



Executive Safety Intelligence Toolset

Carlo Valbonesi (Deep Blue), Barry Kirwan (EUROCONTROL)

Short abstract: Future Sky Safety is a Joint Research Programme (JRP) on Safety, initiated by EREA, the association of European Research Establishments in Aeronautics. The Programme contains two streams of activities: 1) coordination of the safety research programmes of the EREA institutes and 2) collaborative research projects on European safety priorities. This deliverable is produced by the Project P5 “Resolving the organisational accident”. The main objective is to reduce the likelihood of organisational accidents in aviation via the development and implementation of a Safe Performance System.

This deliverable presents the SAFEORG.EU website, designed and developed to present the Safety Intelligence toolset developed in the context of P5 to different organisational audiences (executives, middle managers and staff).

Programme Manager	Michel Piers , NLR
Operations Manager	Lennaert Speijker, NLR
Project Manager (P5)	Barry Kirwan, EUROCONTROL

Grant Agreement No.	640597
Document Identification	D5.11
Status	Approved
Version	2.0
Classification	Public

Project: Resolving the organizational accident
Reference ID: FSS_P5_DBL_D5.11
Classification: Public



This page is intentionally left blank

Contributing partners

Company	Name
DBL	Carlo Valbonesi
ECTL	Barry Kirwan

Document Change Log

Version	Issue Date	Remarks
1.0	03-08-2018	First formal release
2.0	28-12-2018	Second formal release (public)

Approval status

Prepared by: <i>(name)</i>	Company	Role	Date
Carlo Valbonesi	DBL	Main Author	01-08-2018
Checked by: <i>(name)</i>	Company	Role	Date
Alex Rutten	NLR	Quality Assurance	28-12-2018
Approved by: <i>(name)</i>	Company	Role	Date
Barry Kirwan	ECTL	Project Manager (P5)	03-08-2018
Lennaert Speijker	NLR	Operations Manager	28-12-2018

Acronyms

Acronym	Definition
AIM	Accident Incident Model
ANSP	Air Navigation Service Provider
ATCO	Air Traffic Controller
ATS	Air Traffic Service
CAA	Civil Aviation Authority
CANSO	Civil Air Navigation Services Organisation
CISM	Critical Incident Stress Management
ESI	Executive Safety Intelligence
FDM	Flight Data Monitoring
FIR	Flight Information Region
KPA	Key Performance Area
KPI	Key Performance Indicator
LoA	Letter of Agreement
NSA	National Supervisor Authority
PI	Performance Indicator
RAT	Risk Analysis Tool
RI	Runway Incursion
RP	Reference Period
SDB	Safety Dashboard
SES	Single European Sky
SPI	Safety Performance Indicator
STCA	Short Term Conflict Alert
SMI	Separation Minima Infringement
UG	User Group

EXECUTIVE SUMMARY

Problem Area

The central tenet of Safety Intelligence is that those at the top of an organisation can make the right (safe) decisions. This requires two things: the right understanding of safety, and accurate information.

The original aim of this study was to present a connected set of tools aimed at supporting Safety Intelligence alone, targeting the Executive roles of aviation organisations. However, as the work progressed, P5 partners realised that the actual problem areas would have not been satisfactorily addressed, as the most important contribution of the project is the integrated approach to safety across all organisational layers, not only those at the top. A number of solutions generated by P5 in fact sit at the intersection of Safety Intelligence and Safety Mindfulness, e.g. the executive safety dashboard that while aimed at supporting Board decisions, it is owned and designed by those at the middle level, and exploits also information coming from the front-line. Moreover, the focus on the single organisation quickly appeared to be limited, as the experience gained with the activities performed in building and validating the so-called “Safety Stack”, demonstrated the usefulness of extending the scope not only within the organisation but across different organisations as well, e.g. airlines, ground-handlers, Air Navigation Service Providers (ANSPs), airport authorities etc.

Therefore, the scope of the problem area was enlarged to encompass the needs for safety of all the roles across the different organisations that were identified during the three years of work of P5. The new question to be answered became a more global one: “What are the outcomes of P5 that can support the needs of an aviation organisation for excelling in safety, at all levels?”

Description of Work

The Work described in this report provides a picture of the design and development process of SAFEORG.EU, a website that presents the main outputs of P5, covering Safety Intelligence for executives and middle managers, Safety Mindfulness, Safety Culture, Agile Response Capability, and how to integrate these components into Safety Management Systems (SMS). The website offers solutions based on the work performed in the project and aims at facilitating the application of such solutions in the industry.

Results & Conclusions

The end result of the activity leading to this deliverable is the SAFEORG.EU website (<https://www.safeorg.eu>). The present deliverable should not be considered the main outcome of the activity, as the most substantial output is the SAFEORG.EU website itself.

Applicability

SAFEORG.EU is a website aimed at supporting the safety needs of any role (executives, middle managers and staff) working in any aviation organisation. Considering the focus on exploitation, the website lifespan is intended to extend well beyond the end of Future Sky Safety activities.

