

Press release

Innovation from skyguide and Indra improves runway safety at Zürich Airport

- **The Advanced Runway Safety Improvement (ARSI) project has resulted in a pioneering solution that improves air traffic controllers' situational awareness.**
- **The system is capable of A-SMGCS stage 3+ alerts, improving the safety of ground operations significantly.**
- **The objective has been to improve runway safety at Zürich Airport, characterized by its many intersecting runways. However, the solution may improve safety also at other airports with a high number of runway crossings.**
- **Led by skyguide, the ARSI solution is based on Indra's InNOVA Tower System, but also SkySoft-ATM and Zürich Airport have greatly contributed to the successful outcome of the project.**

Asker, Norway, XX, 2019.-

Airports around the world may benefit from an innovative solution developed by skyguide, Indra, Skysoft-ATM and Zürich Airport in the Advanced Runway Safety Improvement (ARSI) project. The objective of the project has been to increase runway safety and traffic capacity during certain arrival and departure configurations at Zürich Airport, but the solution has implications reaching far beyond the initial project scope.

In the ARSI project, skyguide's electronic flight strip system, TRACE from SkySoft-ATM, is integrated with Indra's A-SMGCS InNOVA Ground. Aimed at both the tower and apron environments, air traffic controllers will get an electronic warning in case they make safety critical decisions.

"The solution is based on the input given to the Electronic Flight Strips. The system will immediately detect potential accidents due to conflicting clearances or violations of instructions, allowing more time to react in critical situations", explains Terje Dalen, Product Manager Tower Systems from Indra. "Skyguide and Zürich Airport are the pioneers, but any airport with a high number of runway crossings could benefit from a similar solution."

Air traffic controllers already reporting that the new solution has provided them with greater situational awareness. "The controllers have been actively involved in designing and developing the solution. It has been important for us to minimize their need for feeding the system", explains Project Manager Jörn Winkler from skyguide. "The result is a fully integrated and semi-automated tower system. The feedback from the users is very positive, and we expect to soon see Zürich Airport running at a higher capacity."

The system is capable of A-SMGCS 3+ alerts (conflict detection). The first phase of the project has been operational since February 2018, and the implementation was finalized in February this year.

About skyguide

Skyguide provides air navigation services for Switzerland and certain adjacent parts of neighbouring countries. With its 1,500 employees at 14 locations in Switzerland, the company guides some 1.3 million civil and military flights a year safely and efficiently through Europe's busiest airspace. Skyguide is well integrated into the international air navigation services community and, with its innovative and customer-minded solutions, helps enhance Switzerland's appeal as a place to live, work and do business. The company is majority-owned by the Swiss Confederation, and is headquartered in Geneva.

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About Indra

Indra is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence markets, and the leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America through its affiliate Minsait. Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2017 financial year, Indra achieved revenue of €3.011 billion, with 40,000 employees, a local presence in 46 countries and business operations in over 140 countries.