



# mySPECTRA for Defense

MANAGE, OBSERVE and DEFEND your Spectrum



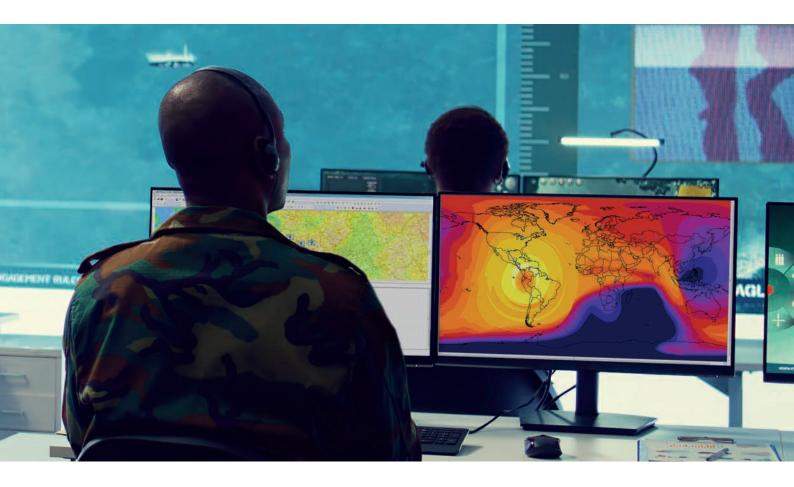
# mySPECTRA for Defense - Your Solution for Electromagnetic Spectrum Operations

Mission success relies on secure, real-time access to the electromagnetic spectrum. Critical functions like command, surveillance, and communication require seamless spectrum management. In congested and contested environments, mySPECTRA for Defense delivers advanced tools for strategic planning and tactical execution, ensuring optimal spectrum use and operational superiority.

# **Key Features and Benefits**

- Comprehensive Spectrum Management
- Joint Operations Support
- Strategic and Tactical Integration
- Seamless System Interoperability
- Customizable and Scalable
- Automated Workflow Efficiency
- Real-Time Coordination
- Data Consistency Assurance
- Practice-Proven COTS Solution for Timely Implementation
- Advanced Frequency Deconfliction

**Why Choose mySPECTRA for Defense?** With over 30 years of expertise in spectrum management, LS telcom is a trusted partner for military organizations worldwide. mySPECTRA for Defense delivers precision, efficiency, and reliability in managing the electromagnetic battlespace.



# **Enabling Electromagnetic Dominance**

mySPECTRA for Defense offers a comprehensive suite of modules to support military spectrum operations with flexibility, precision, and user-centric functionalities:

#### **Frequency Plan Management**

Enables multi-step planning for military, civilian, and international spectrum usage

#### Holistic Spectrum Management

Centralized system for handling spectrum requests, equipment data, and analysis

#### **Mission Data Visualization**

Web-based interface for real-time visualization of friendly and hostile units, technical analysis results, and geospatial intelligence

#### **Technical Analysis**

Advanced coverage prediction, interference analysis, and electronic warfare support tools

### **Technical Database**

Central repository for all frequency plans, equipment data, and compliance records

#### **Central Monitoring Software**

Integrates real-time spectrum surveillance data, ensuring accurate analysis of emissions and spectrum use

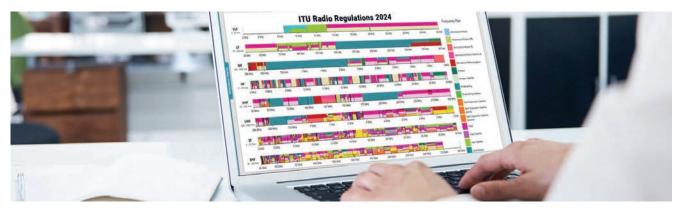
#### Each module is designed to enhance operational efficiency, security, and readiness for military spectrum management.

# **Strategic Mission Planning**

## **Frequency Plan Management**

Effective mission execution begins with robust frequency management. The Frequency Planning module helps military spectrum managers to:

- Optimize spectrum utilization to meet operational requirements
- Coordinate frequency usage with civilian and international partners
- Assign specific frequency pools to designated operational areas



## **Equipment Management**

Ensuring secure and interference-free communication in military operations requires effective equipment registration and certification. mySPECTRA for Defense provides:

- A structured process for adding and configuring military standard and electronic warfare equipment.
- A centralized database for storing all equipment records and certifications.



## **Frequency Assignment and Coordination**

Before using any spectrum-dependent equipment, defense units must request necessary frequencies. mySPECTRA for Defense streamlines this process through intuitive workflows that guide users step-by-step. The process includes:

- Administrative data to define a mission
- Selection of military equipment
- Selection of appropriate frequency allocations based on predefined plans
- Technical analysis-driven channel selection to ensure compliance and efficiency

This structured approach ensures accurate, fast approvals while maintaining compliance with operational standards.

# **Deconfliction Management**

Deconfliction management refers to the avoidance of conflicts or overlaps in operations, particularly regarding space, time, resources, or tasks. mySPECTRA for Defense provides analytical tools to handle interference cases:

- Interference Analysis Tool: Visualize, identify, and resolve spectrum conflicts
- Historical Conflict Resolution: Analyze and prevent recurring interference issues
- Operational Safety & Efficiency: Ensure secure and interference-free communication during critical missions

## By storing all interference cases in a centralized database, mySPECTRA for Defense enables users to cross-analyze military and regulatory data, pinpointing and eliminating spectrum issues.

