

PROJECT #5

RESOLVING THE ORGANIZATIONAL ACCIDENT

TYPE OF PROJECTCollaborative project

PROJECT MANAGER EUROCONTROL

Building Ultra-resilient Systems and Operators



TOP MANAGERS interviewed



SAFETY STACK initiative



SAFETY TOOLS produced



AVIATION ORGANIZATIONS involved

WHAT'S THE PROJECT FOCUS?

Most aviation accidents have an **organisational risk component**, whether due to a safety culture problem, poor (in hindsight) decision-making at senior levels, a failure to appreciate the importance of 'weak signals' in time, or failure to coordinate effectively during major crisis events. These "**soft aspects**" are hard to address, yet are important for safety. P5 set out to develop tools to help aviation companies **strengthen** their *management* of **organisational risks**.

WHAT DID THE PROJECT DO AND ACHIEVE?

P5 started top down, by interviewing 16 senior executives from a variety of European aviation organisations, finding out how they understood and dealt with safety from the top, leading to a **White Paper on "Safety Wisdom".** This led to two further action lines: development of a **safety dashboard for top executives**, and **guidance for middle managers** (called Safety Blueprint) on how to address safety during day-to-day running of the business. The second step focused on those at the **operational sharp end** (pilots, cabin crew, controllers, ground staff), who often notice new issues and potential risks (so-called weak signals), and developed an approach to help them channel such safety insights quickly and effectively to those who need to know, thus **maximising safety mindfulness** where it matters most.

The third step concerned safety culture, where surveys have been used effectively for more than a decade in European air traffic. P5 aimed to migrate the approach to other parts of the aviation system, and carried out **tailored surveys** in two major airlines, six companies at a UK airport, and an airframe manufacturer. This approach worked, and in the case of the airport led to a new innovation in safety culture now known as the **Luton Safety Stack**, in which **15 aviation organisations** are working together to **improve safety and safety culture**, sharing data and putting safety before economic competition. The fourth step focused

on how organisations react in major crises such as volcanic ash, and based on insights and methods from the military experience, worked with the European Aviation Crisis Coordination Cell (EACCC) and several other companies to develop novel ways to **increase the resilience of organisations** and inter-organisational collaboration during major national and pan-European crises. The last step involved considering how these various tools and insights could be integrated into **contemporary Safety Management Systems** (SMSs), so that they become a fully-supported component of the way aviation companies stay safe.

WHAT'S IN IT FOR AVIATION?

The resulting guidance and tools from P5 are being hosted on a website (www.safeorg.eu). The tools are as follows:

Executive Safety Intelligence

safety wisdom, safety blueprint, safety dashboard.

Safety Mindfulness

guidance on how to collect and share rapid intel on safety hazards.

Safety Culture

guidance on how surveys work and the Luton Stack process.

Agile Response

guidance on how to improve organisational resilience and agility during crisis events.

SMS

how to integrate such approaches into an existing Safety Management System.

WHAT'S NEXT?

Since P5 is concerned with real organisations managing a complex risk profile, the main ideas for future research concern **further trialling** of the methods in aviation organisations, e.g. migrating the Luton Stack concept to another airport, **further validation** of the mindfulness approach to see how weak signals can really improve safety performance, **further interviewing** of middle managers and use of dashboards at Executive level, and more use of the **agility guidance** in crisis simulations. At a certain point in the future, it would then be useful to carry out an independent evaluation of the safety benefits of the P5 approaches, and the degree of their industrial uptake.



The Luton Stack

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