Project: Resolving the organizational accident
Reference ID: FSS_P5_DBL_D5.11
Classification: Public



This page is intentionally left blank

CONTENTS

Contributing partners	3
Document Change Log	3
Approval status	3
Acronyms	4
Executive Summary	5
Problem Area	5
Description of Work	5
Results & Conclusions	5
Applicability	5
List of Figures	8
1. Introduction	9
1.1. The Programme	9
1.2. Project Context	9
1.3. WP 5.1 objectives	10
1.4. Approach	10
2. The Safety Intelligence toolkit	12
3. Approach to the design and development of SAFEORG.EU	14
4. Information architecture of SAFEORG.EU	15
5. SAFEORG.EU contents	18
5.1. Storytelling	20
5.2. Quotes	23
5.3. Needs	24
5.4. Guidance	25
5.5. Links	25
6. Conclusion	26
7. References	27

LIST OF FIGURES

FIGURE 1 THE P5 PYRAMID: SOLVING THE NEXT ORGANISATIONAL ACCIDENT BY OFFERING SAFETY TOOLS TO EVERY LAYER OF THE ORGANISATION	12
FIGURE 2 SAFEORG INFORMATION ARCHITECTURE	15
FIGURE 3 SAFEORG HOMEPAGE: TOP BAR MENU	16
FIGURE 4 EXECUTIVES NEEDS THAT CAN BE ADDRESSED BY SAFEORG TOOLS	16
FIGURE 5 SAFETY BLUEPRINT TOOL: ABOVE-THE-FOLD SECTION OF THE PAGE	19
FIGURE 6 SAFETY BLUEPRINT TOOL: BELOW-THE-FOLD SECTION OF THE PAGE	20
FIGURE 7 SAFETY BLUEPRINT: PRESENTATION OF PROBLEM AREA.....	21
FIGURE 8 SAFETY BLUEPRINT: THE CALL TO ACTION.....	21
FIGURE 9 SAFETY CULTURE: DESCRIPTION OF THE WORK DONE (1/2)	22
FIGURE 10 SAFETY CULTURE: DESCRIPTION OF THE WORK DONE (2/2)	22
FIGURE 11 SAFETY CULTURE: DESCRIPTION OF PROPOSED SOLUTION	22
FIGURE 12 SAFETY STACK: DESCRIPTION OF THE WORK DONE	23
FIGURE 13 SAFETY STACK: NATS QUOTE	23
FIGURE 14 SAFETY STACK: EASYJET QUOTE.....	23
FIGURE 15 SAFETY STACK: EASYJET GROUNDOPS MANAGER QUOTE	24
FIGURE 16 SAFETY WISDOM: AIRLINE EXECUTIVE QUOTE (DE-IDENTIFIED)	24
FIGURE 17 FIGURE 16 SAFETY CULTURE: EXECUTIVE QUOTE (ANONYMOUS)	24
FIGURE 18 EXECUTIVES' NEEDS.....	24
FIGURE 19 MIDDLE MANAGERS' NEEDS.....	25
FIGURE 20 STAFF'S NEEDS	25

1. INTRODUCTION

1.1. The Programme

FUTURE SKY SAFETY is an EU-funded transport research programme in the field of European aviation safety, with an estimated initial budget of about € 30 million, which brings together 33 European partners to develop new tools and new approaches to aeronautics safety, initially over a four-year period starting in January 2015. The Programme focuses on four main themes:

1. Reducing risk of accidents;
2. Improving processes and technologies to achieve near-total control over the safety risks;
3. Building ultra-resilient vehicles and improving the cabin safety;
4. Improving safety performance under unexpected circumstances.

The Programme which includes five projects with a risk-reduction focus in five technical areas (runway excursions; total risk picture, resolving the organisational accident; human performance envelope; and fire on board an aircraft) also helps coordinate the research and innovation agendas of several countries and institutions, as well as create synergies with other EU initiatives in the field (e.g. SESAR, Clean Sky 2). The Programme has started on the 1st of January 2015.

FUTURE SKY SAFETY contributes to the EC Work Programme Topic MG.1.4-2014 Coordinated research and innovation actions targeting the highest levels of safety for European aviation in Call/Area Mobility for Growth – Aviation of Horizon 2020 Societal Challenge Smart, Green and Integrated Transport. FUTURE SKY SAFETY also addresses the Safety challenges of the ACARE Strategic Research and Innovation Agenda (SRIA).

1.2. Project Context

The objective of P5 “Resolving the organisational accident” is to reduce the likelihood of organisational accidents in aviation via the development and implementation of a Safe Performance System. Safety focus has traditionally been on technical failures and human errors as they occur in operations, while new and promising approaches consider the overall socio-technical system in its full operational and organizational context. This Project addresses the effects of organizational structures, processes & cultural phenomena on safety performance in aviation organizations. The key areas comprising the resolution of the next aviation accidents are safety intelligence, safety culture, safety mindfulness and an agile response capability at organisational and inter-organisational levels. These elements are all available, but they need to be focused on the daily realities of aviation-related organisations, and then integrated into a cohesive system that will work for all parts of the aviation industry, whether ground or air, operational or support. P5 answers to Theme 3 “Building ultra-resilient systems and operators”, which aims at strengthening the resilience to deal with current and new risks of the humans and the organizations operating the air transport system. Outcome of the research (2018) will be a Safety Performance System model which will address safety in aviation under a more cohesive and collaborative approach.

P5 consists of five inter-connected Work Packages, each addressing key-safety components:

- Safety Intelligence (WP5.1);
- Safety Mindfulness (WP5.2);
- Safety Culture (WP5.3);
- Agile Response Capability (WP5.4);
- Safe Performance System (WP5.5).

