DEFENCE AND SPACE

Eurostar Neo

AIRBUS

What is Eurostar Neo?

THE MOST MODULAR REFERENCE OF GEO TELECOMMUNICATION SATELLITE BY AIRBUS

Since the first launch in 2022, Eurostar Neo offers increased efficiency, performance and competitiveness, from a cost and schedule perspective compared to any GEO platform on the market.

It draws on all the strengths, experience and unique in-orbit heritage of the Eurostar family.

The spacecraft design, from payload accommodation to equipment options, is based on a single imperative: providing the widest range of choices to deliver the most responsive, and flexible solution to customer needs.

> “Eurostar is the most tailorable and reliable solution to your needs”

Design to mission and smart modularity

Multi-launcher compatibility

5 Capacity to fire up to 5 thrusters simultaneously

15 years
Extended operational life, often exceeding 15 years

6.8t
From 3 to 6.8 ton launch mass

Electric Orbit Raising
Most optimised and reduced orbit raising duration

Up to 2,700
Payload mass

12m
Capacity to embark 12m unfurlable reflectors

6×2.6m
Antennas fully customisable to customer’s need with up to 6 deployable reflectors of a diameter up to 2,6m

7-24+kW
Scalable power system to cover a payload power needs up to 24kW

Eurostar Neo in production

EUROSTAR NEO DRAWS ON THE BEST OF AIRBUS' EXPERIENCE, BUILDING ON THE EUROSTAR FAMILY HERITAGE, ONEWEB AND AIRCRAFT EXCELLENCE IN DESIGN AND PRODUCTION

Deployable antennas

Top floor antennas

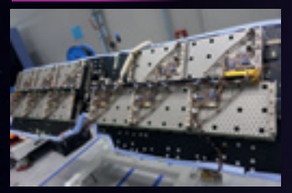
Communication module

Deployable thruster arms

Service module

Solar array

Batteries



Platform

Communication Module

- Scalable product focusing on optimised payload performance,
- Open I-Frame configuration simplifying payload layout and maximising accessibility for integration,
- Dedicated X-face supporting side antennas.

Service Module

- Full Carbon Fibre Reinforced Polymers (CFRP) primary structure and 1666mm Launch Vehicle Adapter (LVA),
- Supports avionics, power and propulsion systems,
- Equipment, harness and propulsion pre-installed on panel modules,
- Maximum opportunity for parallel integration,
- Common equipment across options.

AIRBUS WAS THE FIRST TO USE FULL ELECTRIC ORBIT RAISING FOR LARGE AND POWERFUL SATELLITES

Payload

MODULARITY AND FLEXIBILITY SOME EXAMPLES

ENEO CM3

- Ku-Band DTH bent pipe mission, UHF hosted payload
- 6 antennas, three 2.2m antennas and three 2.6 m antennas

ENEO CM3

- Ku/Ka Multi-Beam HTS Bent pipe mission
- Triple antenna configuration up to 2.6m diameter reflectors

FROM 7kW DC POWER

ENEO CM3

- L/S-Band Geomobile Processed mission

ENEO CM4

- Ku/Ka-Band DTH bent pipe with complex selectivity
- Double deployment of up to 2.6m diameter reflectors

UP TO 24kW DC POWER

ENEO CM4

- Flexible payload
- 2.2m Rx User antenna, 2,6 m Tx User antenna and two 1.2 m G/W antennas

