

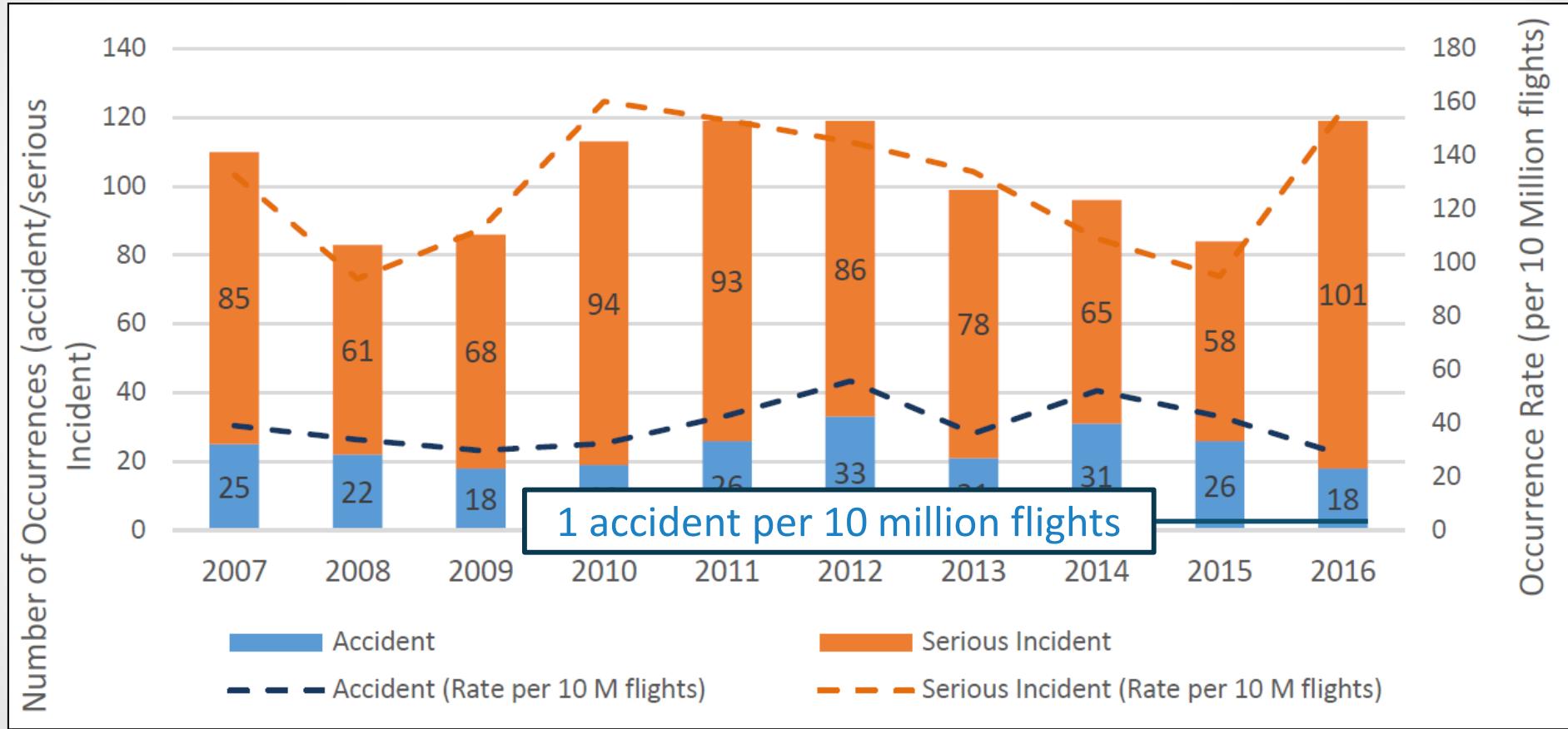
# The Risk Observatory

SM ICG - Industry Day - Gatwick 16 May 2017 - “SMS interfaces”