ECTL leads WP5.1 “Executive Safety Intelligence” in cooperation with the following partners: DBL, ENA, BRTE, AIR¹, KLM and LSE.

1.3. WP 5.1 objectives

Directors and senior leaders of aviation organisations need to understand organisational safety, including the organisational roots of accidents, and be equipped with the tools and data to manage safety effectively. The objective of this WP is to equip **senior** (CEO/Board) and **middle management** layers with a pragmatic understanding of organisational safety and how to optimise it. This will include guidance on safety culture leadership, and usage of tools such as safety dashboards and data feeds to ensure safe decision-making. Main work is to take existing Executive Safety Intelligence (ESI) conceptual guidance and broaden it to fit across the entire aviation spectrum including airlines, airframe manufacturers, ATM organisations and airports.

1.4. Approach

Executive Safety Intelligence has been developed over the past seven years, mainly in the air traffic domain, the term first being coined in 2009, linked to safety culture. Work led by EUROCONTROL and executed by the University of Aberdeen led to the development of a White Paper on safety intelligence², with input from a dozen CEOs and other senior executives to elaborate the safety intelligence concept. More recently, there has been a recognition that the approach needs to be extended both *upwards* and *downwards*. It needs to be extended upwards in order to reach those who sit above organisations such as ANSPs and airlines, i.e. those who set industry or national targets (e.g. on performance) that can affect safety directly or indirectly. It needs to be extended *downwards*, since in a number of organisations, good safety understanding was found at the top and bottom layers of organisations, *but not in the middle management layer*. If middle management is not engaged for safety, then even if top management want to improve safety and safety culture, such ambitions are unlikely to be translated into processes that deliver safety, because of the disconnect.

¹Airbus is now co-lead for WP1, focusing on Middle Management Safety Intelligence

²http://www.eurocontrol.int/sites/default/files/article/content/documents/nm/safety/safety_intelligence_white_paper_2013.pdf

Safety Intelligence has two main facets. The first is safety understanding, and what was recently called ‘Safety Wisdom’ in a FSS White Paper³, which refers to having a good understanding of safety at the top of organisations. This includes the capacity to make reasoned and well-judged decisions concerning safety-related issues, threats and opportunities. The second facet concerns the information available to decision-makers, upon which they base their decisions. Safety Intelligence therefore also relies on a set of techniques and tools for the collection and transformation of data into actionable knowledge. A first task was therefore to identify the techniques, tools and data available to the different management layers inside the organisation. By collecting needs, limitations and ‘desiderata’ (wish-lists) with the support of real end-users, it becomes possible to envision how to extend and improve this set of techniques and tools.

The work presented in this deliverable has been started in the context of two Project Progress meetings, when a review of the achieved results convinced the partners to change the scope of the Safety Intelligence Toolkit.

This document divides into the following sections:

- Section 2 provides some background information on the Safety Intelligence toolkit and how it increased its scope to encompass all the solutions generated in P5, opting for an online presence rather than the form of a traditional report;
- Section 3 describes the approach followed to design and develop the SAFEORG.EU website;
- Section 4 describes the information architecture of SAFEORG.EU;
- Section 5 presents some of the contents of SAFEORG.EU;
- Section 6 outlines a way forward, considering that the website will live beyond the formal conclusion of the project;
- Section 7 lists the references.

³ https://www.futuresky-safety.eu/wp-content/uploads/2016/04/FSS_white_paper_keeping_aviation_industry_safe-1.pdf

2. THE SAFETY INTELLIGENCE TOOLKIT

At the beginning of P5 “Resolving the organizational accident”, the idea was to develop a connected set of tools that would work together to protect companies from sources of risk due to organizational factors. The P5 concept was embodied in the ‘pyramid’ (see Figure 1), and the idea was that if you wanted to really protect your organisation, you would need to address all these areas.

