

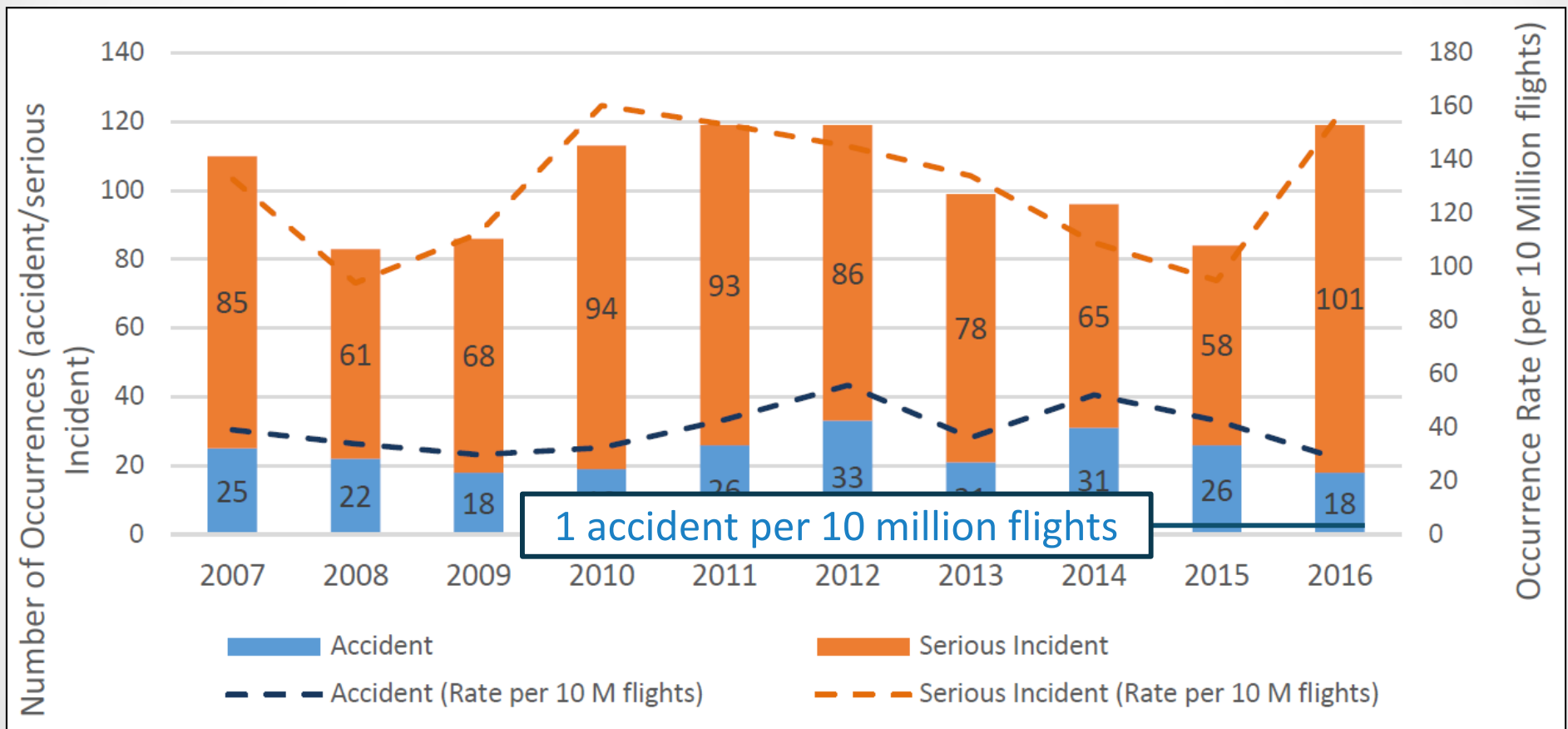
The Risk Observatory

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



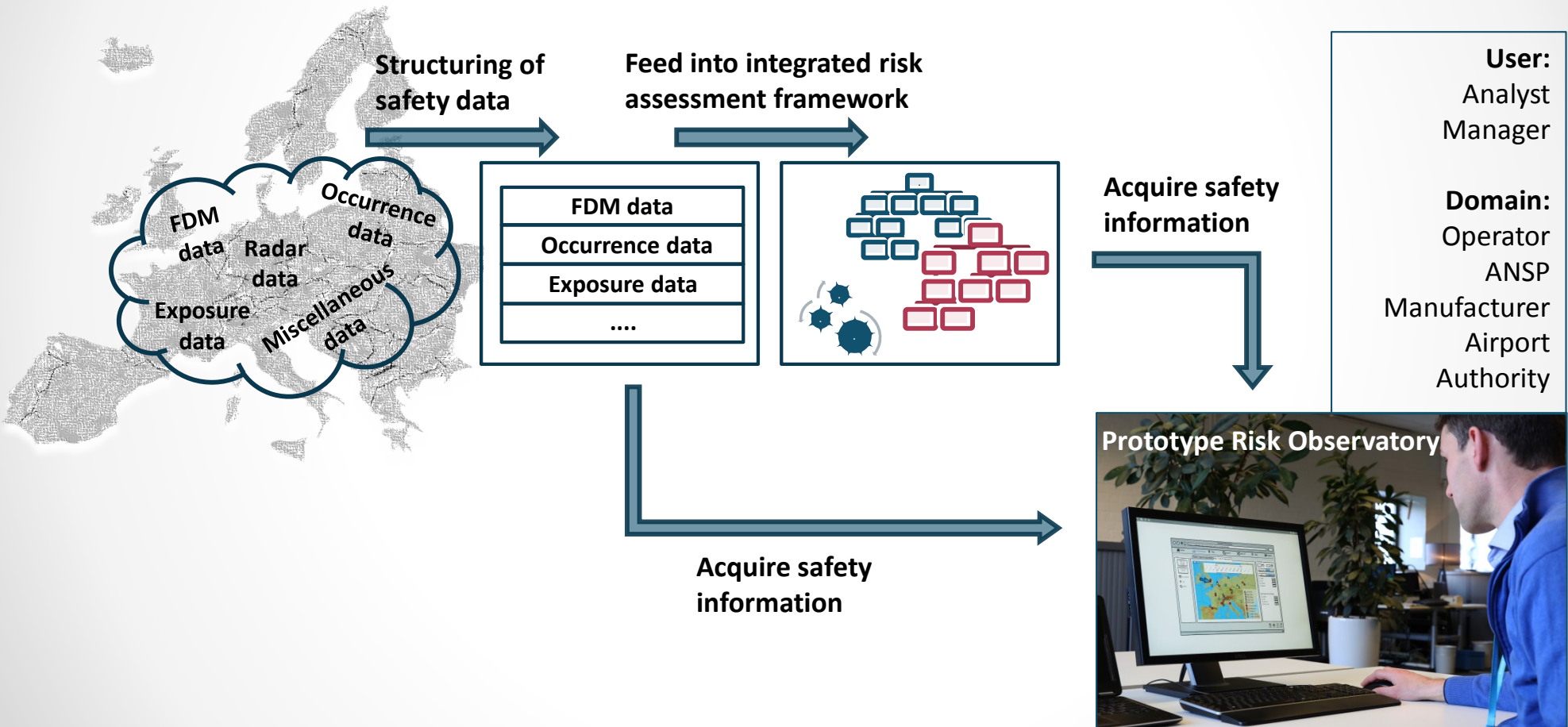
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NLR - the Netherlands
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Accident rate is stagnating



