



land systems

DELIVERING EXCELLENCE IN LAND SYSTEMS

ST Kinetics, the land systems arm of ST Engineering, offers an integrated suite of innovative solutions for the defence, homeland security and commercial markets. With customers in more than 30 countries, ST Kinetics' capabilities span the entire value chain from systems centric design and development to lean manufacturing and comprehensive through-life support.

In 2007, ST Kinetics reorganised its core activities under three business groups to enhance the integration of its operations.

Land Systems & Solutions

As an original equipment manufacturer for a wide range of mobility, weapon and munitions systems, 2007 saw ST Kinetics continue to help maintain the peace of nations by delivering creative and versatile solutions for the defence and homeland security markets.

In March, ST Kinetics unveiled its new Commercial Articulated Vehicle, a track-based platform designed for disaster relief operations, at Global Security Asia. With a four-tonne payload, the vehicle provides great versatility in a wide range of rescue missions, from fire fighting and the recovery of trapped vehicles during

massive floods to the transportation of relief cargo.

During the year, ST Kinetics also showcased its defence products at major exhibitions, including the Association of the United States Army Annual Meeting and Exposition 2007 in Washington D.C., and the inaugural Brunei International Defence Exhibition 2007.

Recognising robotics as a key growth area, ST Kinetics sponsored and participated with the team from Cornell University in the prestigious US Defense Advanced Research Projects Agency (DARPA) Urban Challenge. The race required a vehicle to interact autonomously with traffic signals, pedestrians and other vehicles. The Cornell team emerged as one of six teams, out of an initial group of 35, to successfully complete the race. ST Kinetics will continue to invest in and develop such types of dual use technologies for both commercial and defence applications.

Specialty Vehicles & Services

Working to raise end users' productivity, ST Kinetics continued to develop new specialty vehicles and equipment with reliable product performance, low cost of ownership and ease of maintenance for use in

construction, goods distribution and urban services.

In North America, ST Kinetics launched a mobile command vehicle for the law enforcement market. During the year, ST Kinetics also received approval from the US Government Supply Administration (GSA) for VT Specialized Vehicles Corporation (VT SVC) and VT LeeBoy to list products for direct sales to US government entities.

In China, ST Kinetics unveiled an articulated dump truck and new excavators, including a hybrid version, expanding its family of offerings. In addition, ST Kinetics injected US\$16.9m (about \$25.6m) into Guizhou Jonyang Kinetics Co., Ltd. (GJK) to increase production capacity and enhance product lines, bringing its total investment in GJK to US\$28.9m (about \$43.8m).

ST Kinetics also appointed new dealers throughout Asia, including India, Indonesia, the Philippines, as well as Australia, to market and support its range of specialty vehicles and equipment.

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ST Kinetics launched the hybrid electric excavator at BICES 2007.

(following page, from left to right)

The mobile command vehicle was developed specially for the law enforcement market.

ST Kinetics successfully developed a range of environmentally friendly specialty vehicles, including a hybrid electric luggage tow tractor.



Total Support & Services

In 2007, ST Kinetics continued to maximise the uptime of its customers' specialised equipment, specialty vehicles and automotives through its comprehensive through-life support services.

STAR Automotive Centre in Singapore secured a two-year renewal contract for taxi fleet maintenance from SMART Automobile.

Singapore Test Services, which is one of the largest test services houses in Singapore, signed an agreement with RHE Asia Pacific to provide repair, maintenance, testing and certification services of aircraft jacks and associated ground support equipment exclusively in the Asia Pacific.

PERFORMANCE OF THE LAND SYSTEMS SECTOR

Half Yearly Performance

Turnover of the Land Systems sector in 2H2007 of \$594m was comparable to the \$584m achieved in 1H2007.

Compared to 1H2007, 2H2007 PBT decreased by 47% or \$24.4m to \$27.8m. The lower PBT was mainly attributable to loss on disposal of

a subsidiary, impairment in value of a long term investment and higher operating expenses.

Full Year Performance

Land Systems sector's FY2007 turnover of \$1,178m was higher than that achieved in FY2006 by 18% or \$176m. Higher turnover was recorded in Automotive (Auto) with higher specialty vehicles sales, Bionix II and Bronco deliveries, but this was partially offset by lower turnover in Munitions & Weapon (M&W). The lower turnover in M&W was mainly due to the absence of Primus and SAR 21 deliveries as well as lower weapon export sales, but these were partially offset by higher munitions sales.

Compared to FY2006, Land Systems sector's PBT of \$80.0m for FY2007 was higher by 14% or \$10.0m. Both Auto and Services, Trading and Others (S&T) recorded higher PBT, but these were partially offset by lower PBT in M&W. The higher PBT of Auto was attributable to higher contribution from higher turnover, but this was partially offset by loss on disposal of a subsidiary and the impairment in value of a long term investment. For S&T, the higher PBT was mainly due to the share of higher profits from CityCab,

an associated company, as well as higher trading sales. M&W's PBT was impacted by lower turnover and product mix.

Acquisitions

ST Kinetics increased its shareholding in STAR Automotive Center (Guangzhou) Co., Ltd. making it a wholly-owned subsidiary. The capital injection of an additional RMB11.36m (about \$2.27m) was in line with business growth in the expanding automotive repair market in China.

Major Projects

ST Kinetics won a \$78m six-year contract, with an option for another six years, to provide weapon maintenance and related services to the Singapore Armed Forces (SAF). The contract enabled SAF, whose weapon maintenance was previously handled by various agencies and third parties, to consolidate and streamline various weapon maintenance activities for greater efficiency and cost effectiveness.

In the clean and green technology arena, ST Kinetics successfully developed a range of environmentally friendly and commercially viable specialty vehicles. This included an



innovatively designed hybrid electric luggage tow tractor, over 70 units of which had been ordered by Singapore Airport Terminal Services Ltd (SATS) for use at Changi Airport Terminal 3. ST Kinetics also unveiled a new hybrid electric excavator with significantly lower fuel consumption at the Beijing International Construction Machinery Exhibition and Seminar (BICES) 2007.

Using similar technologies, VT SVC launched UltraTemp – a hybrid system for refrigerated distribution that combines the benefits of both cold plate and mechanical refrigeration. The state-of-the-art system offers low operating costs, high reliability and long life expectations associated with cold plates while providing unlimited route capability, automatic defrost and lower weight advantages of a mechanical refrigeration system.

As part of its efforts to further protect the environment and contribute to the realisation of a sustainable society, ST Kinetics became a founding partner of the Fuel Cell Community in Singapore to help spearhead the drive towards the maturity and greater usage of fuel cell technology.