

# New Main Battle Tank (NMBT)



## NMBT - A NEW STANDARD FOR EUROPEAN ARMORED SUPERIORITY

The “New Main Battle Tank” (NMBT), industrialised by Leonardo Rheinmetall Military Vehicles (LRMV), represents the next generation of European main battle tanks. Designed from a clean-sheet, it is created to dominate the digital battlefield and to ensure long-term operational superiority.

Developed through the joint expertise of Leonardo and Rheinmetall, the NMBT is part of a family that includes also support vehicles (recovery vehicle ARV, engineering vehicle AEV and bridge layer vehicle AVLB) and combines advanced lethality, full digitalisation, integrated survivability, as well as a new standard of mobility and scalable architecture. It is designed to meet the requirements of modern armed forces operating in multi-domain, high-intensity conflict environments. With its 120 mm turret, fully digitalised NGVA architecture, and readiness for human-machine teaming, the NMBT is not simply a tank, it is a combat system for the future battlefield.

The NMBT family ensures a sovereign European industrial capability.

## DECISIVE LETHALITY. EXTENDED REACH. TOTAL CONTROL.

At the core of the NMBT’s firepower is the 120 mm L55 smoothbore gun. The NMBT is designed to enable a possible future upgrade to a 130 mm gun to match new

requirements from a rapidly evolving environment. With a substantially increased engagement range and next-generation ammunition, the NMBT ensures dominance in tank-on-tank combat and beyond.

Beyond the main gun, the NMBT provides a layered firepower concept:

- Advanced C-UAS 30x113 mm remote weapon station for close protection and drone defence, combining fire power and high precision in a light turret with programmable ammunition
- Vulcano 120 mm guided rounds substantially increasing range and adding capability of reaching moving targets and BLOS engagement
- Integrated autoloader system, 20 rounds ready to fire, to enable a high rate of fire and reduce crew workload, allowing faster engagement cycles and sustained combat effectiveness
- Loitering munition capability for NLOS
- Direct control of Unmanned Aerial Platforms for RECCE and Vulcano target pointing
- Automated video LOS tracking for precise engagement

All weapon systems are fully integrated into the digital architecture, enabling:

- Hunter-killer and killer-killer operations
- Seamless sensor-to-shooter connectivity
- Rapid multi-target engagement



### INFORMATION AND SURVEILLANCE SUPERIORITY AT EVERY LEVEL

The NMBT is built for network-centric warfare. Its fully digitalised architecture allows the vehicle to operate as a node within a tactical unit. This enables real-time data exchange across platforms, units and domains in a cyber secure by design environment.

The integrated battle management capability ensures commanders to have:

- Continuous situational awareness
- Rapid decision-making tools thanks to modern AI support
- Full control over sensors and effectors
- Next generation sights and sensors providing unrevealed range of engagement and 360° day/night full situational awareness capability

The flexible crew station concept allows every operator to access and control key systems, resulting in:

- Role redundancy
- Task sharing under combat conditions
- Increased resilience in degraded scenarios

The NMBT is also designed to integrate and control:

- Uncrewed aerial systems
- Loitering munitions

This enables true human-machine teaming, and extended operational reach far beyond the known MBT engagement radius.

The result is clear: faster decisions, better coordination, decisive advantage.

### INTEGRATED DEFENCE AGAINST MODERN THREATS

The NMBT introduces a comprehensive, layered survivability concept designed for the full spectrum of modern threats. Protection is no longer defined by armour alone. The NMBT combines passive and active protection systems:

- Signature management through obscurator systems
- Most modern Active Protection System (APS) against the full spectrum of threats spectrum incl. large calibre KE penetrators
- Enhanced Mine and IED protection
- EV-powered Stealth-Watch up to 8 h (no running APU)

A key innovation is the integration of active protection against kinetic energy (KE) threats, significantly increasing survivability without increasing vehicle weight.

The NMBT is also designed to operate in a contested electromagnetic environment, with full cyber resilience built into the system.

### AGILITY WITHOUT COMPROMISE

The NMBT introduces a new generation powerpack, developed for being the state of the art on the market. It outclasses current solutions by performance and is designed to be the reference for the next generation of heavy tracked vehicles.

The NMBT's mobility concept introduces:

- Strong tactical mobility thanks to high acceleration of 0-40 km/h in under 8 sec. and rapid repositioning on the battlefield with top speed of up to 70 km/h
- Advanced manoeuvrability and superior obstacle crossing capability
- Full drive by wire capability
- Improved performance, reliability and weight reduction for greater operational flexibility
- Grow potential up to 1350 kW
- Optimisation of power and cooling capability
- Operational temperature from -32°C to +49°C (with arctic kit as option)
- Equipped with selectable driving mode to allow optimisation of performance or consumption with a range up to 450 km, enabling sustained operations without frequent resupply
- Ready to integrate remote controlled operations

Therefore the NMBT achieves a new balance between firepower, protection and mobility.

*Disclaimer: The presented configuration in this brochure is as offered to the Italian MoD.*



## GENERAL PERFORMANCE DATA

<b>Concept</b>	Next-generation main battle tank with fully digitalised architecture, Cyber secure by design
<b>Crew</b>	3 operators + 1 specialist role
<b>Main Armament</b>	120 mm L55 smoothbore gun (upgradability to 130 mm) with BLOS firing engagement enabled by Vulcano ammunition
<b>Automated Ammunition Loading System</b>	Autoloader with high rate of fire and 20 rounds ready to fire
<b>Secondary Armament</b>	12.7 mm coaxial machine gun, 30x113 mm C-UAS Remote Weapon Station (multi-role)
<b>Sights &amp; Reconnaissance</b>	Top notch sights and sensor suite providing 360° day/night full situational awareness, EV-powered Stealth-Watch up to 8h (no running APU)
<b>Extended Capabilities</b>	Loitering munition integration and UAS control station
<b>Protection</b>	Integrated hybrid-protection system countering all convenient threats (Mines/IED, RPGs, ATGMs), Large calibre KE penetrators and top-attack threats as UAVs, NBC protection
<b>Mobility</b>	Vmax 70 km/h, Drive-by-Wire, Acceleration 0-40 km/h <8 sec., Range up to 450 km, weight up to 69.5 t (incl. full combat weight and growth potential)
<b>Architecture</b>	Fully digital NGVA-compliant system, Predictive maintenance capability based on HUMS technology



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