Source: EASA Preliminary Safety Review – 2017

Introducing the Risk Observatory

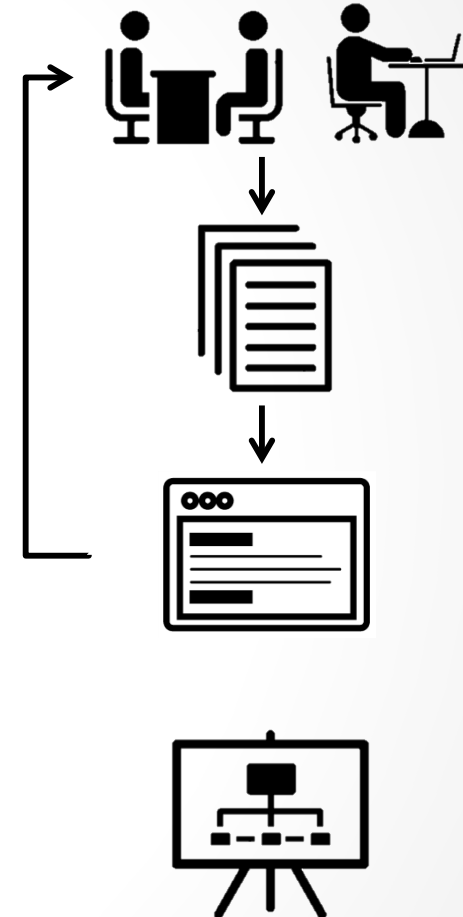


Future Sky Safety - Horizon 2020



Project progress so far

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



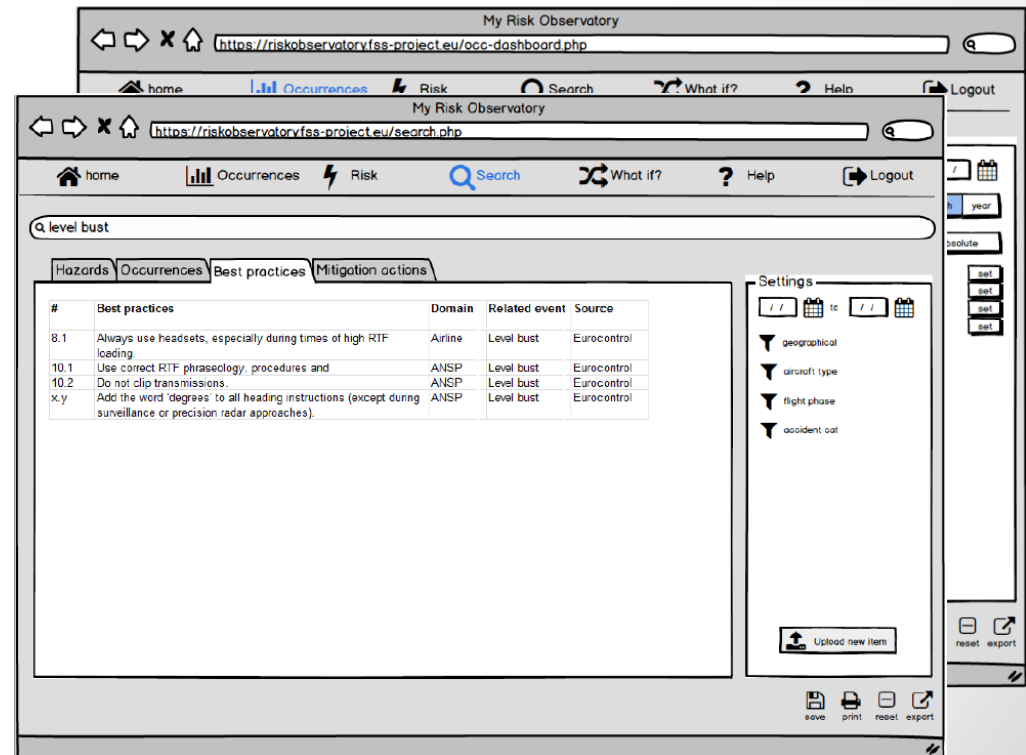
Compare safety performance

“What is normal performance?”



