Moving Forward on Safety Culture

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The Process – High Level

- Decide to embark on the Safety Culture Process
- Elect a champion, back the champion
- Engage internal stakeholders
- Launch the Process
- Ensure good participation
- Expect a mixture of news
  - Strengths
  - Areas for improvement
- Give feedback to participants
- Build on the Results
Step 1. Prepare (1/2)

✓ Consider Benefits & Costs
  • Better risk picture & management; Staff engagement in safety vision
  • Costs of staff involvement (time); External supply costs

✓ Consider Breadth & Timing
  • Participation: ATCOs, Engineers, Managers, All?
  • Locations: HQ, ACCs, Towers, other?
  • Other initiatives? Ongoing problems/issues?

✓ Elect Champion & Support Champion
  • Trusted by both staff & management; visible management commitment (CEO/Board announcement);

✓ Inform Internal Stakeholders
  • Heads of Departments; Staff Committees; Unions; etc.
Step 1. Prepare (2/2)

- **Select Approach**
  - Questionnaire; focus groups

- **Select Technique**
  - Off-the-shelf; Bespoke
  - Eurocontrol; Keil Centre; other

- **Select Outside Agency**
  - Eurocontrol; Consultancy; University

- **Determine Launch Date**
  - Best if not during summer period
Step 2. Launch

- Management Briefing
- All Staff Briefing
- Multi-Centre
- Explain Why, What, So What
- Stress independence/anonymity
- Practical Points (POCs; Timings)
- Survey team familiarisation and observation, walk-rounds, etc.
SAFETY CULTURE

Commitment

Teaming

Involvement

Learning & Reporting

Responsibility

Communications & Trust
Below is a list of statements regarding safety issues that are relevant to your role in the organisation. Please indicate the extent to which you agree/disagree with each one by circling one number on each line. We want your opinion about how your organisation currently works.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Even if some equipment is unavailable, we are still required to meet our capacity targets</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>2. The equipment that is available is suitable for my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<tr>
<td>3. In ATC everyone knows there is an accident ‘just waiting to happen’</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>4. Maintenance staff understand how equipment failures affect our ability to provide safe air traffic services</td>
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<td>5</td>
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<tr>
<td>5. I trust the ATC procedures that I use in my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<tr>
<td>6. Maintenance staff perform sufficient system checks</td>
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<tr>
<td>7. The future plans are adequate for the development of the ATC service</td>
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<tr>
<td>8. I trust the ATC equipment that I use in my job</td>
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<tr>
<td>9. We openly discuss incidents in an attempt to learn from them</td>
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<tr>
<td>10. Controllers would never compromise their responsibility for safety</td>
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<tr>
<td>11. We are expected to be able to handle safety problems without reducing throughput</td>
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<td>2</td>
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<tr>
<td>12. We are consulted about changes to the technical/engineering system that impacts on the way we do our work</td>
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<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>13. There is pressure to use smaller safety margins than I feel comfortable with</td>
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<td>5</td>
<td></td>
</tr>
<tr>
<td>14. It is possible for operational and technical/engineering systems teams to meet together and discuss potential solutions for past problems</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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</tbody>
</table>
Step 3: Running the Survey - The Heart of the Process

Survey the population
1. General section
2. Controllers/Assistants
3. Maintenance/Engineering
4. Managers

Workshops

After the workshops

Improvement Strategy

Feedback to Management & Staff

Solution proposals

Prioritising the Issues

Analysing the Issues

Understanding the Issues

Identify Key Issues

Questionnaire Analysis
Sample Results: Best 5 items

- I have confidence in the people that I interact with in my normal working situation
  - % of respondents: 92.8%

- If I do something wrong, I can discuss it with my colleagues without worrying about the consequences
  - % of respondents: 92.9%

- Each member of staff has a responsibility to keep up with changes to procedures
  - % of respondents: 94.1%

- Only the Safety Department has responsibility for safety
  - % of respondents: 96.7%

- Only my manager has responsibility for safety
  - % of respondents: 96.8%
Sample Results: Bottom 5 items

Even if the system fails, we are still expected to achieve the targets that are set for us

- 60.3% unfavourable
- 12.2% neutral
- 27.5% favourable

Feedback from incidents comes months or years later with few recommendations

- 53% unfavourable
- 15.2% neutral
- 31.8% favourable

The other people in the organization do not understand our job and the safety roles we fulfil

