

## COMBAT RADIUS



Combat radius and time on station can be extended through air-to-air refuelling.

### IRST

Provides passive situation awareness at long range against air and ground targets

### ES-05 RAVEN AESA RADAR

Simultaneously and independently tracks air-to-air and air-to-surface targets

### LITENING

Precision target pods that significantly improve the effectiveness of stand-off weapons

## RANGE AND MANOEUVRABILITY

The maximum combat radius for Gripen NG on an air-to-surface configuration is approximately 800 nm (1,500 km). This is defined as flying to a target, releasing air-to-surface weapons, and then returning to home base. The actual combat radius depends on the configuration of the aircraft's external stores, its profiles and the availability of reserve fuel tanks. Gripen NG's combat radius meets the needs of air forces around the world, but at a much lower cost than its competitors.

The aircraft's maximum time on station in a mission depends on the stores carried and the distance from the home base to the combat air patrol station. In a typical air-to-air configuration for example, Gripen NG can patrol for over two hours.

### AIR-TO-AIR REFUELLING

All Gripen NG are equipped to conduct air-to-air refuelling via the NATO standard probe-and-drogue system. This ability increases its combat radius and/or time on station considerably – in fact, missions of up to eight hours or more can be flown.

### MANOEUVRABILITY

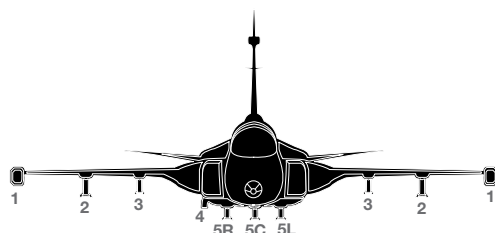
Gripen NG has a canard/delta wing configuration with relaxed stability. A triplex fly-by-wire aerodynamic control system enables stable and precise flight with highly agile manoeuvring. This aids pilots by optimising their commands across the entire flight envelope. It also reduces the effort required in executing demanding manoeuvres. The flight control system compensates for difficult environmental conditions and minimises drag. It is thoroughly tested and ensures care-free flight, meaning that the pilot can never overstress the aircraft except in an emergency.

# WEAPON SYSTEMS

Gripen NG has weapons for all types of mission, from guided bombs for precision engagement with low collateral damage, to long-range and agile air-to-air missiles and heavy anti-ship armaments. Additionally, the aircraft has an inherent precision strike and stand-off capability.

The single-seat Gripen NG is equipped with a 27 mm Mauser BK27 gun. This can be used in air-to-surface attacks against land and sea targets and is suitable for air policing missions. Gripen NG can also carry pods and sensors for reconnaissance and special missions.

Gripen's flexible weapon system architecture allows easy and cost-efficient integration of new stores, from long-range and agile air-to-air missiles to anti-ship missiles and guided bombs. This is enabled by standard pylon interfaces, a modular avionics system, and adaptive payload classifications that eliminate the need for updates of the flight control system.



## MULTI-ROLE CAPABILITY

PYLON STATION	1	2	3	4	5R	5C	5L	3	2	1
AIR-TO-AIR IR MISSILES	✕	✕	✕					✕	✕	✕
AIR-TO-AIR RADAR MISSILES		✕	✕		✕	✕	✕	✕	✕	
ANTI-SHIP MISSILES		🚢	🚢		🚢		🚢	🚢	🚢	
SMART BOMBS		✕	✕		✕	✕	✕	✕	✕	
SDB		📦	📦		📦	📦	📦	📦	📦	
SDB ALTERNATIVE		📦	📦		📦	📦	📦	📦	📦	
RECCE POD				📡		📡				
FLIR/LDP POD			📡							
AACMI POD	●									●
ECM POD		📡	📡		📡			📡	📡	
EXTERNAL FUEL TANK		🛢️			🛢️			🛢️		





## SURVIVABILITY

Gripen NG is built to survive in combat via a series of integrated EW capabilities that enable smart tactics.

