

# TowerPad A-SMGCS

Rethinking airport ground traffic management

Safe and cost-effective operations.

Higher productivity and sustainability.

Enhanced situational awareness.

Air Traffic Management

**FREQUENTIS**  
FOR A SAFER WORLD

# TowerPad A-SMGCS turnkey solutions for safety, capacity, and environmental sustainability

All airports, from the smallest to the most complex, are facing dynamic changes in traffic scenarios and need to operate more cost-effectively. Converting complex information into an easy-to-understand situational picture for the operator will enable safe and efficient operations. Harmonised workflows in combination with decision-support information help controllers to ensure safe and continuous ground traffic management.

Our TowerPad A-SMGCS (advanced surface movement guidance and control system) provides tailored services covering surveillance, safety, control, planning, routing and guidance while taking into account local procedures and infrastructure constraints.

Airports and ANSPs benefit from Frequentis' unique and comprehensive digital tower portfolio, in which TowerPad A-SMGCS combines best-in-class products to deliver a seamlessly integrated solution.

Our mission is to deliver on safety, performance, capacity, and environmental needs. We deploy end-to-end turnkey solutions out of one hand and provide maintenance support services throughout the lifecycle to ensure continuous adaptation to dynamic changes in our customers' airport ecosystems.

TowerPad A-SMGCS is designed to grow and adapt to your changing needs, making it fit-for-purpose both today and in the years ahead.

