

The term **Safety Culture** was first applied in the aftermath of the Chernobyl nuclear disaster in 1986. This nuclear power plant had trained operatives using clear procedures backed up by safety management systems, but deficiencies in the attitudes to safety in the organisation led to the world's worst nuclear disaster. Since 1986, the use of the term and approach has spread to other industries including Oil and Gas, Chemical, Rail, Aviation, Medical, and Air Traffic Management (ATM), where it has recently been applied to both the Überlingen and Milan Linate accidents.

This Briefing Note answers the following questions:

- **What is Safety Culture?**
- **Why is it important?**
- **How do you measure and improve it?**
- **What does it deliver?**
- **What does it cost?**

### What is Safety Culture?



Safety Culture is **the way safety is perceived, valued and prioritised in an organisation. It reflects the real commitment to safety at all levels in the organisation.** Safety Culture is not something you get or buy; it is something an organisation has. Safety Culture can therefore be positive, negative or neutral. Its essence is in what people believe about the importance of safety, including what they think their peers, superiors and leaders really believe about safety's priority.

### Why is Safety Culture Important?

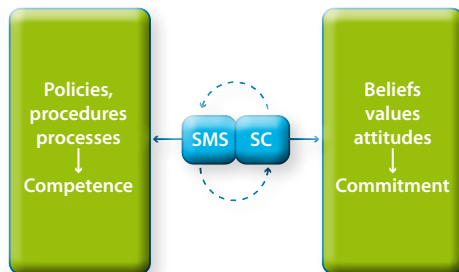
Safety Culture can have a direct impact on safe performance. If someone believes that safety is not really important, even temporarily, then workarounds, cutting corners, or making unsafe decisions or judgements will be the result, especially when there is a small perceived risk rather than an obvious danger.



However, a typical and understandable first response to Safety Culture in ATM is:

*'We already have an SMS, why do we need Safety Culture too?'*

A Safety Management System represents an organisation's competence in the area of safety, and it is important to have an SMS and competent safety staff to execute it. But such rules and processes may not always be followed, particularly if people in the organisation believe that, for example, 'moving traffic' is the real over-riding priority, even if risks are occasionally taken. Where would people get such an idea? The answer, ultimately is from



their peers, but more so their superiors, including the person at the helm of an organisation, namely the CEO. To ensure the required commitment to safety, organisational leaders must show that safety is their priority.

So, ANSPs need both a SMS and a healthy Safety Culture in order to stay safe. But here is a problem for ATM organisations – ATM is generally very safe, with accidents only occurring rarely. This means that almost all organisations will assume they are already safe. There may be few incident

reports, and these may be of low severity; safety cases may be well in hand for current operations and future changes. Real ATM accidents are usually complex and multi-causal, so it is not always easy to see them coming. Even harder to see are contributing situations which affect an organisation's 'forward vision' in safety: e.g. under-reporting of incidents due to fears of recrimination or prosecution; people running risks because they believe that is what they are supposed to do; different sub-groups not sharing information due to a lack of mutual trust; etc.

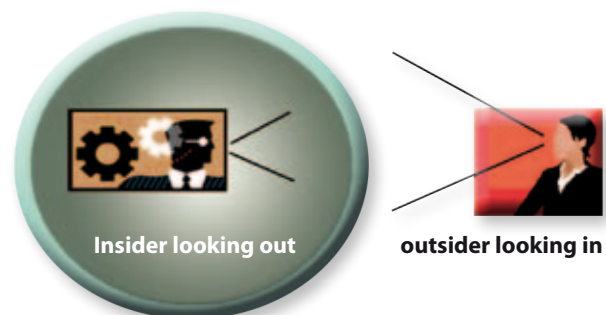
**If you want to remain safe, you have to know the realities of safety in your organisation**

How would a CEO know if such undermining factors were evident in their organisation? By asking their directors? By touring the workforce and asking? The alternative, and more robust approach, is to carry out a Safety Culture survey; to measure Safety Culture.

### How do you measure Safety Culture?



Safety Culture, like culture, is sometimes hard to see from the inside. It is like a fish swimming in water – the fish does not really think too much about the water. Therefore, usually Safety Culture surveys in most industries are a combination of internal and external perspectives: the 'outsider's view is used to help make objective the insider's viewpoint.



