

REGULATING SATELLITE CONSTELLATIONS: ITU COMPLIANCE

HOW INTEGRASYS ENABLES EFFICIENT
REGULATORY COMPLIANCE

Álvaro Sánchez
CEO

26th International Space Radio Monitoring Meeting

Why NGSO Regulation is Much More Important Than Before

- LEOs provide **services without licenses**, and there are not many regulators that can regulate it.
- LEOs are **starting to provide Direct-to-Device** (D2D) connectivity.
- **Local** and global **satellite industry** have been completely disrupted by new business models and interference.
- **Local** and global **telecommunication companies** are about to be disrupted by D2D LEO service.



SATCOM disruption



hispasat



TELCO disruption



T Mobile

verizon

Deutsche Telekom



How can INTEGRASYS help?



PROTECTING TELCOS

Protecting TELCOs by analyzing Articles 21 & 22.



PROTECTING COUNTRIES

Protecting countries by analyzing satellites with illegal transmission over them.



AUTOMATION

Measurement automation for new talents who may not be experts in NGSO constellations.

INFRASTRUCTURE

Set up the required infrastructure and provide the systems and reports as perpetual capability or ongoing service.



GEO
OPERATOR



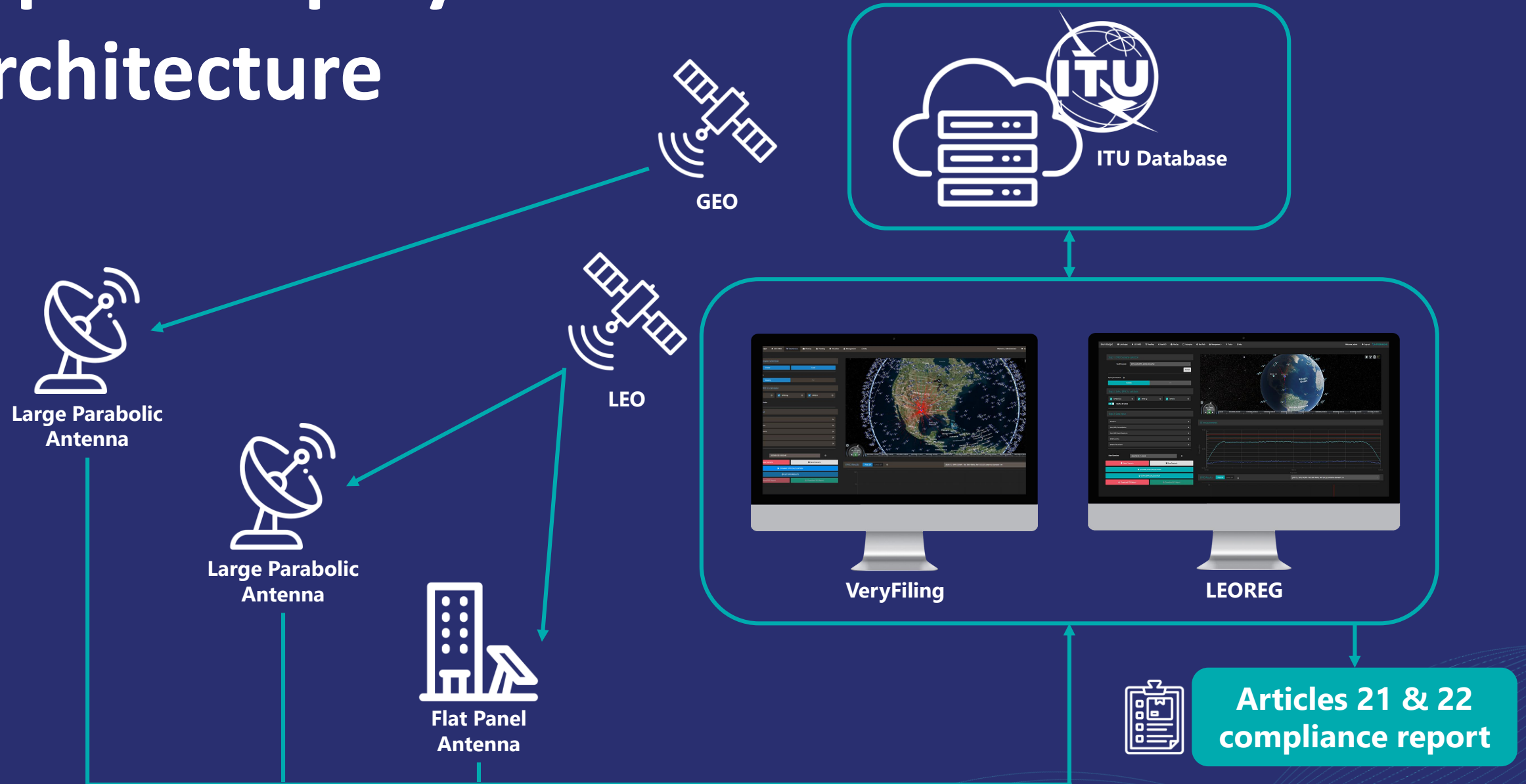
TELCO



REGULATOR

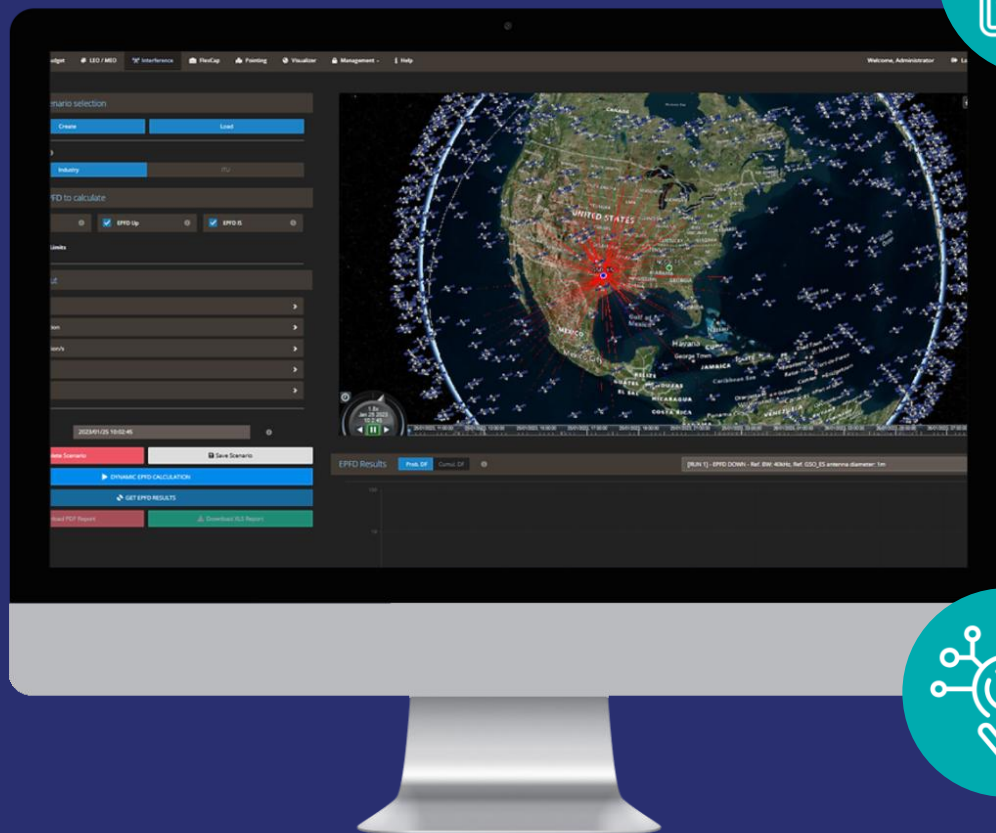


Typical Deployed Architecture



VeryFiling

ITU/FCC FILING SOFTWARE



Used for communications, and APNT or EO satellites



Calculation software aligned with the ITU-R S. 1503-3 standards

Allows complying with the ITU/FCC regulations before approval request

Allows regulators to test constellations and provide recommendations

Virtualized in the cloud

Complete 100+ pages PDF customizable report