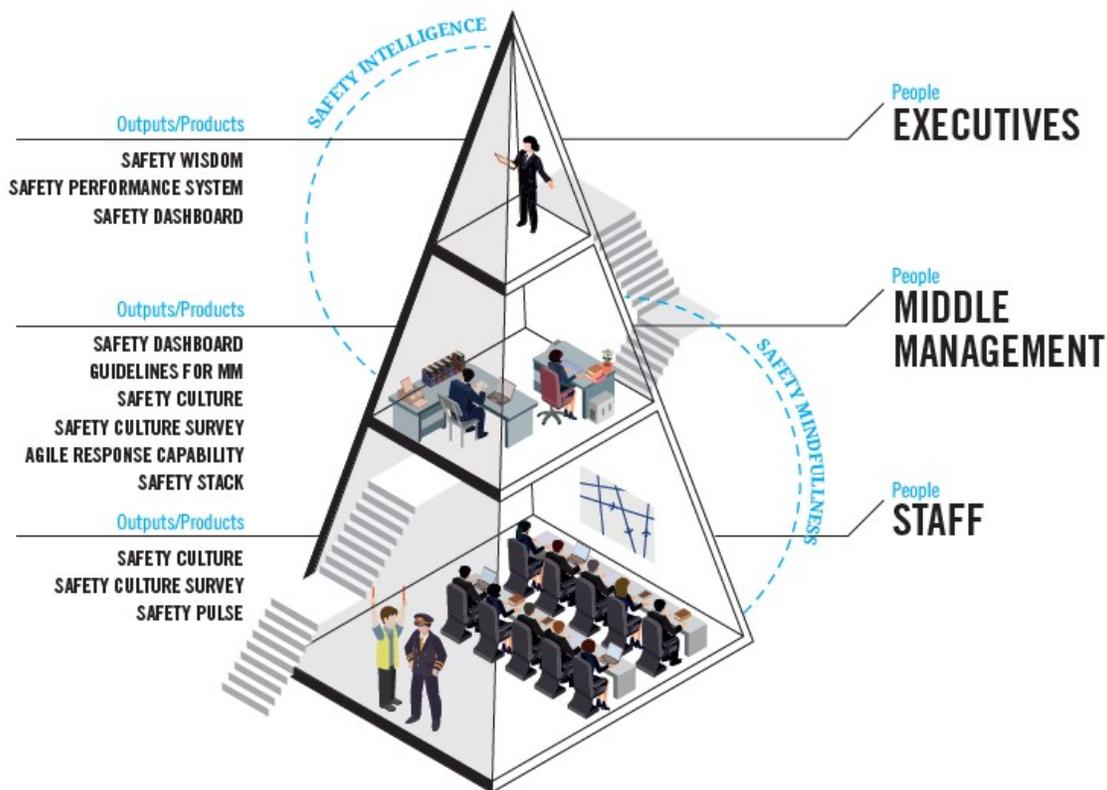


Figure 1 The P5 Pyramid: solving the next organisational accident by offering safety tools to every layer of the organisation

However, as the work started top-down, in particular interviewing sixteen executive leaders from all segments of the industry, it became apparent that this approach might not be a good fit, for several reasons.

The first is that each segment differs in its ‘appetite’ for the components making up P5. For example, safety culture is very well accepted in air traffic management (ATM), but is relatively new for airlines, airports and airframe manufacturers, and so it can take some convincing to persuade organisations to take it on. Another reason is that the P5 elements themselves were at significantly different levels of maturity at the outset of P5. For example, safety culture is already effectively deployed in ATM (thus

already at TRL9 for ATM), and so could be brought up to speed for airlines and airports quite quickly. In contrast, safety mindfulness and agile response were really starting at TRL2-4, and so had a longer way to go to reach the point at which they could impact and be accepted by organisations. A third reason is that each segment appeared to have its own ‘preferences’ and ‘what it was used to’, and within each segment, each organization may have its own safety management style, affecting the interest in the various elements, capabilities and products delivered by P5.

These factors, which grew and became more and more evident as the project progressed, meant changing the approach for how the final set of tools would be disseminated, exploited, and ultimately deployed into industry. The original and traditional concept of delivering a large report which was a portfolio containing detailed descriptions and guidance for each technique was clearly going to have little impact and take-up by industry, as few organisations would be interested in the whole package. Rather, organisations were far more likely to ‘cherry-pick’ from the resultant tool-set according to their prioritized needs, safety management style, and internal resources.

The decision was made in year three of the project, therefore, to develop a customized website called “SAFEORG” which would introduce all the products and explain in simple yet direct and relevant terms what each tool can do for an organization, with examples and links to more detailed guidance, as well as relevant quotes from industrial stakeholders concerning the tools or the issues they address.

A website is more user-friendly than a large and complex report, is visually appealing, and can go straight to the heart of the matter, backed up by quotes and testimonials. It is effectively an appealing ‘shop window’ for the P5 toolset, allowing industrial stakeholders fairly quickly to understand how the tools can help, and to know what to do next if interested. A further advantage of this approach is that the SAFEORG website will be maintained at least two years after the project, and can evolve as new information becomes available (e.g. a new stakeholder adopts one of the tools), thus enhancing the sustainability and exploitation of the toolset.

The remainder of this report explains how the website was developed, and how it works.

3. APPROACH TO THE DESIGN AND DEVELOPMENT OF SAFEORG.EU

The beginning of SAFEORG design process can be traced back to the FSS P5 Progress Meeting held in Dublin in October 2017, when a discussion was started about how to support the dissemination and exploitation of the project outcomes. The discussion focused on the use of means alternative to the traditional report, i.e. video clips, mobile apps, websites and others. The Dublin meeting ended with a consensus towards the use of a website collating the outcomes of the different WPs.

During the FSS P5 Final Meeting held at EEC on March 27-28, 2018, a specific session on Day 2 was fully dedicated to define better the structure of the website. The session was organised in the form of a so-called “speed-dating” (i.e. short and structured face-to-face conversations between partners), with two main aims:

- *Exploitation* – each WP/element discussed with DBL their plans and ideas for exploitation, so that DBL could determine how best to support them;
- *Advanced SMS Integration* – each WP/element discussed with NLR how their products/approaches could best fit into the Advanced SMS concept.

Just before the session, ECTL proposed to highlight the need to move to the industry what has been achieved by P5, by branding the Educational Toolkit to be produced by P5 as “SAFEORG: Raising your game in organisational safety”.