ENEO CM3

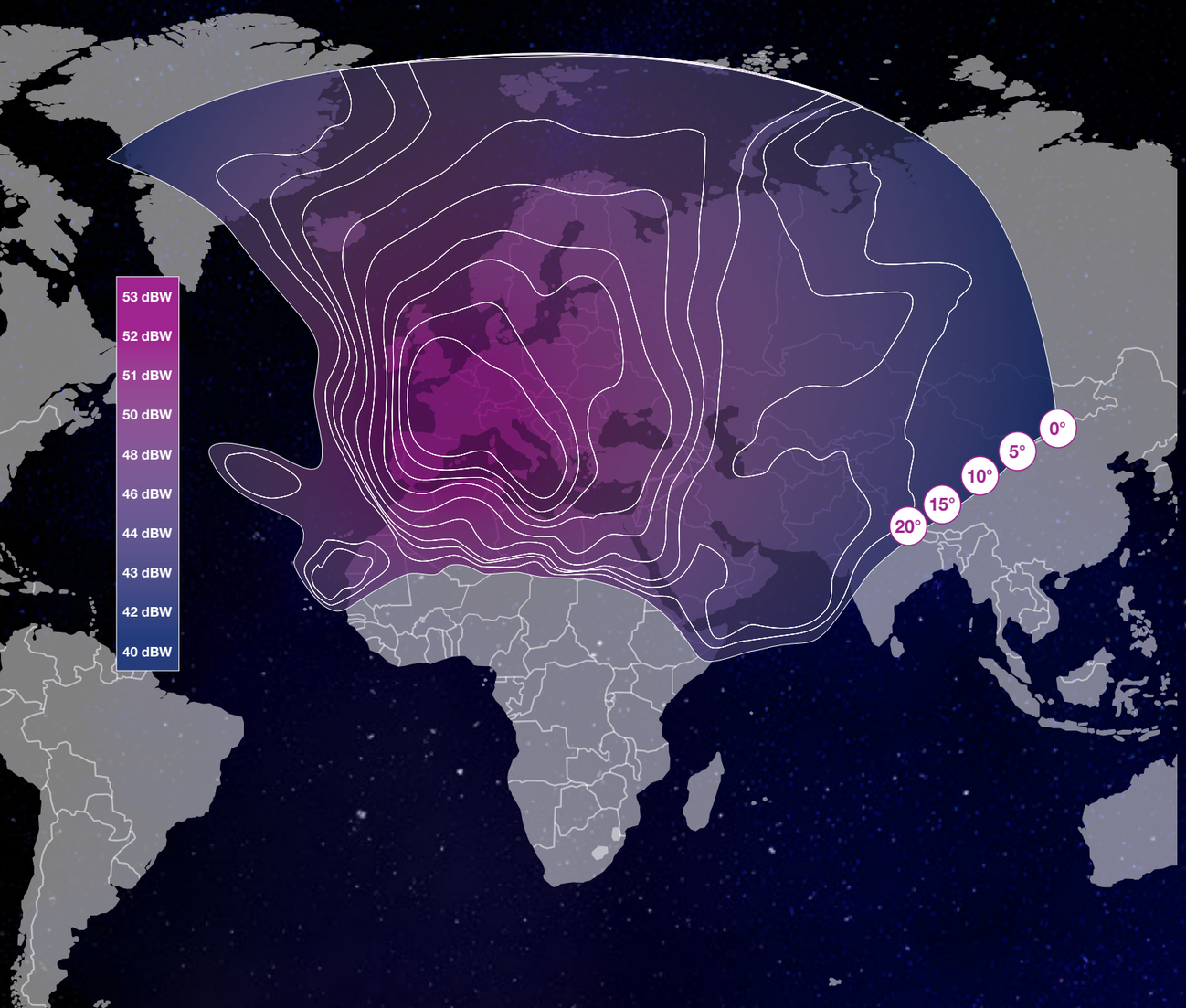
- Pallet of Ka-Band, UHF antenna and active X-Band antenna

Extensive and continuous coverage

AIRBUS CUSTOMISES PAYLOAD DESIGN TO YOUR COVERAGE AREA NEEDS

Typical bentpipe payload broadcast using up to **80 transponders** in Ku/Ka/X/C frequency bands for multibeam and multi-coverage missions.

EUROSTAR NEO COVERAGE EXAMPLE (for illustration only)

