More efficient airports operations
High level A-SMGCS functions supported by an open architecture


A-SMGCS: Routing and Guidance

Challenge:
Controlling and guiding the safe, expeditious and efficient movement of aircraft and vehicles in the airport movement area.

Benefits:
Increased Safety
- Visualisation of the routes improves the situational awareness of the tower controllers.
- Unambiguous instructions to the cockpit crew.
- Routing is an enabler for the Enhanced Safety Nets (see below).

Increased Airport Capacity
- Planning of ground movements based on estimated taxi times computed for each taxi route improves predictability.

A-SMGCS: Enhanced Safety Nets

Challenge:
Complement the existing safety net solutions based on airport surveillance with new additional safety support tools based on the knowledge of procedures, clearances and instructions entered by the air traffic controllers.

Benefits:
Increased Safety
- Complements the existing A-SMGCS safety nets functions with new functions.
- Allows early detection of potential incidents, leaving more time for corrective intervention at an early stage to resolve the potential incident.

Open Architecture

Challenge:
Integrate existing and new tools for rapid development and validation, supplied from different manufacturers.

Conclusions
- The Open Architecture is ...
- the enabler for fast innovation and reliable operation in a multi-supplier service-providing environment.
- a customer-oriented solution, leaving the customer the freedom to choose the best solutions to enhance the existing system.
- The approach will be continued in SESAR 2020 to make solutions ready for industrialization.