During the session, each WP leader defined the following:

- The *organisational need(s)* the SAFEORG tool produced by his/her WP of responsibility is responding to;
- The intended *organisational roles* to be targeted (executives, middle managers, staff);
- The *main message* to be given to the target;
- Their ideas about *how to communicate* the outcome (text, video, storytelling on slider, other interactive pages).

DBL used the collected data to start the definition of the website architecture and contents, which are specified in section 4.

4. INFORMATION ARCHITECTURE OF SAFEORG.EU

The website has been designed with simplicity in mind, in order to make immediately accessible, by any visitor, the tools developed in the context of P5. The adopted information architecture is given in Figure 2.

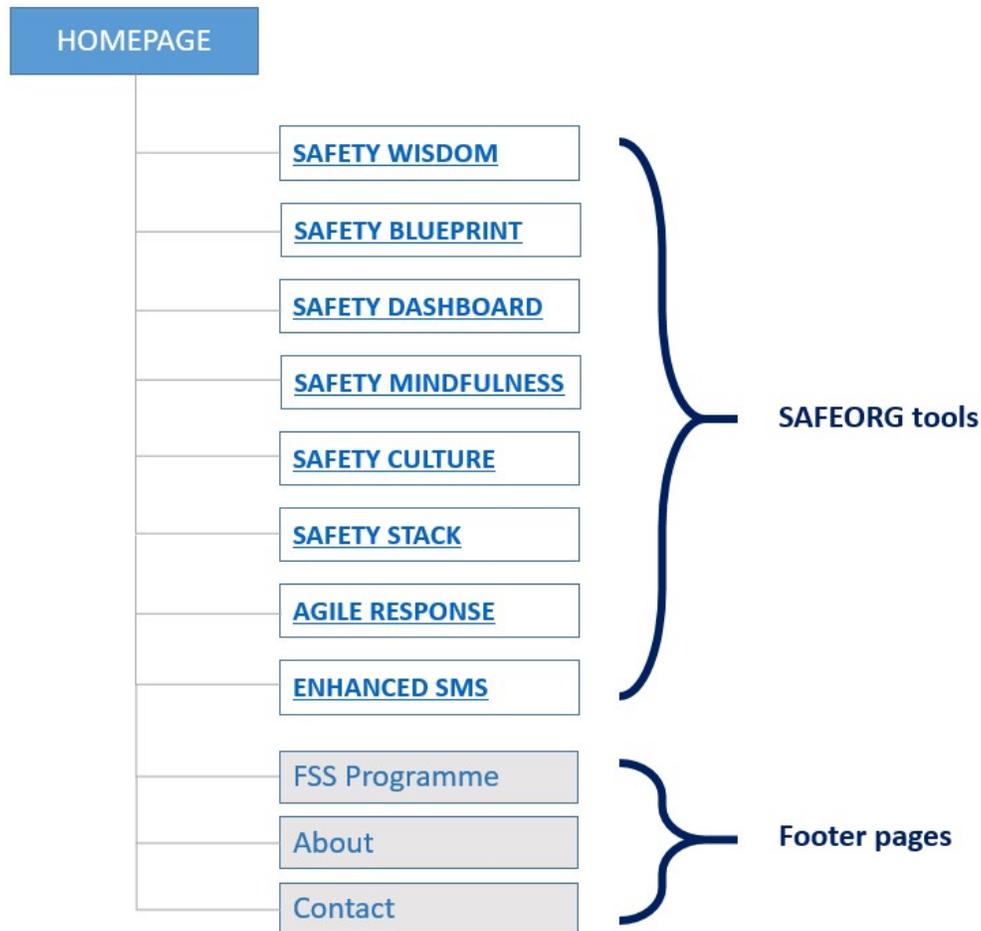


Figure 2 SAFEORG information architecture

Each tool page can be accessed directly from the homepage using two different “routes”:

- By clicking on the *tool* link which is placed in the top bar menu (see Figure 3);
- By clicking on the *needs* that are described for each organisational role (see Figure 4 as an example).



Figure 3 SAFEORG homepage: top bar menu

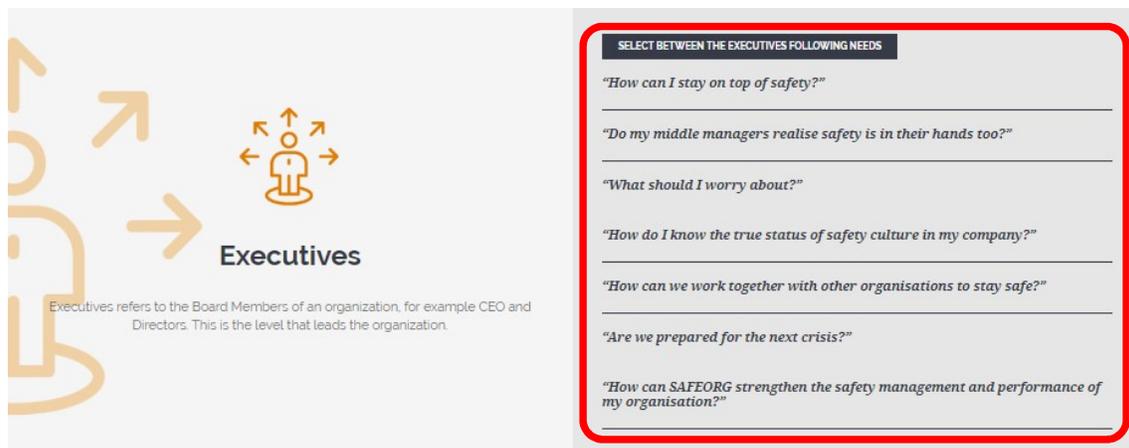


Figure 4 Executives needs that can be addressed by SAFEORG tools

Each need takes the visitor to a specific SAFEORG tool. The complete mapping of role's needs and tools is the following:

- **Executives:**
 - "How can I stay on top of safety?" > [Safety wisdom](#);
 - "Do my middle managers realise safety is in their hands too?" > [Safety Blueprint](#);
 - "What should I worry about?" > [Safety Dashboard](#);
 - "How do I know the true status of safety culture in my company?" > [Safety Culture](#);
 - "How can we work together with other organisations to stay safe?" > [Safety Stack](#);
 - "Are we prepared for the next crisis?" > [Agile Response](#);
 - "How can SAFEORG strengthen the safety management and performance of my organisation?" > [Enhanced SMS](#).
- **Middle managers:**
 - "How to make decisions that are safe yet good for business?" > [Safety Blueprint](#);
 - "What does the Board need to be aware of regarding safety?" > [Safety Dashboard](#);
 - "How do we maximise safety awareness among operational staff?" > [Safety Mindfulness](#);

Project: Resolving the organizational accident
Reference ID: FSS_P5_DBL_D5.11
Classification: Public



- “What is the true status of safety culture in my department?” > Safety Culture;
- “Are our crisis simulations challenging enough?” > Agile Response;
- “Which SAFEORG tools would benefit my organisation?” > Enhanced SMS.
- *Staff:*
 - “How do I share safety-relevant information directly with my colleagues?” > Safety Mindfulness;
 - “How do I get my voice heard on what I really think about safety in the organisation?” > Safety Culture.

5. SAFEORG.EU CONTENTS

This section presents some examples of the contents featured in the SAFEORG website.

There are five main types of content:

- Storytelling (sliders);
- Quotes;
- Needs;
- Guidance;
- Related links.

Each one of the next sub-sections presents example of the above-mentioned contents.

An example of a full page of a tool featuring all the types of content is provided in the following pages, in Figure 5 and Figure 6.

HOME SAFETY WISDOM SAFETY BLUEPRINT SAFETY DASHBOARD SAFETY MINDFULNESS SAFETY CULTURE SAFETY STACK AGILE RESPONSE ENHANCED SMS

Safety Blueprint

Tool description (main text)

While there has been a good deal of focus in research and practice on how top executives should lead safety in high risk organisations, and even more on how to motivate people for safety at the 'sharp end' via safety culture, there is **very little formal research on the safety role of middle managers**, in fact this area seemed to be a research desert. Yet the people at this intermediate layer, who serve as vertical and horizontal integrators – transmitting the Board's strategy and objectives into actions and collating and feeding key messages from staff at the sharp end upwards – are critical in determining how smoothly and effectively safety works in organisations.

- The key role of the middle manager
- How we analysed their influence
- What we found
- Safety Blueprint workshop

Needs

EXECUTIVES
"Do my middle managers realise safety is in their hands too?"

MIDDLE MANAGERS
"How to make decisions that are safe yet good for business?"



Quotes

"We are data-rich but not necessarily information-rich."

Figure 5 Safety Blueprint tool: above-the-fold section of the page



Figure 6 Safety Blueprint tool: below-the-fold section of the page

5.1. Storytelling

One of the most notable feature of SAFEORG website is the use of storytelling (e.g. sliders) to communicate the work done to produce a specific tool/solution. They consist of a number of scrollable animated slides that present a “story”.

Each slider follows the same structure or “plot”:

- Presentation of a problem area;
- Description of the work done to address the problem;
- Description of the proposed solution;
- A call to action, consisting in an invitation to contact SAFEORG (via a dedicated email form in the “Contact” section of the website) for further information about how to apply the solution.

This type of solution has currently been selected for the following tools:

- Safety Blueprint;
- Safety Culture;
- Safety Stack;
- Safety Dashboard;

A number of screenshots taken from the currently implemented sliders is presented from Figure 7 to Figure 12. At the moment of submission of the current deliverable, three out of four storytelling sliders (Blueprint, Culture and Stack) will have been implemented, while the Safety Stack and Safety Dashboard ones will be implemented in September 2018.



Figure 7 Safety Blueprint: presentation of problem area



Figure 8 Safety Blueprint: the call to action



Figure 9 Safety Culture: description of the work done (1/2)

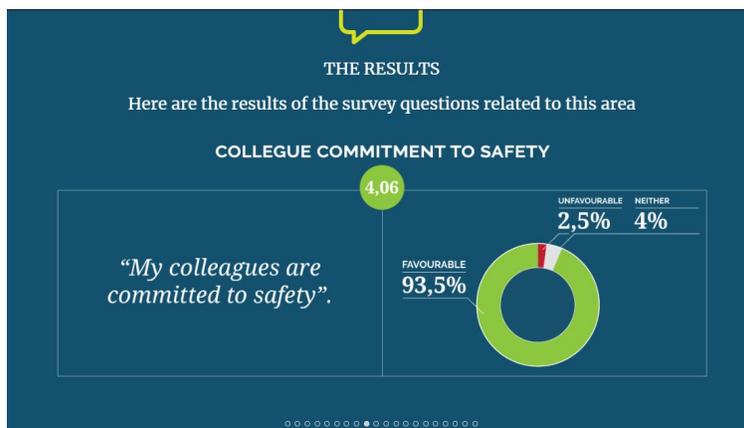


Figure 10 Safety Culture: description of the work done (2/2)



