ENABLING IMPROVED SAFETY MANAGEMENT

Main Objective

➢ Develop an advanced support tool for Total Safety Management in Aviation

Challenge

➢ Connecting data and models from different sources and origins

Results

➢ a prototype **Risk Observatory (RO)**
- Acquiring, fusing and structuring safety data
- Translating data into actionable safety intelligence
- Suiting Safety Management

➢ an **Integrated Risk Assessment Framework**
- Occurrence Dashboard
- Risk Dashboard
- FDM-data for Safety Performance Indicators
- What-If-Scenario's

➢ a **Business Model**
- How to make RO successful ?

Exploitation Aspects

➢ **Centralized RO & Framework delivery & maintenance**
- RO parts like Runway Excursion & Mid-Air Collision back bone models
- RO complementary to other initiatives like Data4Safety
- Defined Safety Performance Indicators
- Enabled Risk Analysis
- Provided Safety Intelligence
- Applied different data sources (across different domains) and results of "Big Data" techniques
- Total (Aviation) System Risk derivation approach

➢ **Risk Observatory Organisation (ROO)** to be set up
- Creating a Central Safety Intelligence Organisation

➢ **Potential Stakeholders:**
- ANSPs, Airlines, Airports, Regulators and Authorities, Ground Service Providers, MRO, Manufacturers (OEMs), Accident Investigation Boards & many other

Look-and-feel prototype — Functional design

Done

Ongoing — Towards a full functioning prototype — Validation

Occurrences dashboard

Risk dashboard — interfaced models

RO- Risk Picture

RO INTERFACE — BACKBONE MODELS — DOMAIN / SPECIFIC MODELS
Safety Indicators — MAC ER — RWY EXC — Generic CF — Contributing Factors — Influencing Factors — Mainly one to one — Mainly many to many

Safety Model inside the RO