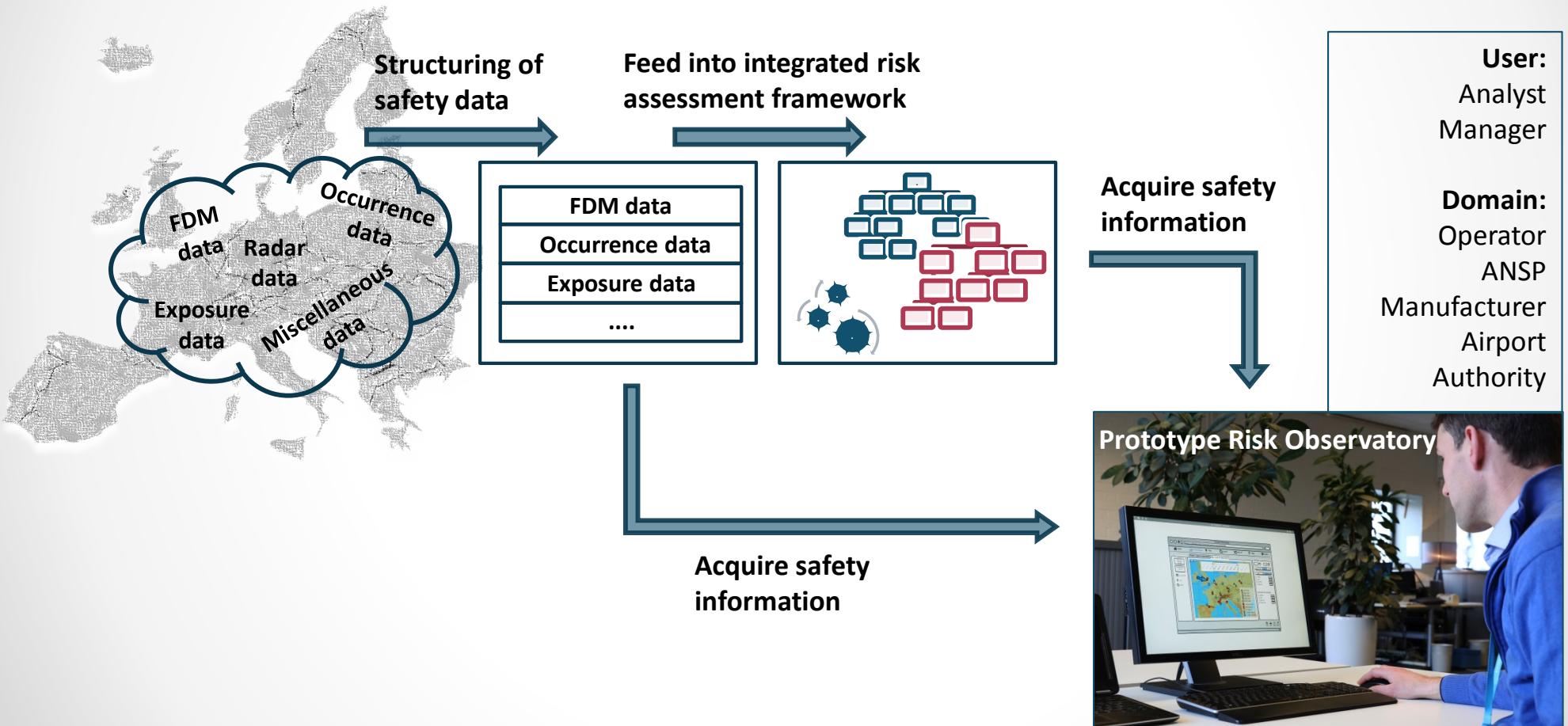
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# Accident rate is stagnating