Figure 11 Safety Culture: description of proposed solution

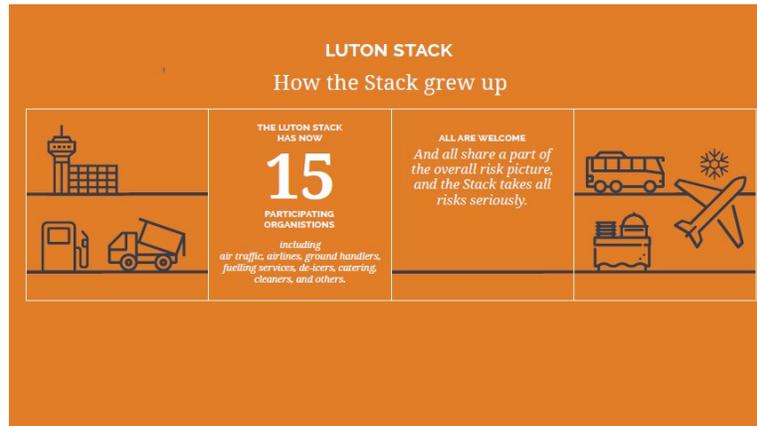


Figure 12 Safety Stack: description of the work done

5.2. Quotes

Quotes are a way to provide a direct message to the website visitors, collected from stakeholders who have experienced a benefit from the application of a specific solution. Quotes were collected during meetings (e.g. Luton Safety Stack meetings) and/or interviews (e.g. Safety Wisdom and Safety Blueprint). In some cases, a reference to the stakeholder, but not the individual, who generated the sentence is given (see Figure 13 to Figure 15), while in other cases the source is either de-identified by using a generic indication, like “airline” or “ANSP” (e.g. for Safety Wisdom) or kept anonymous (e.g. for Safety Culture).

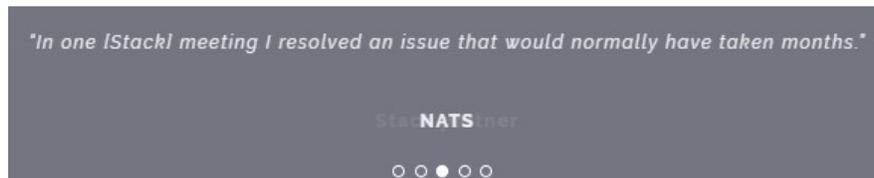


Figure 13 Safety Stack: NATS quote

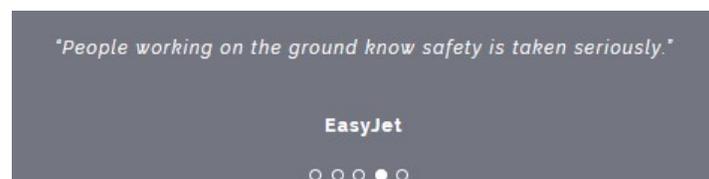


Figure 14 Safety Stack: EasyJet quote

"After one year of Stack implementation, we achieved a 100% reduction in ground handling damage incidents against an increase in traffic of 5% and an increase in efficiency of operations of 7%."

EasyJet Ground Ops Manager

○ ○ ○ ○ ●

Figure 15 Safety Stack: EasyJet GroundOps Manager quote

"The only way to see around the corner is having a very open relationship with your post-holders. I have a very strong relationship with my post-holders. There's no fear in the relationship."

AirLine

○ ○ ○ ● ○

Figure 16 Safety Wisdom: airline executive quote (de-identified)

"It has changed the way the Executive Board deals with safety. Now, we do really try and drive safety culture from the top."

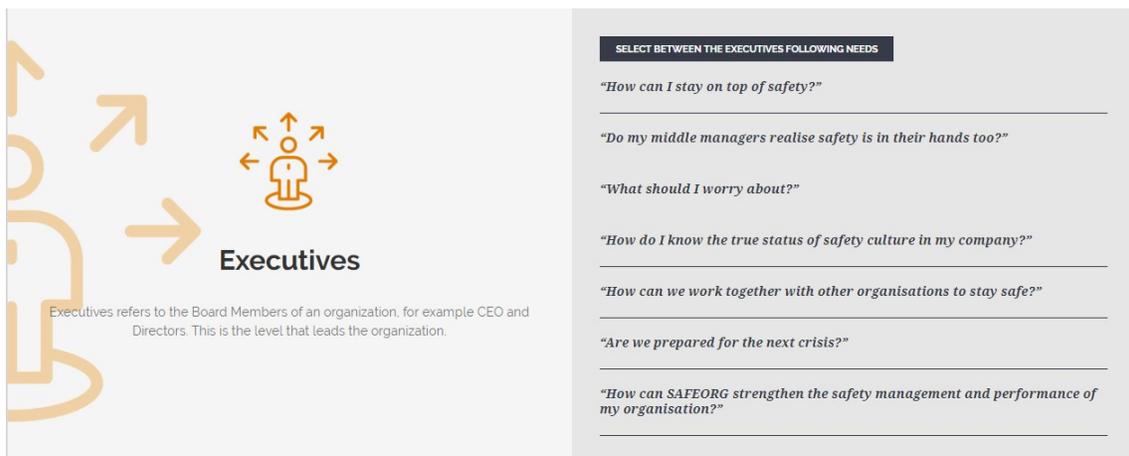
○ ○ ○ ○ ●

Figure 17 Figure 16 Safety Culture: executive quote (anonymous)