That being said, however, it is useful to have a 'champion' inside the organisation who will act as an interface between the survey professionals, and the internal staff, including the Board and CEO, as well as staff, unions, etc. This champion is typically the Safety Director or Safety Manager for the ANSP.

The survey usually proceeds as shown below:

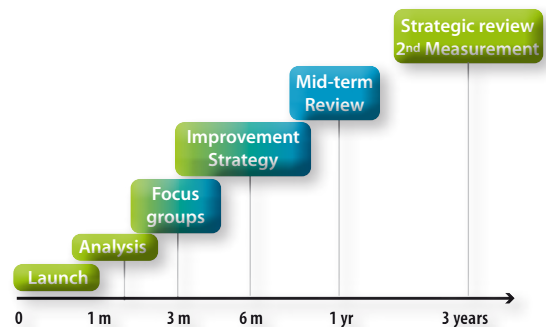


It is a tried and tested process starting with ‘pre-launch’ discussions to explain the process, decide the breadth and copy of the survey, and to reassure the ANSP that the approach is:

- Anonymous
- Confidential to the ANSP
- Independent - not favouring any particular group

The survey process culminates in clear and concise actions being developed by the ANSP (with input from the Survey Team if required) with regard to developing a robust Safety Culture improvement strategy.

The overall timings of the approach are illustrated below:



A typical ATM model of Safety Culture is shown below:



### What does Safety Culture deliver?

For one ANSP, the survey has delivered a clearer and more comprehensive risk picture, one that takes in all regional aspects of the company. This has come about through a better information flow and a more realistic dialogue with the whole company about safety.



# Safety Culture in ATM

## An overview

As well as such 'macro' effects, the approach delivered more concrete advice on the incident analysis process, team training, and better integration of maintenance safety concerns with operational control safety priorities.

Another organisation sees Safety Culture as a key ingredient of their business transformation approach, and has endorsed a company-wide Safety Culture enhancement process – the people at the 'sharp end' feel more empowered to act in the interests of safety, and know that the management will protect them to the limit. Trust has been enhanced. This has a positive impact on productivity, too.

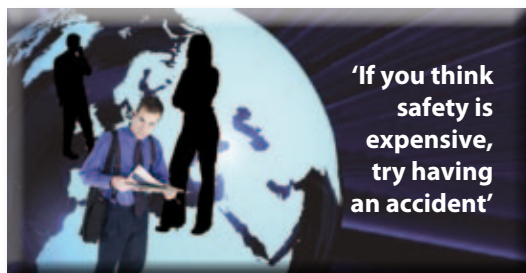
A third organisation wanted to be sure of Safety Culture's validity as an approach, and so carried out two independent surveys. They found a very high degree of overlap in the results, and so are now working on the recommendations arising from both surveys, and considering the best timing for a further Safety Culture review to see how they have improved.

Each ANSP is different, and also has its own national cultural traits. What each ANSP therefore gets out of it will vary, but so far the ANSPs who have participated have valued its insights.

### What does it cost?

There are two cost components to the cost equation of Safety Culture. The first is the actual survey costs. Here there are three options. EUROCONTROL aims to support the enhancement of Safety Culture throughout Europe, and so is performing surveys at ANSPs request, within certain resource limitations. Secondly, a number of ANSPs have used Applied Psychology departments in various universities who specialise in Safety Culture, to adapt and apply survey techniques to their organisations. Third, there are consultancy services who carry out these types of surveys. Currently, EUROCONTROL is building a web-based 'Safety Culture toolbox' which will include information on all these types of 'Resources'.

The second aspect of cost is the provision of an organisation's own resources – its people – to participate in the survey, including the time of the 'champion' and administrative support to organise survey participation. This is more difficult to cost, but typically the questionnaire takes 30 minutes to complete for each participant (of which there may be hundreds), and around 20-30 people in total are involved in four separate workshops each taking half a day. There are sometimes additional interviews with Board members, and presentations and meetings after



the survey to determine the way forward etc. Such resource requirements are not onerous, but do need to be timed so as not to clash with other potential initiatives.

Safety Culture can help refine the organisation's risk picture, and enable a sharper clarity on safety priorities. It can also help to enable the entire workforce to act and react safely, and make safe judgements on a day to day basis.

### Further information

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