Source: EASA Preliminary Safety Review – 2017

# Introducing the Risk Observatory

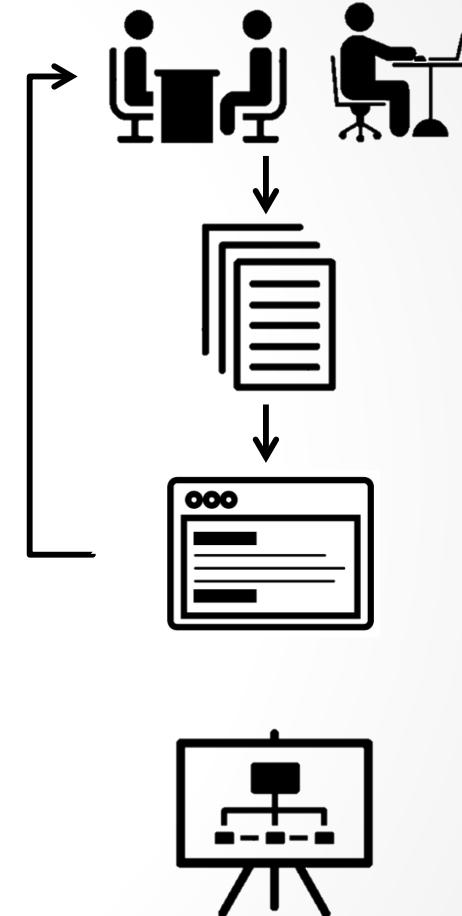


# Future Sky Safety - Horizon 2020



# Project progress so far

1. Consultation and desktop research
2. Drafted requirements
3. Translated requirements into an early prototype
4. Improving risk modelling capabilities



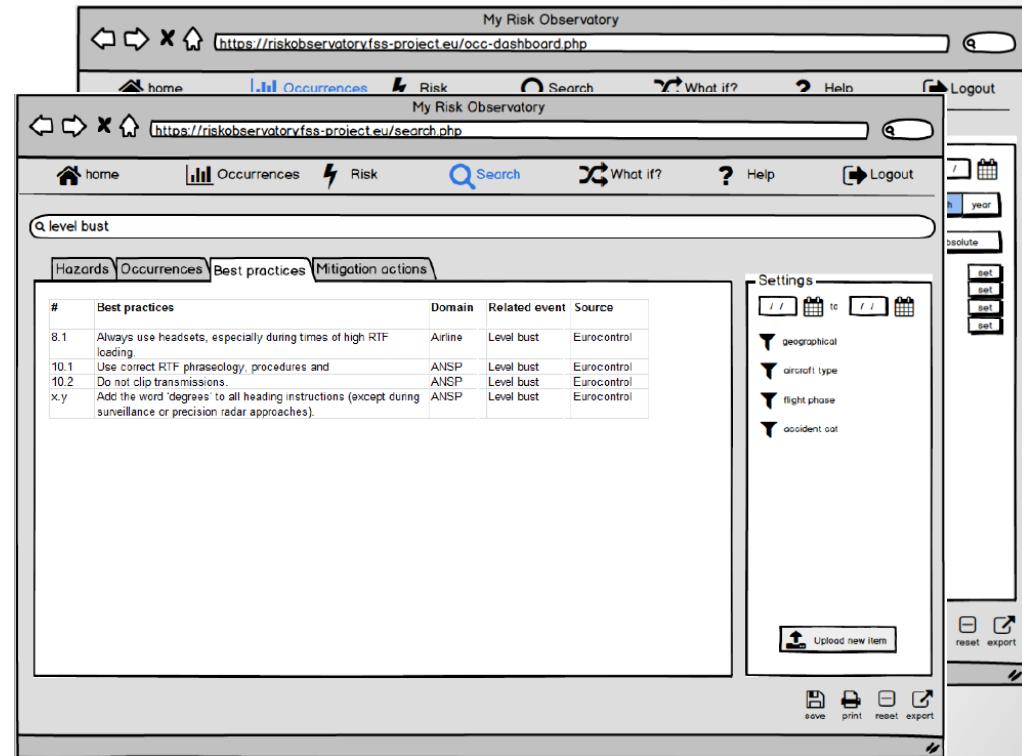
# Compare safety performance

“What is normal performance?”