5.3. Needs

Needs are the output of the conversations with the consortium partners held during the dedicated sessions of the Bretigny final meeting (see section 3). The needs were then refined by DBL and ECTL, and validated with each partner. Needs are one of the access routes to the SAFEORG tools, and are mapped to a specific role. Each role has only one need linked to a specific tool, while each tool can address more than one need (of different roles).

A complete view of the needs is given in Figure 18 to Figure 20.



SELECT BETWEEN THE EXECUTIVES FOLLOWING NEEDS

"How can I stay on top of safety?"

"Do my middle managers realise safety is in their hands too?"

"What should I worry about?"

"How do I know the true status of safety culture in my company?"

"How can we work together with other organisations to stay safe?"

"Are we prepared for the next crisis?"

"How can SAFEORG strengthen the safety management and performance of my organisation?"

Figure 18 Executives' needs



Middle Managers

Middle managers are senior managers who only have other managers reporting to them, but who are not at Executive Board level, e.g. heads of divisions or the general manager of an airport, etc. The organisation's safety manager may be at this level, or at Director level.

SELECT BETWEEN THE MIDDLE MANAGERS FOLLOWING NEEDS

- "How to make decisions that are safe yet good for business?"
- "What does the Board need to be aware of regarding safety?"
- "How do we maximise safety awareness among operational staff?"
- "What is the true status of safety culture in my department?"
- "Are our crisis simulations challenging enough?"
- "Which SAFEORG tools would benefit my organisation?"

Figure 19 Middle managers' needs



Staff

Staff refer to all other people in an organisation, e.g. front-line operational and technical staff and their supervisors, but including all support staff as well.

SELECT BETWEEN THE STAFF FOLLOWING NEEDS

- "How do I share safety-relevant information directly with my colleagues?"
- "How do I get my voice heard on what I really think about safety in the organisation?"

Figure 20 Staff's needs

5.4. Guidance

Guidance material (see Figure 6) is the section of the page dedicated to host all the material that can support the application of the solution by any interested stakeholders.

As a general principle, the guidance should not point to the submitted formal deliverables, but to more user-oriented documentation, written with applicability in mind (e.g. a white paper as for Safety Wisdom). However, as SAFEORG will be progressively populated with the best fitting material, for some time this section will instead feature the P5 published deliverables.

5.5. Links

Links are resources related to the tool presented in the page. They may be white papers, websites, or reports produced by organisations such as EUROCONTROL, EASA, CANSO and others, referring to the topic tackled by the tool. They are meant to provide more background and depth to the interested website visitor.

As for the guidance material, this session is being progressively populated; therefore, some tools pages are empty at the moment.

6. CONCLUSION

The main goal of SAFEORG.EU is to showcase the solutions developed in the context of the project and create an opportunity for proposing their implementation to any interested organisation. A secondary goal is to become a useful resource for all the aviation organisations willing to improve their organisational safety. In fact, the idea is to progressively enrich the pages of the website by adding guidance material and links pointing to external sources on the topics of organisational safety risk management.

The resultant SAFEORG website represents a far more user-oriented and user-friendly way of disclosing the P5 products than traditional reports. It will allow interested parties to browse, cherry-pick, and learn of other tools, as they interact with the website, enhancing the overall exploitation of the tools derived from the project. The website will be officially launched at the final Future Sky Safety Conference in November 2018, and will be maintained for at least two years after the end of the Future Sky Safety programme.

7. REFERENCES

Bieder, C., Callari, T.C. (2018) Future Sky Safety P5 - D5.9 Supporting Middle Managers' Contribution to Safety. Version 2.0. European Commission.

Valbonesi, C., Silvagni, S., Kirwan, B. (2016) Future Sky Safety P5 - D5.5 Safety Intelligence tools for Executive and Middle Managers. Version 2.0. European Commission.

McDonald, N., Callari, T.C., Baranzini, D., Mattei, F., Citino, S.A., Stroeve, S., Woltjer, R., Johansson, B.J.E., and Oskarsson, P.A., (2018) Future Sky Safety P5 - D5.12 Operational Mindfulness Manager. Version 2.0. European Commission.

Reader, T.W., Parand, A., and Kirwan, B. (2016) Future Sky Safety P5 - D5.4 European pilots' perceptions of safety culture in European Aviation. Version 2.0. European Commission.

Reader, T.W., Parand, A., and Kirwan, B. (2018) Future Sky Safety P5 - D5.13 Mapping safety culture onto processes and practices: the Safety Culture Stack approach. Version 2.0. European Commission.

Woltjer, R., Johansson, B. J.E., and Kirwan, B. (2015) Future Sky Safety P5 - D5.3 Agile Response Capability (ARC) best practices. Version 2.0. European Commission.