STRIKE **ANY**  
**TARGET**

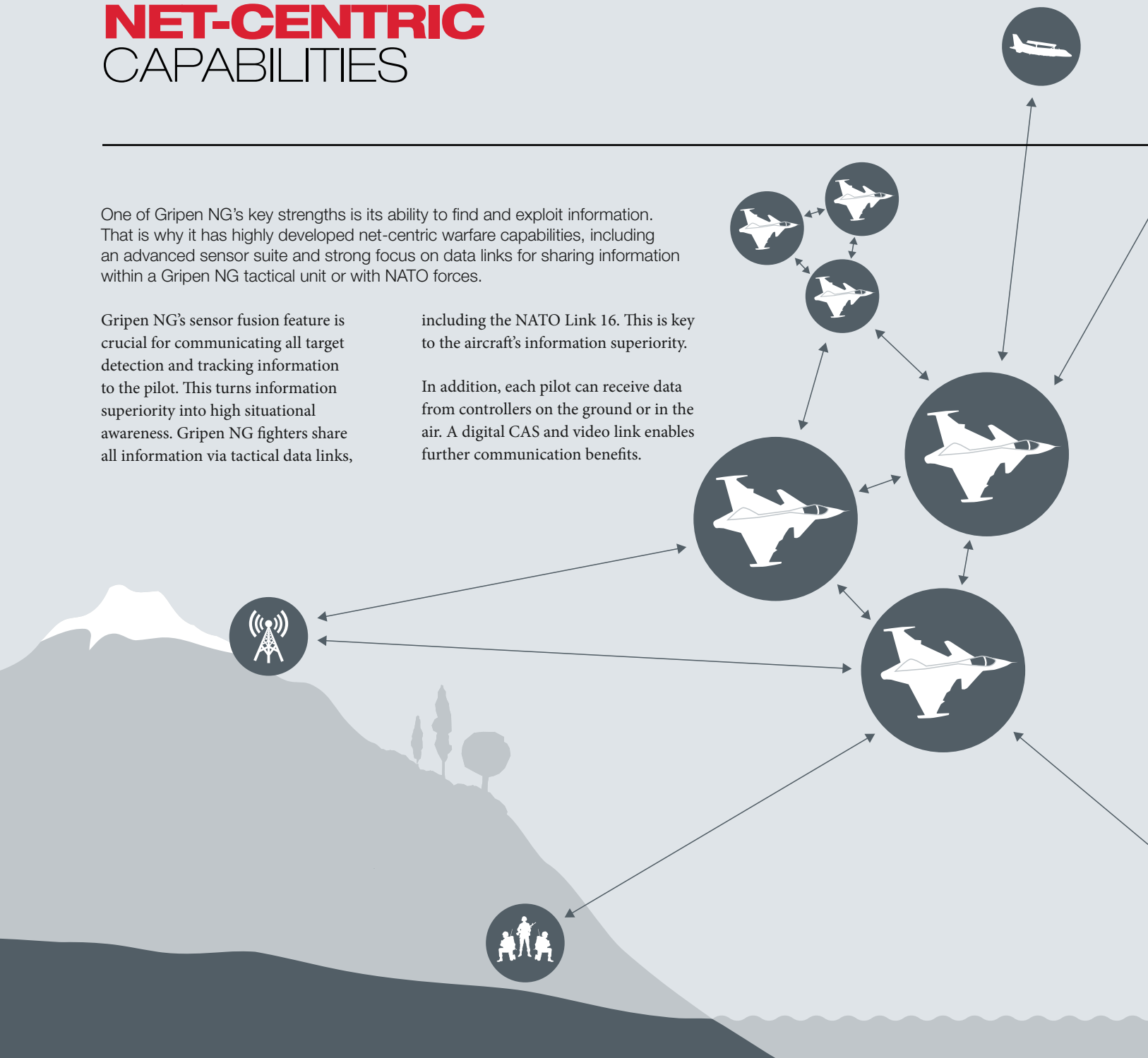
# NET-CENTRIC CAPABILITIES

One of Gripen NG's key strengths is its ability to find and exploit information. That is why it has highly developed net-centric warfare capabilities, including an advanced sensor suite and strong focus on data links for sharing information within a Gripen NG tactical unit or with NATO forces.

Gripen NG's sensor fusion feature is crucial for communicating all target detection and tracking information to the pilot. This turns information superiority into high situational awareness. Gripen NG fighters share all information via tactical data links,

including the NATO Link 16. This is key to the aircraft's information superiority.

In addition, each pilot can receive data from controllers on the ground or in the air. A digital CAS and video link enables further communication benefits.