What the stakeholders want

How the Risk Observatory delivers it



The screenshot shows a web-based application titled 'My Risk Observatory'. The interface includes a top navigation bar with links for 'Occurrences', 'Risk', 'Search', 'What if?', 'Help', and 'Logout'. Below the navigation is a search bar with the query 'level bust'. The main content area displays a table of 'Best practices' related to 'level bust' events. The table has columns for '#', 'Best practices', 'Domain', 'Related event', and 'Source'. The data in the table is as follows:

#	Best practices	Domain	Related event	Source
8.1	Always use headsets, especially during times of high RTF loading.	Airline	Level bust	Eurocontrol
10.1	Use correct RTF phraseology, procedures and	ANSP	Level bust	Eurocontrol
10.2	Do not clip transmissions.	ANSP	Level bust	Eurocontrol
x-y	Add the word 'degrees' to all heading instructions (except during surveillance or precision radar approaches).	ANSP	Level bust	Eurocontrol

On the right side of the interface, there is a 'Settings' panel with dropdown menus for 'geographical', 'aircraft type', 'flight phase', and 'accident cat'. At the bottom of the interface are buttons for 'Upload new item', 'reset', 'export', 'save', 'print', and 'reset export'.

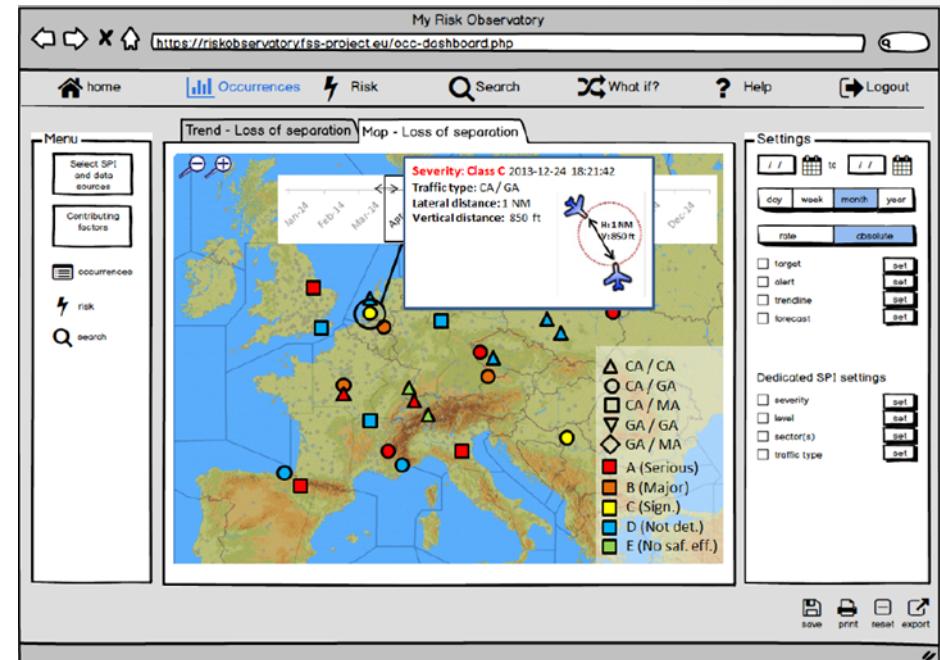
# Facilitate joint actions

“Build momentum  
behind actions  
that will make a  
difference”



