



FACT SHEET

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Fact Sheet: Transformation of the Singapore Army

Background

1. The Singapore Army is constantly transforming to build and maintain operational capabilities to deal with evolving security challenges and threats that Singapore faces. The Singapore Army works closely with the Defence Technology Community and defence industry partners to integrate and enhance its capabilities. This ensures that the Army is structured and equipped to deal with the growing spectrum of multi-domain threats to safeguard Singapore's national interests and security.

The 3rd Generation Army

2. In 2004, the Army embarked on its 3rd Generation Army transformation journey to become a more advanced, networked and integrated force capable of responding to a wide range of operations to safeguard Singapore's national interests and security from peace to war. See **Annex A** for the 3rd Generation Army's transformation timeline. The 3rd Generation Army is built on the concepts of Precision Information, Precision Fires and Precision Manoeuvre, which in turn is premised upon the concept of Precision Warfare – the precise application of combat power at the time and location we require – to secure a swift and decisive victory.

- a. Precision Information – timely and precise information to aid planning and integration of accurate manoeuvre and fires.
- b. Precision Fires – the provision of concentrated fires quickly and accurately through networked and synchronised sensors and shooters.
- c. Precision Manoeuvre – the concentration of forces at the right place and time, to achieve maximum operational effectiveness.

3. **Full Operational Capability of the 3rd Generation Combined Arms Division**. The Combined Arms Division (CAD) is a key component of the Singapore Army's transformation into the 3rd Generation Army. Through a capstone exercise conducted in March this year, the

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Singapore Army attained Full Operational Capability (FOC) for the 3rd Generation CAD. This was a significant milestone building upon the wide array of capabilities operationalised since 2004.

4. This capstone exercise involved both active and NSmen from 3rd Singapore Division and its constituent units, and was conducted locally. It was conducted as a live-constructive exercise, involving live execution by soldiers in local training areas, and constructive simulation using the Army War-game Simulation System. The 3rd Generation CAD has validated its capabilities in the following areas:

a. Operationalisation of Combined Arms Brigades. The Combined Arms Brigades (CAB) are the tactical fighting forces for the 3rd Generation CAD. The exercise operationalised the Mechanised and Motorised CABs and validated their ability to operate as integrated brigades as part of the 3rd Generation CAD. During the exercise, the Terrex Infantry Carrier Vehicles, together with the Belrex Protected Combat Support Vehicles, provided combat, combat support and combat service support forces with additional mobility, protection and firepower, and enhanced the ability of forces to operate effectively in an urban environment.

b. Operationalisation of Division Strike Brigade. With increasing digitalisation of the Singapore Artillery's capabilities, the Division Strike Brigade was able to leverage the Army's High Mobility Artillery Rocket System (HIMARS) and the RSAF's F-15SG and F-16 Fighter aircraft and Apache attack helicopters, and effectively command and control available strike capabilities, to deliver precise and responsive strikes against opposing forces.

c. Digitalised and Networked Forces. Enabled by the 3rd Generation Command and Control Information System and Battlefield Management System, the 3rd Generation platforms and tactical forces are synchronised and connected to the Division and Brigade headquarters (HQs) of the 3rd Generation CAD. With capabilities to conduct real-time tracking of forces, the Division and Brigade HQs have strengthened command and control capabilities during operations, and are better able to fight as an integrated and effective force.

Developing the Next-Generation Army

5. As part of the Next-Generation SAF transformation, the Next-Generation Army must remain ready to respond to a diverse array of threats and operational demands to safeguard Singapore's national interests and security. To do so, the Next-Generation Army will leverage technological developments for the Army to better sense-make information and execute robust responses for maximum operational effectiveness.

a. Leveraging New Technologies. Working closely with the Defence Technology Community, the Next-Generation Army will employ new technologies in areas such as manned-unmanned teaming and Robotic Command, Control and Communications (C3)

systems¹. The incorporation of such technologies into warfighting concepts will enhance operational effectiveness and reduce manpower requirements.

b. Enhanced Sense-Making and Responsiveness. The Next-Generation Army will be more dynamic, and will be able to operate at a faster tempo to achieve intended operational outcomes. With platforms such as the Hunter Armoured Fighting Vehicle, the Next-Generation Army is able to bring greater firepower to the battlefield with enhanced mobility, protection and connectivity. The incorporation of artificial intelligence and data analytics in operations will allow the Next-Generation Army to “think faster” and “act faster” to enhance operational effectiveness.