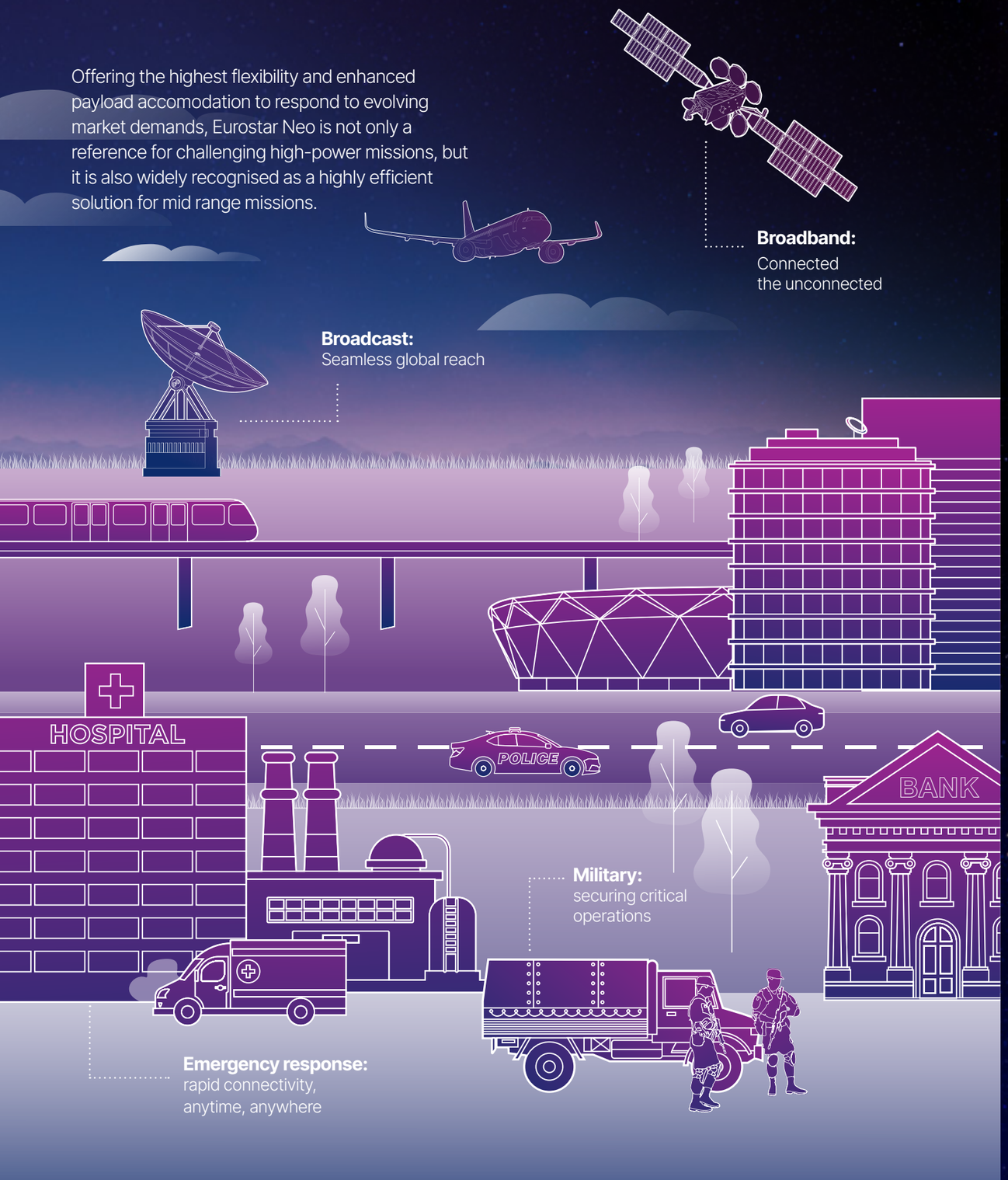


Key benefits

- **High performance**, payload power up to 24kW and VHTS missions
- **World shortest** Electric Orbit Raising (EOR) duration
- **Robust design** fully customisable to fit any satellite mission
- **High reliability** more than 99.9% availability
- **Compatible** with all launchers
- **Dual mode:** enhanced autonomy in LEOP and On-station
- **Airbus is the most experienced** in electrical propulsion
- Eurostar family: more than **35 years of heritage**
- Enhanced platform beam **pointing accuracy**
- **Core product innovations** payload centric and design-to-manufacture

Use cases

Offering the highest flexibility and enhanced payload accomodation to respond to evolving market demands, Eurostar Neo is not only a reference for challenging high-power missions, but it is also widely recognised as a highly efficient solution for mid range missions.



Broadband:
Connected
the unconnected

Broadcast:
Seamless global reach

Military:
securing critical
operations

Emergency response:
rapid connectivity,
anytime, anywhere

- Europe's largest defence and space company and pioneer in telecommunications
- Proven track record of successful deployments
- Leader in large satellite manufacturing (up to 24kW)
- End-to-end system provider for a seamless integrated solution, easily deployable
- 77 000 m^2 cleanroom capacities
- Unrivalled LEOP* and in-flight service more than 50 LEOP's from the satellite operations center since 1998
- Entire value chain mastered including Ground segment, Satellite equipment, Launchers, Satellite manufacturing...
- Airbus Space Academy Operational training center dedicated to our customers

*LEOP Launch and Early Orbit Phase

With Eurostar Neo, gain more than a GEO satellite, partner with Airbus, a trusted leader in the space industry

Systems · Ground segment · End user application · Manufacture and Testing · Launcher

AIRBUS

March 2025.

Concept design by Airbus Multi Media Studio, 20250135.

Photos by Airbus.