What the stakeholders want

## How the Risk Observatory delivers it



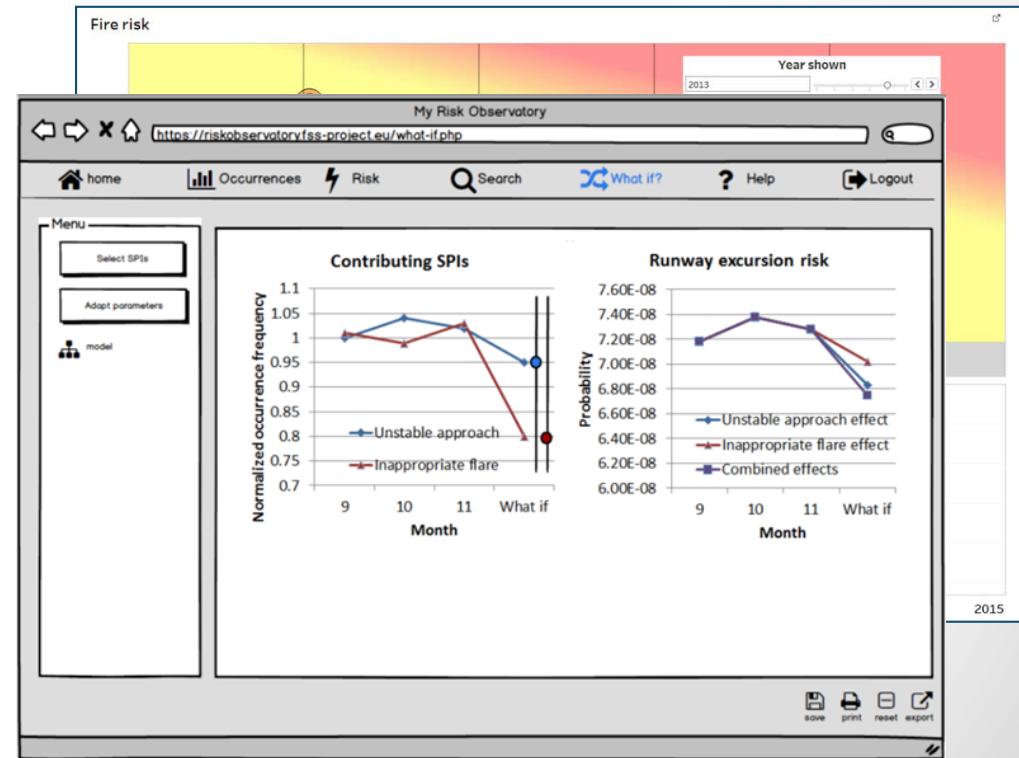
# Focus on the highest risk

“We would like to prioritise hazards”