6. Establishment of HQ Sense and Strike to “See Better” and “Shoot Faster”. The new 6th Singapore Division/ Headquarters Sense and Strike (6 Div/HQ SS) was formed to deepen and enhance the Next-Generation Army’s sense and strike expertise and competencies, and to operationalise new capabilities and fighting concepts. As part of the transformation into a future-ready force that is leaner and more capable, 6 Div/HQ SS will spearhead cross-domain expertise to integrate the Army’s tactical intelligence and fires capabilities with manoeuvre capabilities. In collaboration with the Defence Science and Technology Agency, the Next-Generation Army leverages emerging technology to “see better” and “shoot faster” with less manpower, and can better support the Next-Generation SAF in more complex and higher tempo operations. One key enabler is C3 systems for the Army to leverage on whole-of-SAF sense and strike capabilities. The Army will have the capability to dynamically employ sensors and shooters as required by mission demands, to enable manoeuvre forces to bring the full weight of the SAF’s combat power to bear on the adversary.

a. See Better. By exploiting new technologies, such as robotics and advanced early warning capabilities of the TPQ-53 Weapon Locating Radar and VELOCE 15 mini-Unmanned Aerial Vehicle (mUAV), 6 Div/HQ SS is able to achieve early detection and provide early warning of hostile rockets, artillery and mortar threats, to enable greater real-time situational awareness for swift counter-attacks on enemy artillery forces.

b. Shoot Faster. The BELREX Protected Combat Service Vehicle (PCSV) (Mortar), jointly developed by the Army, DSTA and ST Engineering Land Systems, leverages automation in its advanced mortar system and is an example of how 6 Div/HQ SS is able to conduct precision fire support at a higher volume and at a faster speed to support high tempo operations.

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¹ A Robotics C3 system is a hub that allows the simultaneous control and monitoring of multiple unmanned systems to develop a consolidated situation picture for coordinated missions

3rd Gen Army Transformation Journey Timeline

Year	Military Platform/ Exercises
2004	Beginning of the 3rd Gen Army Transformation
2006	Commissioning of the Bionix Infantry Fighting Vehicle
2007	Commissioning of the Mobility 3 rd Generation Float Bridge
2008	Inaugural participation of the Leopard Main Battle Tank at Ex Wallaby
2009	Unveiling of the Terrex Infantry Carrier Vehicle
2010	Battlefield Management System
	Leopard 2 Armoured Vehicle Launched Bridge
2011	Multi-Agency Counter-Terrorism Exercise
	Commissioning of the High Mobility Artillery Rocket System
2013	Commissioning of the Wide Area Communication System
	Inaugural participation of the Light Strike Vehicle at Ex Wallaby
2015	Commissioning of the Peacekeeper Protected Response Vehicle
	Air-Land Integration Live-Firing at Ex Wallaby
2016	Commissioning of the BELREX Protected Combat Support Vehicle
	Commissioning of the SAFARI Weapon Locating Radar
2017	Counter-Terrorism Exercise with the Singapore Police Force
2018	Counter-Terrorism Exercise with the Singapore Police Force
	Motorised - Mechanised Platforms Integration Exercise
	Operationalisation of the Unmanned Watch Tower
2019	Ex Golden Sand Tri-Service Exercise
	River Crossing Exercise
	Unveiling of the Wheeled Recovery Vehicle
2021	3rd Gen Combined Arms Division Full Operational Capability Exercise

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