## Key challenges to be solved

### Dynamic traffic scenarios

Peak and low traffic changes  
Low visibility conditions

### Silo and legacy systems

Seamless integration of closed and older systems

### Automation

Automate non-core tasks for better decision-making

### Safety regulations

Growing regulations put greater strain on operations

### Ease of use

Operators require streamlined tools to maximise operational efficiency

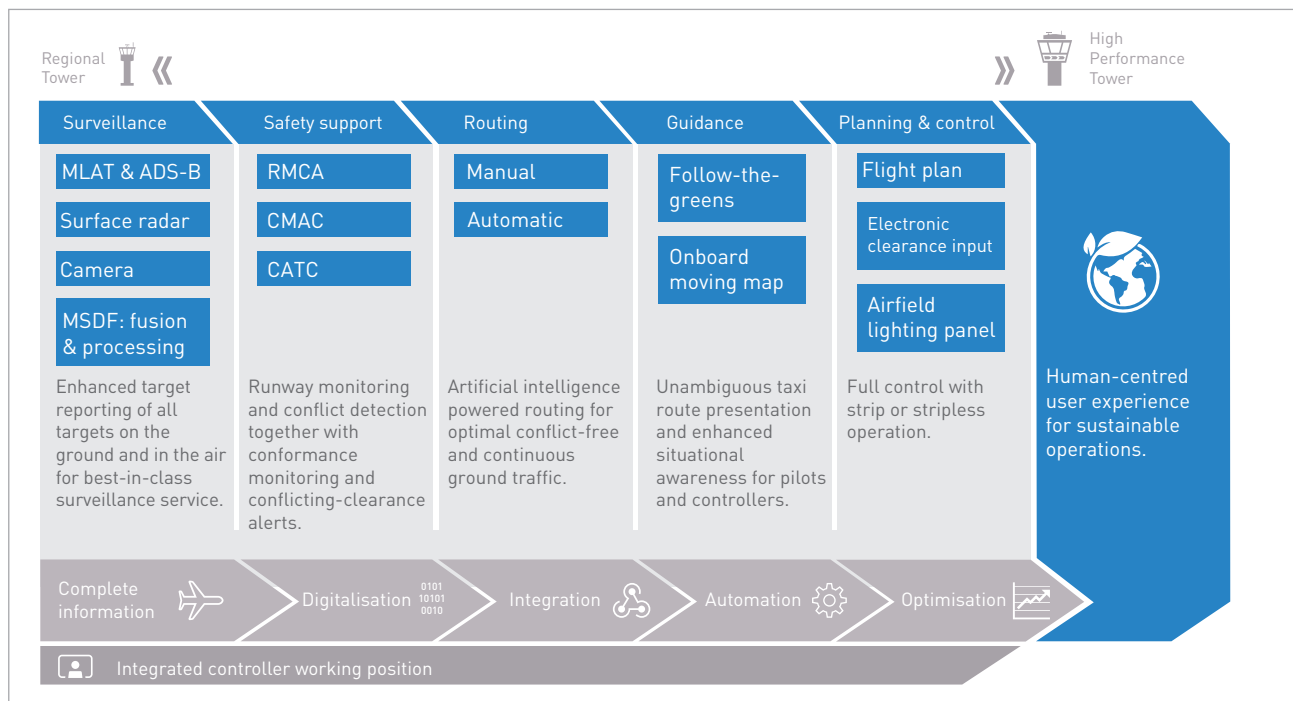
### Evolving requirements

Conformity to ICAO Aviation System Block Upgrade

# Seamless digitalisation and integration

TowerPad A-SMGCS is at its best in dynamic traffic environments where at peak traffic times multiple controllers operate together in a harmonized workflow. In situations with lower traffic volumes TowerPad A-SMGCS automates daily tasks to single-click operations at your fingertips in real-time, e.g., changes from day to night operation or changing landing directions.

TowerPad A-SMGCS is a seamless integrated solution that can monitor and control nav aids, airfield lighting, and other systems. TowerPad A-SMGCS intelligently integrates sub-systems such as weather observation to inform the operator and provide enhanced decision support. The built-in artificial intelligence of TowerPad A-SMGCS supports the controller to ensure safe and continuous ground traffic management.



## Key qualities

### Consolidation

Combines all essential information and controls into one configurable operator-focused interface delivering enhanced situational awareness and decision support.

### Scalability

Meets all requirements, from modular solutions for regional airports up to comprehensive solutions for large airports.

### Interoperation

Standardises and simplifies information exchange between different teams and functions within an airport ecosystem.

# Trusted partnership: de-risking your A-SMGCS lifecycle operations

The modular nature of Frequentis TowerPad A-SMGCS enables rapid implementation including seamless integration for an exceptionally broad range of legacy and modern airport equipment. The Frequentis standardised delivery model and its processes ensure on-time, on-budget delivery of projects to the expected level of quality. The TowerPad A-SMGCS solution meets the needs of huge, complex airports, greenfield airports as well as extensions, upgrades, and end-of-life replacements.

Frequentis acts as master system integrator and trusted partner from initial deployment to sunset. As a prime contractor we deliver each and every element as an integrated turnkey solution including 3<sup>rd</sup> party components such as Surface Movement Radar and related civil works.

Our project services include coordination and joint consolidation of stakeholder expectations, site surveys, requirements management, compliance, design, simulation and evaluation, production,

factory testing, logistics, installation, integration and commissioning, training, transition, and go-live support.

Additionally we provide risk-aware sub-contractor and integration management while keeping the customer in the loop with regular reporting, training and workshops. The Frequentis project risk management and change control board ensures high-quality delivery and mutual success.

Frequentis services ensure 24/7 uninterrupted operation throughout the solution life-cycle. A dedicated service manager channels and coordinates maintenance support for all delivered products including warranty, spare parts and repairs, software updates and security patches, through to obsolescence management.

Frequentis' solutions and services help to make airports a safer place - for a safer world.

The Frequentis tower solutions roadmap is fully aligned with the SESAR wave of ATM research and ICAO Aviation System Block Upgrades. This enables airports to rely on support to address future industry challenges according to standardised best-practice approaches.

The logo for Frequentis, featuring the word "FREQUENTIS" in a bold, blue, sans-serif font. The letters are slightly stylized, with the 'F' and 'R' having a unique, blocky appearance.

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