What the stakeholders want

How the Risk Observatory delivers it

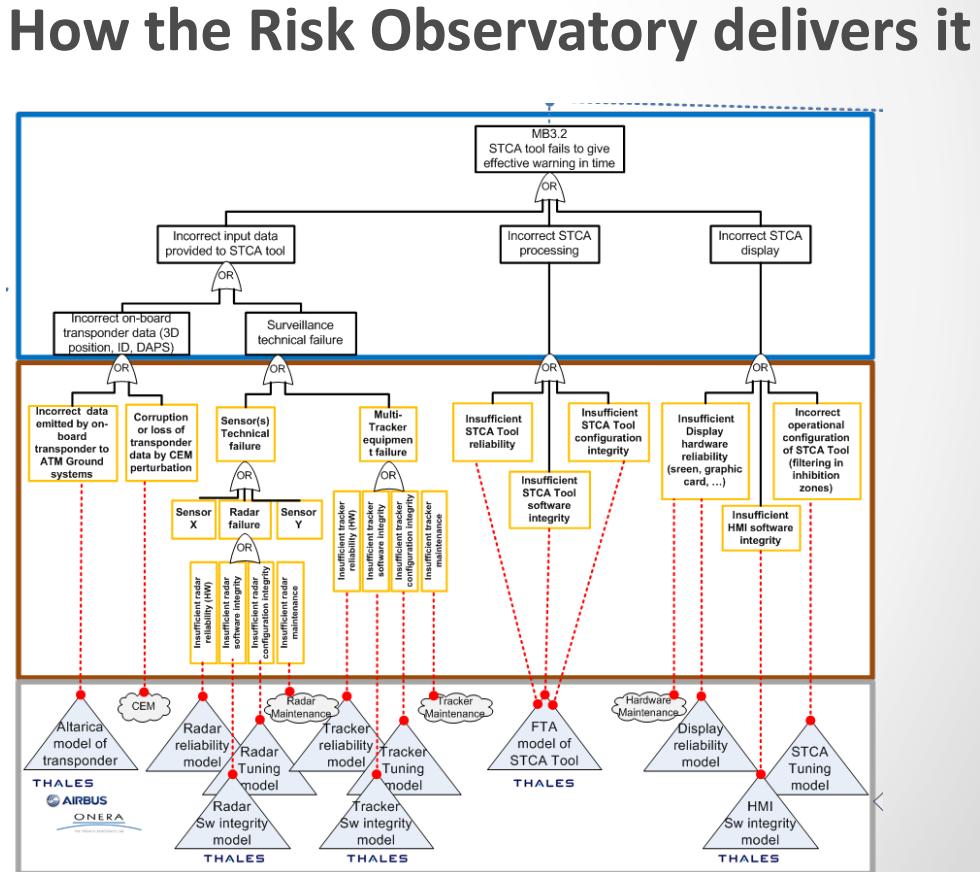


# Tackle concerns at interfaces

“Ensure the interfaces are working together effectively”

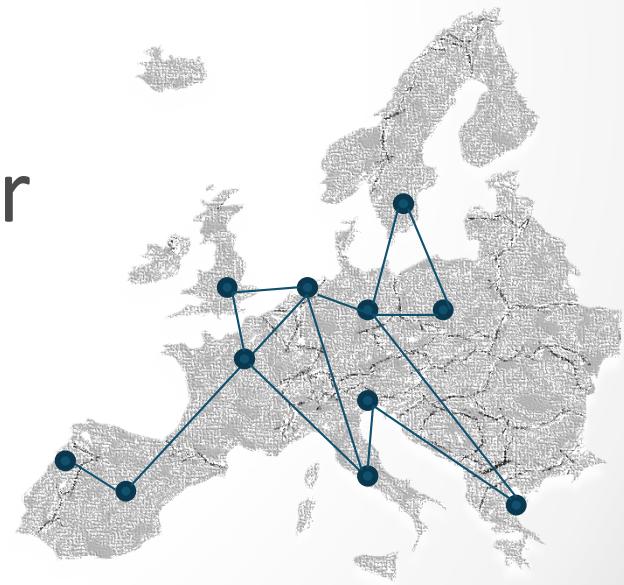


## What the stakeholders want



# How a RO helps to achieve the safety goal

- Raise the bar
- Best use of resources
- Learn from your peers
- Tackle big concerns together