TO KNOW IS  
**TO WIN**



## BATTLEFIELD NETWORK

Gripen's Data Link System (TIDLS), along with a Link 16 or National Data Link provide the following capabilities:

- ▶ Data link within the Tactical Air Unit
- ▶ Data link between Gripen, AEW&C and C2 centres on ground or at sea
- ▶ Data link with Forward Air Controller



# INTEROPERABILITY



\*This image has been digitally created using 3D modelling software

Gripen NG is able to participate in joint missions around the world, as well as acting to protect the interests of the user's nation.

The aircraft is interoperable with army, navy and C2 organisations, and is also fully NATO-compatible. Originally designed to withstand the harsh arctic conditions of northern Sweden,

Gripen NG has been adapted to operate in a complete range of extreme climates – from tropical zones such as Thailand, through to the deserts of Africa.

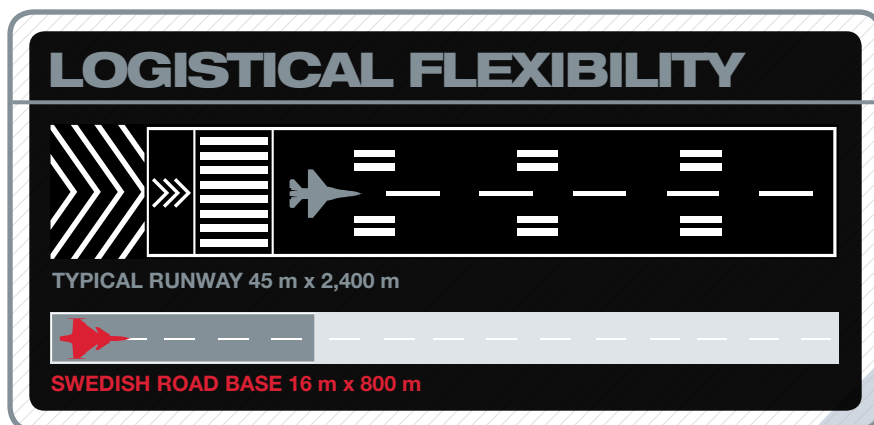
# LOGISTICS

Gripen was originally designed for flexible deployment with a small logistical footprint. This was due to the Swedish Air Force's policy during the Cold War to operate out of a number of dispersed bases across the country. This made it vital to keep staff resources, support systems and spares to a minimum. As a result of this, Gripen was designed to operate from runways only 16 x 800 metres in length. This means it can land on a regular highway, which further improves its logistical flexibility. This capability has been carried over to Gripen NG.

## AVAILABILITY

High availability is vital for small air forces. These organisations rely on aircraft that offer a long Mean Time Between Failure (MTBF) and short Mean Time To Repair (MTTR). Gripen NG has been designed with this in mind. For example, the entire engine can be exchanged and tested in the field in less than an hour.

These properties, together with low maintenance requirements per flight hour, give the aircraft higher availability than its competitors. Gripen NG has also been designed for minimal turnaround time. For example, an air-to-air combat set up takes only 10 minutes to perform, including refuelling and rearming.



THE WORLD'S MOST  
**ADVANCED**  
**AVIONICS**



## MODULARITY

Gripen NG's modular design greatly enhances its ability to adapt. Using off-the-shelf products and integrating them in an open architecture makes the aircraft development process very flexible. It also enables distributed development of Gripen NG in customer nations as part of industrial cooperation and technology transfer packages.

## FURTHER DEVELOPMENT

### TWO-SEATER GRIPEN NG

A two-seater version of Gripen NG is in development and will be used for both pilot training and combat missions. For the combat role, this version will be optimised to enable air battle management from the back seat, including jamming, information warfare and network attack capabilities. Weapon System Officer (WSO) and EW roles can also be facilitated from this position.



## FUTURE VERSIONS

### SEA GRIPEN

Sea Gripen is a carrier-based fighter that enables affordable naval air power. It will make a first-class carrier-based fighter and will retain the combat capabilities offered by the regular NG version.

### OPTIONALLY UNMANNED

An optionally unmanned Gripen NG would be useful for a range of situations, for example flying very high risk missions. It provides the operator with the flexibility to use the aircraft daily for either manned or unmanned missions.