EPFD calculations: pass/fail under ITU Articles 21 & 22

Saves 95% of the time developing calculations and 95% of the OPEX with the Press & Go button



Multi-mode specially built for industry and coordinating regulators

Special mode designed for regulator's (ITU, FCC...) review

LEOREG



EPFD REGULATORY MONITORING SYSTEM

Evaluates NGSO constellation for compliance after launch

Real-time EPFD verification for existing constellation



Intuitive 3D visualization for situational awareness and constellation tracking

Antenna management modules for parabolic and flat panel

Reduces spectrum congestion

Automated and AI-driven algorithms to ease operations

Pass/fail summary for ITU

Certification of cells not transmitting with 5° pointing at GEO

Reporting under Articles 21 & 22



INTEGRASYS:

Software Company

SMART SOLUTIONS FOR THE SATELLITE INDUSTRY

35

Years of
Experience

35%

R&D Investment

100

INTEGRASYS
Employees

9

★★★★★
Innovation
Awards

8

Countries in
4 continents



Smart Solutions
for Spectrum
Regulation



COTs and
R&D Developments



Leading Customers
within the,
Regulatory, Defense
& Satellite Industry

Conclusion

Ready-to-use technologies as Software as a Service (SaaS)

WIN-WIN-WIN situation

Regulators

TELCOs

SATCOMs





Building Success from Innovation



WEBSITE

www.integrasys-space.com



EMAIL

info.sales@integrasys-sa.com



EUROPE

HQ - +34 916 316 846

Seville - +34 955 638 650

Luxembourg - +352 278 746 056

Ukraine - +380 44 391 8288

UK - +44 208 899 6000

AMERICAS

USA - +1 470 294 6325

MIDDLE EAST

UAE - +971 4311 6041

ASIA

Indonesia - +62 812 2185 1280

AUSTRALIA

Sydney - +61 2 8311 1700