

Sensis Solutions at Work



At a Glance

Improved situational awareness
in all weather conditions

Improved airport efficiency

Accuracy: 4.5 m.

Coverage: Ground level
to 500 ft.

Amsterdam Schiphol International Airport Surface Surveillance

The Challenge:

Amsterdam Schiphol International Airport, the fourth busiest in Europe, handles more than 44.5 million passengers a year. Schiphol continues to facilitate an increasing amount of aircraft movements annually, prompting Air Traffic Control the Netherlands (LVNL) to consider a system that would safely shoulder this significant amount of air traffic.

Sensis Solutions at Work:

To address the capacity needs of LVNL, Sensis Multistatic Dependent Surveillance (MDS) multilateration was deployed as part of the Advanced – Surface Movement Guidance and Control System (A-SMGCS) at Amsterdam Schiphol International Airport. Sensis MDS improves air traffic controller situational awareness by providing a picture of the airport's runways, taxiways and gate areas with an accuracy of 4.5 meters.



MDS is a transponder multilateration system that uses non-rotating sensors to detect and track the movement of aircraft or vehicles based on their transponder signals, which are then triangulated to determine the position of the signal's source. With precision comparable to global positioning systems, a higher update rate than traditional airport surveillance radar, and consistent surveillance performance regardless of weather conditions, Sensis MDS provides significant safety, efficiency and capacity benefits. The system also provides Mode S Extended Squitter Automatic Dependent Surveillance – Broadcast (ADS-B) tracking capability, providing a bridge to future technologies.

Antenna Installed at Schiphol

MDS

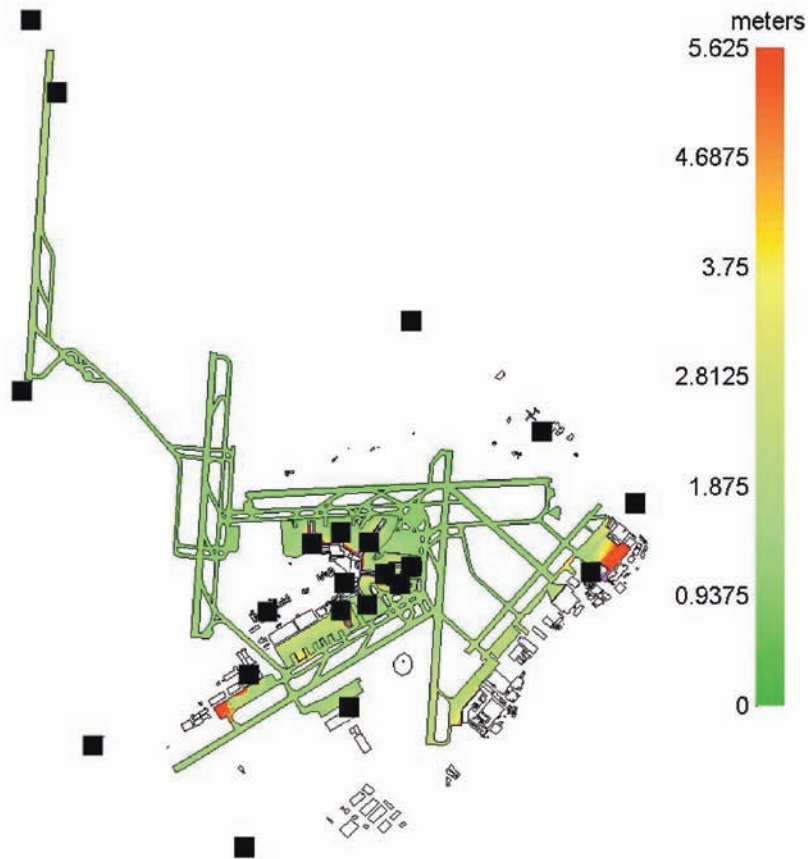


Surface Surveillance

Feature:	Benefit:
Better accuracy and higher update rate than existing radar systems	Enhanced safety from more precise positional information
Adaptable coverage	Coverage over the entire airport area, including ramp and approach/departure areas
Strategically placed sensors	More accurate and reliable data
Tracks all transponder types: Mode S, Mode A/C, ADS-B	Transitions technology from currently equipped aircraft to those of the future

About Sensis MDS:

Sensis MDS has been the solution of choice for more than 20 locations throughout Europe, Canada and Asia. Further, the U.S. Federal Aviation Administration is deploying Sensis MDS to 35 airports as part of the Airport Surface Detection Equipment, Model X program (ASDE-X).



Schiphol MDS Coverage Area