

# Thales unveils Nexium SafeCore, an ANSSI-certified secure infrastructure solution for network function virtualisation

- At Milipol on 16 November, Thales, a global technology leader, unveiled Nexium SafeCore, its new software platform for security, communications and network function virtualisation (NFVi<sup>1</sup>).
- Already in use on several French defence ministry programmes, Nexium SafeCore makes it possible to host civilian network functions and sovereign applications on the same physical equipment.
- The solution significantly reduces the size, weight and power requirements of network hardware, supports easy remote maintenance and ensures an extremely high level of security, as demonstrated by ANSSI's decision to award the technology its First Level Security Certification (CSPN) on 4 July 2023. This makes Nexium SafeCore the first and only NFVi system to be certified at this level.
- Nexium SafeCore is designed for armed forces, security services, governments, public agencies and defence contractors, as well as critical infrastructure providers with particularly high security requirements<sup>2</sup>.



Nexium SafeCore ©Thales

<sup>&</sup>lt;sup>1</sup> Network Function Virtualization Infrastructure

<sup>&</sup>lt;sup>2</sup> Including France's Réferentiel général de sécurité (RGS), <u>protection rules stipulated by Interministerial</u> <u>Order #901</u> and security recommendations published by ANSSI, ENISA and the DGA, France's defence procurement agency.



### Security and reliability: The advantages of network virtualisation

Whether deploying special forces into a theatre of operations or setting up an emergency field hospital for civilian populations, it is becoming more and more important to be able to quickly project secure networks and communications into the areas where they are needed most. Off-the-shelf functions (routers, encryptors, firewalls, satcom links, 4G/5G services and LOS radios) are typically used to meet the urgent need for connectivity and secure network solutions that are quick and easy to deploy. Critical infrastructure providers, working within strict information system security requirements, face similar challenges. Deployment of resilient critical infrastructure typically involves many different types of equipment, pushing up size, weight and power requirements and making vital through-life support and security maintenance ever more challenging.

Virtualisation is the ideal technology for deploying these new networks, just as it is today for hosting applications.

A network function virtualisation infrastructure **abstracts a machine's hardware resources as software and pools them with the network for use by virtual machines (VMs).** Nexium SafeCore's secure-by-design approach and proprietary source code make it possible to partition these VMs from each other, from the platform and from IP traffic passing through, keeping communications secure.

"The ANSSI certification held by Nexium SafeCore, our sovereign network virtualisation solution, reflects its high levels of security and reliability for use in critical infrastructure and military theatres of operations, which demand unmatched agility, security and size, weight and power performance. It is the only solution with this level of certification to provide such a broad range of services and benefits. Its certification speaks to the successful deployment of Nexium SafeCore on various French defence ministry programmes," said Jean-Claude Schmitt, VP Networks and Infrastructure Systems, Thales.

### **Boosting operational capabilities**

By bringing KVM-based virtualisation to standard x86 machines and adapting the technology to each use case, Nexium SafeCore offers forces significant operational gains. The solution reduces equipment size by a factor of three to five or more, cuts energy use by up to seven times depending on equipment type, and makes systems easier to transport, sustain and secure. In terms of security, the solution supports emergency deletion of security keys, remote addition of services such as Cybels Sensor, data encryption using MISTRAL, custom configurations and reliable reboot after unplanned power outages.

The Nexium SafeCore solution is designed for use both by armed forces and by critical national infrastructure providers, offering flexible, scalable virtualisation without compromising on security or reliability.



# **About Thales**

Thales (Euronext Paris: HO) is a global technology leader in three areas: defence and security; aerospace and space; and security and digital identity. Its teams develop products and solutions that help make the world a safer, greener and more inclusive place.

Every year, Thales invests nearly €4 billion in research and development, particularly in the key technology sectors of quantum computing, cutting-edge IT, 6G and cybersecurity.

Thales has 77,000 employees in 68 countries. In 2022, the Group generated sales of €17.6 billion.

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