ComplexWorld 2015 Event. 7th-8th April 2015. Brussels

Data Science infrastructure in ATM

Dirk Janssens

About 14 years ago Dirk joined EUROCONTROL as an IT Project Manager. Since then Dirk applied his IT and ATM expertise to dozens of ATM projects within the Agency.

Then 4 years ago Dirk signed up to the SESAR SWIM Team. In this transition towards true and global ATM interoperability his current role include the operational management responsibility of key and high visible activities such as the "SESAR SWIM Master Class" and "Global SWIM Demonstrations".

In other words," turning SWIM into a reality is the main mission".

Ivan Martinovic

Ivan is an Associate Professor at the Department of Computer Science, University of Oxford. Before coming to Oxford he was a postdoctoral researcher at the Security Research Lab, UC Berkeley and at the Secure Computing and Networking Centre, UC Irvine. Previously he was an associate lecturer at TU Kaiserslautern, Germany were he obtained his PhD.

His research interests are mainly in the area of cyber-physical system security and wireless networks. Although today he is here to talk about OpenSky: A Large-scale ADS-B Sensor Network for Research.

Further questions to Dirk (SWIM)

Is SWIM already implemented today, are there any pioneers which are operational right now?

How can people participate to the SWIM community?

What is done in terms of lowering the threshold?

How compatible is SWIM to connect with other non-EU SWIM-similar infrastructures?

Further questions to Ivan (OpenSky)

How is OpenSky different from other ADS-B networks?

What is OpenSky doing with the received ADS-B messages, is there any historical database?

What is done to help newcomers to join the network and contribute?

What are the issues, if any, of letting part of the infrastructure in hands of volunteers?

Further questions for Both

Is the IT state-of-the-art architectures enough to cope with the AT requirements or are there any special needs not already covered/investigated enough?

Would you rather use externalised infrastructures such as Amazon Cloud or Rackspace or rather use in-house solutions?

How infrastructure's limitations can affect the services that can be provided to users?

Let's stop here and give them a round of applaus.