What the stakeholders want

How the Risk Observatory delivers it



The screenshot shows the 'My Risk Observatory' web application. The top navigation bar includes links for home, Occurrences, Risk, Search, What if?, Help, and Logout. The main content area displays search results for the query 'level bust'. The results are organized into a table with columns for #, Best practices, Domain, Related event, and Source.

#	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 filters for geographical, aircraft type, flight phase, and accident out. At the bottom, there are buttons for 'Upload new item', 'save', 'print', 'reset', and 'export'.

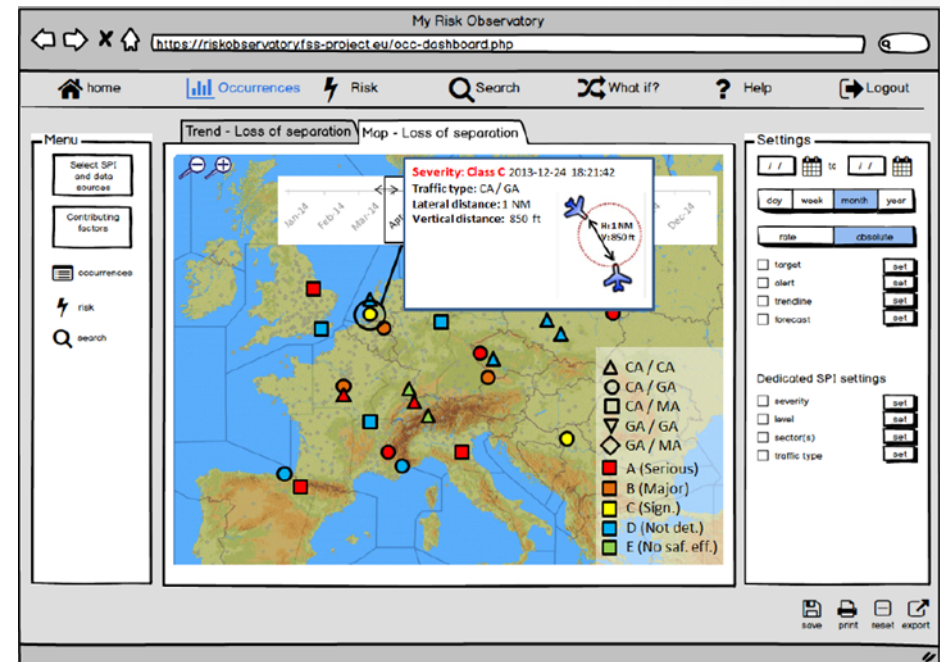
Facilitate joint actions

“Build momentum
behind actions
that will make a
difference”



