

ARTEFACT 1

Executive Program Brief

Satellite Profiling Program – National Mission Readiness & Data Governance Platform

1. Context & Problem Statement

The organisation operated in a highly sensitive space and satellite environment where mission-critical data was fragmented across teams, tools, and processes. Satellite profiling information which covered technical requirements, operational readiness, compliance data, and international coordination was not consolidated into a single governed system.

This fragmentation created operational risk, slowed decision-making, increased dependency on manual coordination, and limited the institution's ability to scale its space operations or collaborate efficiently with international partners.

2. Strategic Objective

The objective of the Satellite Profiling Program was to establish a secure, interoperable, and authoritative digital system that would:

- Centralize satellite profiling and mission readiness data
- Enable controlled access for internal and external stakeholders
- Support regulatory, operational, and international coordination needs
- Serve as a reusable digital foundation for future and data initiatives

The program was not designed as a one-off system, but as a foundational digital public infrastructure for space operations.

3. My role & Accountability

As Program Lead, I was responsible for:

- Designing the digital and data governance model
- Establishing security, resilience, and access control standards
- Leading multidisciplinary teams across engineering, data, research, and operations
- Advising senior leadership on risk exposure, system design trade-offs, and launch priorities

I acted as the bridge between executive leadership, technical teams, and external stakeholders.

4. Stakeholders & Collaboration

The program required coordination across a complex stakeholder landscape, including:

- Internal satellite engineering and mission teams
- The National Space Research and Development Agency
- Defence Space Administration
- Federal Ministry of Communication, Innovation, and Digital Economy
- International Technological Union (ITU)
- Chinese Research and development team

Structured governance forums were established to align priorities, manage dependencies, and ensure accountability across all parties.

5. Outcomes and Impact

- Improved mission readiness through centralized, trusted data
 - Reduced operational risk and manual coordination overhead
 - Secure, auditable access to sensitive satellite data
 - A scalable digital foundation supporting future missions and partnerships
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6. Strategic Relevance to Government & Public-Sector Digital Transformation

This program reflects core principles essential to modernizing digital infrastructure, interoperability across agencies, and sustained institutional capability building.

It demonstrates how foundational platforms can be designed to scale across ministries and departments, reduce duplication, strengthen governance, while enabling continuous innovation in service delivery.