

SECTOR PACKAGE · SPACE

Telecommands with no way back, operations that can be proven

Control, human approval and verifiable evidence for the critical actions of the ground segment: telecommand, constellation operations and increasingly autonomous systems.

In space there is no way back: **a wrong or malicious telecommand cannot be reverted in orbit**. The ground segment concentrates operators, manufacturers, third-party stations and growing automation over assets worth tens or hundreds of millions. A valid credential is no longer enough as a control. *Who authorizes each telecommand, with which operational context, and what evidence remains of each pass?*

WHAT VELANTIA BRINGS TO THIS SEGMENT

AUTONOMY — governs autonomous operations: **capabilities, scopes, conditions and human approval** for automated planning and constellation management.

GATE — decides each critical ground-segment action: **allow, condition, route to approval or block** telecommands, configuration changes and maneuvers, based on policy and context.

SENTINEL — observes operational activity, **detects anomalies** and attributes each action to its author: operator, system, station or third party.

EVIDENCE — preserves a **verifiable history** of each telecommand, pass and maneuver: ready for the customer, the insurer, the agency and anomaly investigation.

WHAT YOU CAN DO WITH IT

- ▶ **Govern the telecommand:** sensitive orders — maneuvers, payload, on-board updates — require approval per policy; the rest flows.
- ▶ **Control ground-segment third parties:** partner stations, manufacturers and support act under defined permissions, with an integrity-protected record.
- ▶ **Introduce autonomy with limits:** automated constellation operations stay bounded to what their policy authorizes.
- ▶ **Prove the operation** to institutional customers, insurers and the regulation applicable to the operator — the evidence is already generated.

The constellation keeps operating — every telecommand with permission, context and a provable history.

DEPLOYMENT

Depending on the environment: **SOVEREIGN 700** for control centers and sovereign operation, and **INDUSTRIAL 500R** for ground stations and deployed environments (both in pre-order), governed from **VELANTIA ONE**. Also software, virtual machine or the operator's private cloud. It integrates with existing mission-control software **without replacing it**.

WHY NOW

The sector is living its decade: **multiplying constellations, increasingly automated operations and institutional customers demanding guarantees**, while the ground segment consolidates as the most attackable link. Whoever puts the governance and evidence of their operations in order today will stand out before agencies, insurers and defense customers.

Next step: an initial meeting and a demonstration.

Complete flow on a scoped ground-segment case: telecommand → policy → approval or block → evidence. A scoped pilot proposal is available, with metrics and no deployment commitment.