What the stakeholders want

How the Risk Observatory delivers it



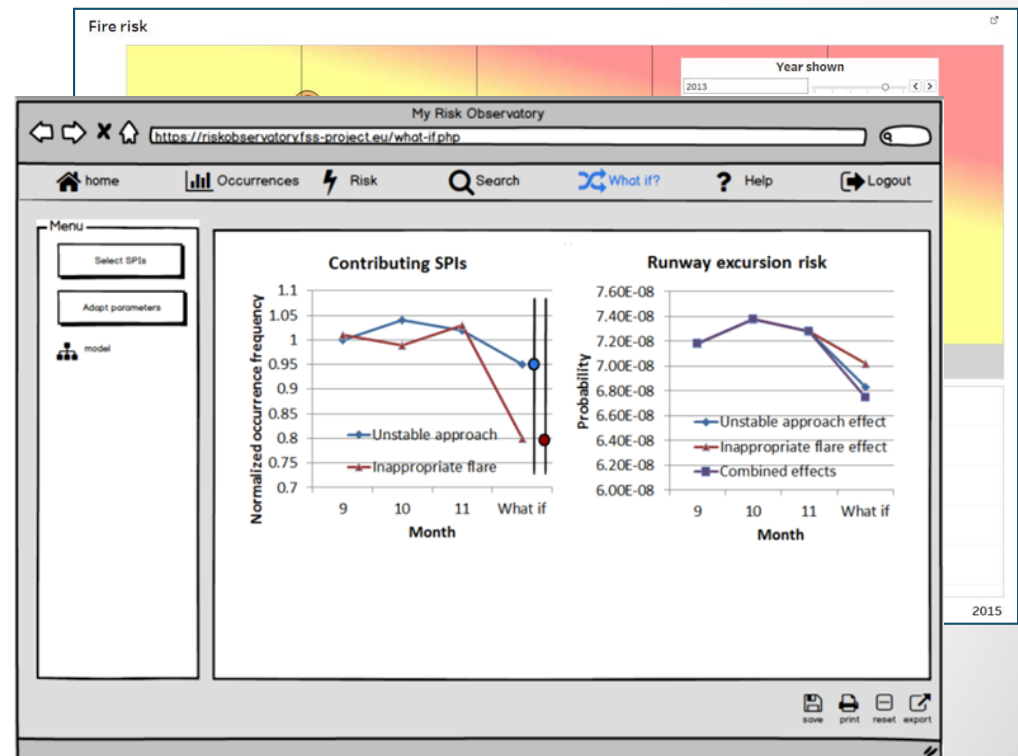
Focus on the highest risk

“We would like to prioritise hazards”



What the stakeholders want

How the Risk Observatory delivers it



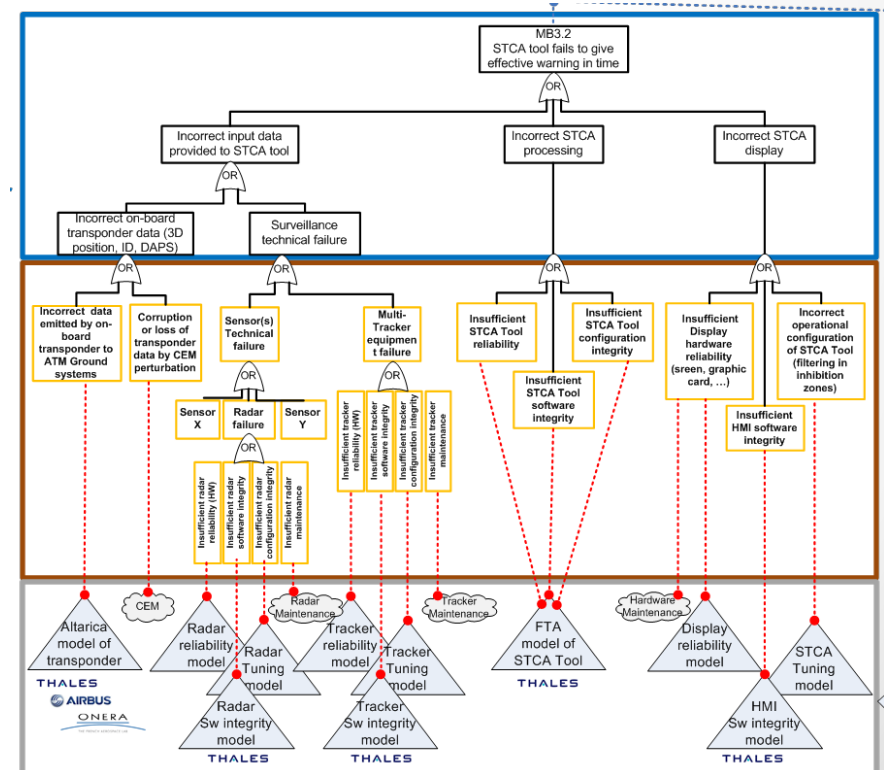
Tackle concerns at interfaces

“Ensure the interfaces are working together effectively”