- 46.4% unfavourable
- 17.9% neutral
- 35.8% favourable

There is a lack of feedback on the results of safety initiatives that we have participated in

- 35.5% unfavourable
- 26.1% neutral
- 38.3% favourable

We have sufficient safety experts and support staff in house

- 38.5% unfavourable
- 20.9% neutral
- 40.5% favourable
Focus Group Process

- 4-6 GROUPS (mixed) + Facilitators
- Key issues
  - Ensure understanding
  - Consider causes and consequences
- Potential solution paths
- Key ways forward
- Mode: Facilitated Process
1. ‘Diagnosis’ of ANSP Safety Culture
2. Detailed Results by Group & Region
3. Suggested Ways Forward: Quick wins & longer term solutions
ANSP Safety Culture Enhancement Strategy

- Decide the options and the priorities
  - Strategic – e.g. safety culture campaigns
  - Tactical – e.g. improved incident reporting system

- Allocate responsibilities & resources

- Be realistic about the time it can take to change culture

- Track & Monitor Progress

- Communicate, communicate, communicate
Timescale of the Survey Process

- Launch
- Analysis
- Focus groups
- Improvement Strategy
- Mid-term Review
- Strategic review 2nd Measurement

Timeline:
- 0
- 1m
- 3m
- 6m
- 1yr
- 3 years
Support

✓ Getting Started
  • White Paper; ‘Brochure’; Safety Culture Toolbox

✓ Technical Support
  • EUROCONTROL Safety Team; CANSO; FAA
  • Consultancies (e.g. the Keil Centre in the UK; NLR in Holland);
  • Universities (various, e.g. Aberdeen [UK], Lund [Sweden]; Leiden [Holland] etc.)

✓ Continued Support
  • EUROCONTROL, CANSO and FAA all have placed Safety Culture as a strategic objective over the next 5 years.

✓ Peer Support
  • EUROCONTROL planning ANSP regional workshops in 2009 onwards
Recent years have witnessed a growing concern over the issue of safety culture within ATM industry. Air Navigation Service Providers—ANSPs—safety management efforts turn out to be insufficient to guarantee safe behaviours, which brought out the need for an in-depth understanding of the existing safety culture level, its strengths and weaknesses. This calls for a safety culture measurement and improvement processes, comparable to any change process.

The following toolbox provides information and practical advice to help in understanding, assessing and enhancing safety culture within your ANSP. Its main aim is to answer the frequent questions "what is meant by safety culture and how it can be measured and improved?". At present, this new Safety Culture toolbox features an initial set of processes and tools, based on an extensive research and applications conducted since 2005 by Eurocontrol, but which will be expanded and fed over time by the ANSPs best practices and successful experiences.
The main purpose of an ANSP’s safety culture assessment is to establish a widely shared understanding of the organization safety culture level, its strengths and weaknesses, and based upon that understanding to determine whether change is desirable.

This assessment being directed at the level of the individual, the workgroup and the organization, it is worth noting that psychological and behavioural measurement is generally collected from the individuals’ perspective who interact directly or indirectly with the assessment team.

In order to effectively capture the nature or essence of the operational context being evaluated, both quantitative and qualitative techniques are used. In fact, depending on the available time and accessibility of the ANSP’s organization and to its data, the approach adopted in collecting data can combine a quantitative process (questionnaire survey) and a qualitative process using interviews, workshops/Focus groups, site visits, historical information reviews and contextual data analysis (see figure).

The current safety culture assessment process, presented hereafter, encompasses three main steps corresponding to data collection, analysis and feedback. A preliminary ‘pre-launch’ phase is needed to enable the preparation of the ANSP’s senior managers and personnel to the Safety culture campaign and ensure their support to its launch.
The Safety Culture assessment campaign, from the launch to the decisions for change by the ANSP’s management, can take about a year before an organization can implement effectively change strategies and see the early premises of improvements, which will certainly need quite more time. A re-assessment campaign will thus be relevant only after two to three years, unless the ANSP strives to challenge continuously its awareness of the pertaining climate and impact of particular events or changes on the safety level and safety culture.
The measurement of safety culture is relatively mature

There is an agreed process: although some individual tools may differ, they deliver similar results

It is not a painful process

There is support available

If ANSPs work together and share insights, ATM can become *best in class* in Safety Culture
Questions?