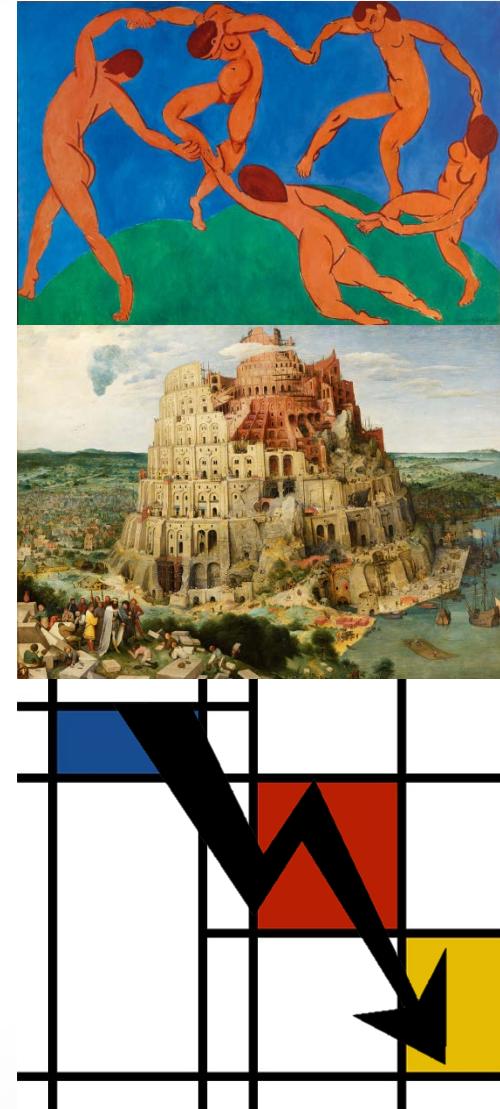


# Bottlenecks

We need to share data

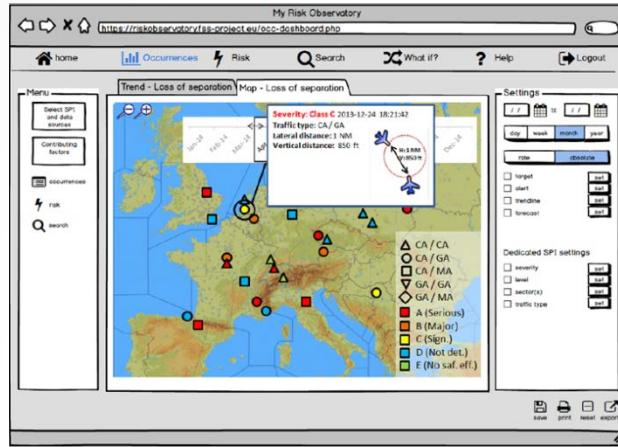
We need to speak a common language

We should improve safety



# Next steps

Done

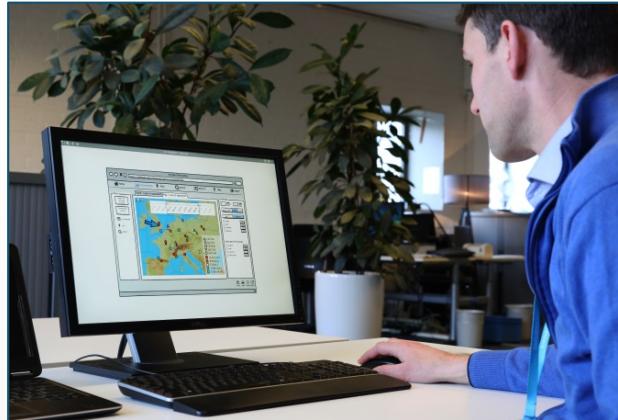


Look-and-feel prototype



Functional design

To do



Full functioning prototype



Validation



## Consortium

Stichting Nationaal Lucht- en Ruimtevaartlaboratorium  
Deutsches Zentrum für Luft- und Raumfahrt  
Office national d'études et de recherches aérospatiales  
Centro para a Excelência e Inovação na Indústria Automóvel  
Centro Italiano Ricerche Aerospaziali  
Centre Suisse d'Electronique et Microtechnique SA  
Institutul National de Cercetari Aerospatiale "Elie Carafoli"  
Instituto Nacional de Técnica Aeroespacial  
Výzkumný a zkušební letecký ústav, a.s.  
Totalförsvarets FörskningsInstitut  
European Organisation for the Safety of Air Navigation

Civil Aviation Authority UK  
Airbus SAS  
Airbus Operations SAS  
Airbus Defence and Space  
Thales Avionics SAS  
Thales Air Systems SA  
Deep Blue SRL  
Technische Universität München  
Deutsche Lufthansa Aktiengesellschaft  
Service Technique de l'Aviation Civile  
Embraer Portugal Estruturas em Compositos SA

Russian Central Aerohydrodynamic Institute TsAGI  
Ente Nazionale di Assistenza al Volo Spa  
Boeing Research and Technology Europe SLU  
London School of Economics and Political Science  
Alenia Aermacchi  
Cranfield University  
Trinity College Dublin  
Zodiac AeroSafety Systems  
Institut Polytechnique de Bordeaux  
Koninklijke Luchtvaart Maatschappij  
Sistemi Innovativi per il Controllo del Traffico Aereo

<http://www.futuresky-safety.eu>