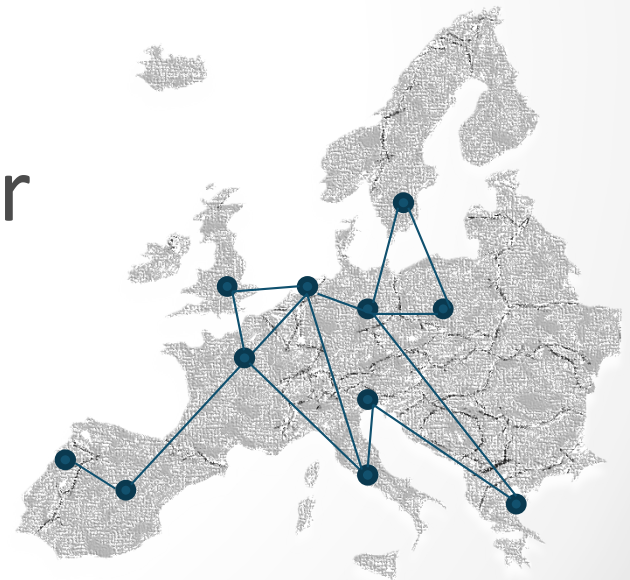
What the stakeholders want

How the Risk Observatory delivers it



How a RO helps to achieve the safety goal

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

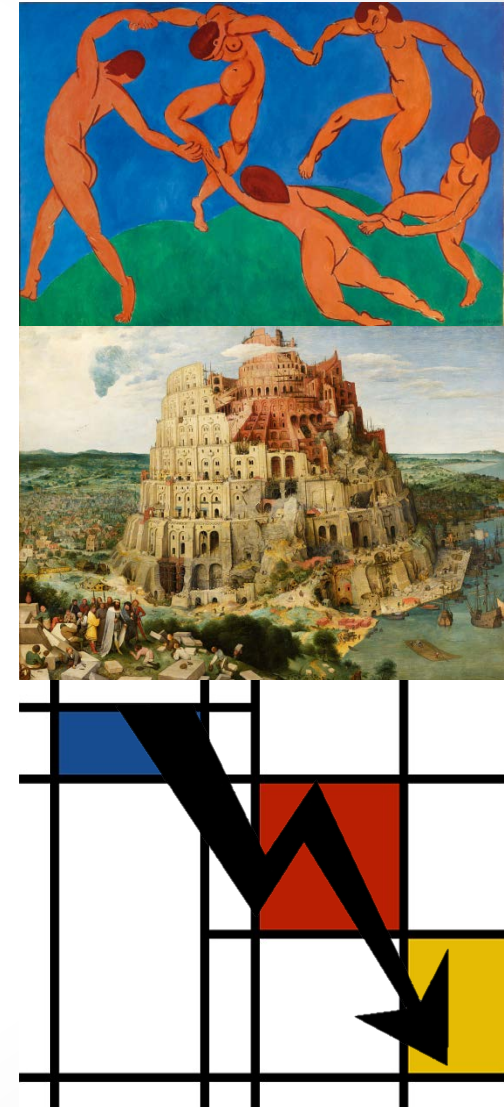


Bottlenecks

We need to share data

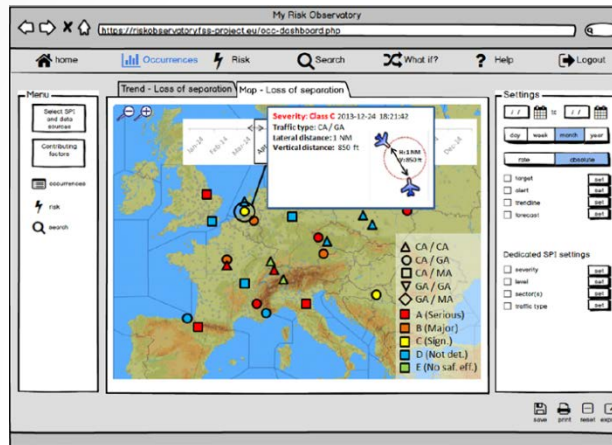
We need to speak a common language

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 Forskningsinstitut
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
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Institut Polytechnique de Bordeaux
Koninklijke Luchtvaart Maatschappij
Sistemi Innovativi per il Controllo del Traffico Aereo

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

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