP has sold 160,000 new energy commercial vehicles all over the world, equipping with a full set of capabilities in marketing, R&D, supply chain, manufacturing and services. Experienced in construction machinery for 64 years, YUTONG is the very first one to launch EV mining trucks since 2018, taking the lead in terms of marketing, R&D, material selection, manufacturing, quality control and services. YUTONG has consistently remained dominant position in the market share of battery electric mining trucks industry by serving more than 100 mining areas, providing safe operation of more than 1,500 days.

YUTONG has always been committed to empowering the mining business with science and technology and leading industrial development with green technologies. SCG is the largest cement company in Thailand and undertakes social responsibility of low-carbon and green development. And YUTONG has always been an advocate and practitioner of ecological priority and low-carbon development and has conducted fruitful cooperation with Huawei and Waytous in many green and smart mining projects, accumulating rich experience by providing reliable EV Mining Trucks, charger and aftersales service to create great value for clients and partners. The shared idea of building green mining and protecting our beautiful planet has brought the five of us together. We would like to wish our cooperation a great success.”

**Prof. Chen Long, Co-founder&CEO of Waytous** said this cooperation was “not only just the mark of reaching a consensus on this cooperation, but also means the formation of a cooperative ecological capability. Throughout this in-depth cooperation, we will gradually form standards for green and smart mine, invent innovative patents, and explore advanced models, we will eventually lead the mining industry towards decarbonization and intelligentization in Thailand and even the whole Southeast Asia. WAYTOUS is a Chinese unmanned mining provider incubated by Institute of Automation of the Chinese Academy of Sciences (CASIA), since its establishment, the enterprise has expanded business into cement, coal, nonferrous, metallurgy and other mining industries. A green and smart mine is an industrialized comprehensive system. Aiming to form an advanced solution, WAYTOUS has closely cooperated with all parties in the industrial chain based on an open ecosystem. In China, as the leading unmanned mining provider, WAYTOUS has closely cooperated with Yutong, the leading manufacturer of new energy mining vehicle, and Huawei, who pioneering 5G ecological platform. WAYTOUS formulated a strategic objective of overseas development in 2021 and urgently need foreign partners who intent to start an in-depth cooperation in order to form a successful overseas model ultimately. We sincerely cherish this opportunity, and we are willing to contribute as much as possible efforts to promote the success of this cooperation.”

The Unmanned EV Truck & Remote Control Vehicle powered by AIS 5G is now officially inaugurated for further rollout to other SCG sites.

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**About SCG**

SCG is a leading conglomerate in the ASEAN region that runs its operations in accordance with ESG criteria in a balanced way that is consistent with sustainable development principles in terms of the economy, society, and environment according to the principles of good governance. SCG comprises of three core businesses: packaging, chemicals, and cement and building materials. SCG is dedicated to developing innovative product, solutions, and services in line with the commitment to "Passion for Better," as well as develop partnerships with partners to promptly satisfy the different needs of customers.

Visit https://www.scg.com for further details.

**About AIS**

Advanced Info Service Public Company Limited (AIS) is the 5G Digital Service Provider with the most spectra to provide service, totalling 1420 MHz . The company has the most subscribers in Thailand, counting over 45.7 million in September 2022. AIS is ready to power Thailand with 5G technology which currently covers 77 provinces through 3 core businesses: mobile phones, high-speed home broadband through AIS Fibre, and Digital Services in 5 aspects of video, the Cloud, digital payments, the Internet of Things (IoT) and services provided jointly with partners. The company is also expanding into AIS eSports and AIS Insurance Service. All of this is to proceed with the vision of becoming a Cognitive Tech-Co, to support a robust digital infrastructure for the country, boost the industrial sector’s competitive potential and upgrade quality of life for all Thais. Find us at [www.ais.th](http://www.ais.th)

**About Huawei**

Huawei is a leading global provider of information and communications technology (ICT) infrastructure and smart devices through integrated solutions in four core segments, namely telecommunications networks, IT, smart devices and cloud services. We are committed to bring digital to every person, home and organization for fully connected, intelligent world. Huawei’s solutions and fully-integrated services are full of competitive potential and reliable. With the collaboration with our partners in an open ecosystem, Huawei can create long-term value to our customers, enhance people’s competency, help making people’s life at home more convenient, and inspire new innovations in various organizations, regardless of size and form.

Huawei’s innovations focus on responding to customers’ needs. We make huge investment budget in research, come up with new innovative techniques that will help moving our world forward. Founded in 1987, Huawei now has more than 194,000 employees, operates in more than 170 countries around the world, and we are a private company wholly owned by our employees.

For more information, please visit Huawei online at [www.huawei.com](http://www.huawei.com)