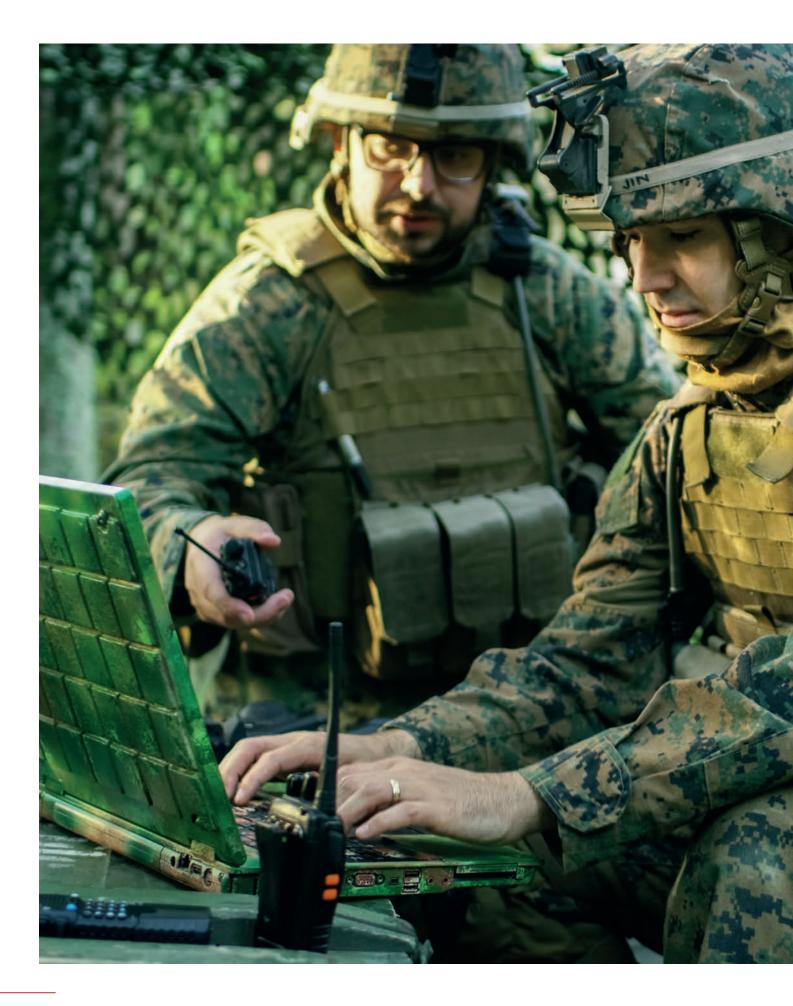


# Integration with National/International Partners

Interoperability is a cornerstone of mySPECTRA's for Defense's design. It can interface through various military-standard exchange formats with:

- NATO's SMIR online system
- TU's BR IFIC database
- Civilian/regulator databases
- other national and international frameworks

These capabilities ensure secure and efficient coordination with allied forces and civilian stakeholders, enhancing mission readiness and spectrum accuracy.





# **Tactical Mission Planning**

Military success depends on secure communication and effective electronic warfare capabilities. mySPECTRA for Defense supports spectrum-based mission planning, including jamming, reconnaissance, and protection against threats like RCIEDs.

# **Maneuver and Mission Planning**

In dynamic battlefield environments, effective maneuver planning ensures reliable communications and operational superiority. mySPECTRA for Defense provides:

**Frequency Assignment** Allocate frequencies strategically to minimize interference and maximize efficiency

#### **Coverage Prediction**

Optimize transmitter placement and visualize reception areas for seamless connectivity

#### **Communication Checks**

Real-time monitoring of communication links to prevent disruptions

#### **MANET Deployment**

Rapidly establish and manage Military Ad Hoc Networks (MANET) for adaptable, mobile communications

## **Electronic Warfare Operations**

Electronic warfare operations are essential for disrupting enemy communications, protecting friendly forces, and ensuring operational superiority in complex and contested environments:

### **Jamming Equipment Positioning**

Disrupt enemy communications effectively with strategic jammer deployment

#### **Reconnaissance Equipment Placement**

Optimize interception and analysis of enemy signals

#### **RCIED Protection**

Secure military assets and convoys from Radio Controlled Improvised Explosive Devices (RCIEDs) through advanced jamming strategies

# **Mission-Ready Spectrum Superiority**

In modern warfare, securing the electromagnetic spectrum is as critical as securing the battlefield. **mySPECTRA for Defense** is the force multiplier that ensures seamless spectrum management, from strategic planning to tactical execution. Built for military operations, battle-tested, and ready for deployment, it empowers forces to control, protect, and dominate the spectrum in contested environments. With over 30 years of expertise, LS telcom is your trusted partner in mission-critical spectrum operations. Equip your forces with the technology that ensures operational superiority and mission success.



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# MANAGE, OBSERVE and DEFEND your Spectrum with our Solutions:

Software- and hardware systems, system engineering and integration

- Spectrum management
- Radio network and mission planning
- Spectrum surveillance
- Spectrum analysis

For more information on products and solutions, please visit our website at www.LStelcom.com or contact us:

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