



# From Safety Culture to Safety Intelligence

Barry Kirwan, Eurocontrol



# What's the problem?

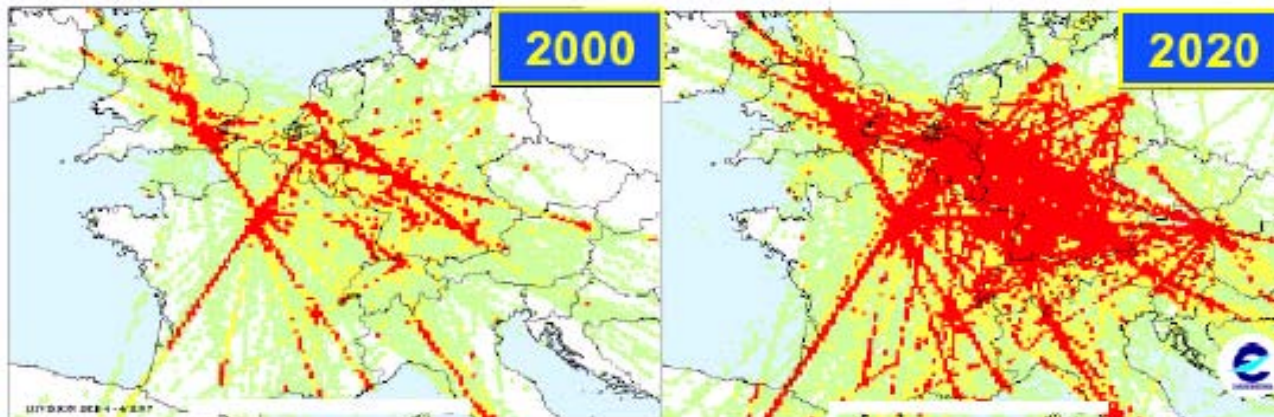


- Challenger ... Columbia
- Piper Alpha ... Texas City
- Kings Cross ... Kings Cross Grove
- Linate ... Uberlingen ... ?

**Do we really learn?**  
**Are we doing enough?**

# Air Traffic: Safety Under Pressure

- Recent accidents involving ATM
- Increasing traffic (capacity)
- Advanced systems (2012 - 2025)
- *Keep ATM safe*
- *Anticipate & Resolve Problems*
- *Learn before accidents occur*



# What is Safety Culture?



**The way safety  
is done around  
here**

Commitment to safety

How safety is prioritised

Everyone in the organisation

Thinking Safety

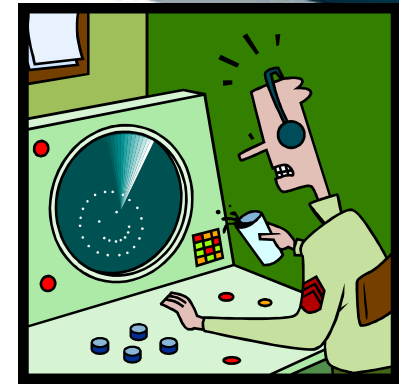
In day-to-day activities safety is given its due respect. There is never complacency about safety, at any level in the organisation



# Real Safety Culture



- A controller makes a mistake, but no one sees it. Does he report it?
- A contractor working on a safety case comes up with a negative result. Does he go back and modify the figures?
- Two Department heads know their departments don't work well together. Do they ignore it?
- A regulator knows a new system can save lives, but can the airlines afford it?



## Decision-Making & Safety



Every day throughout all levels of an organisation, many small, and a few large, safety-related decisions are made. Often such decisions are not clear-cut. Safety culture determines whether the people involved err on the side of safety or not. These small decisions add up.

# Program 2004-12



## Eurocontrol Safety Programme

## Rationale

1. Understand the current state of safety
2. Measure it
3. Help ANSPs

**38 countries**

9 ANSPs participated in 2007  
4 more in 2008; developed best practices;  
Safety Culture Toolbox in 2009





**Engage  
CEOs**

**Develop  
Tool**



**Work  
with ANSP  
Partners**

**Valid?  
Helpful?  
Insightful?**





# What has it got to do with CEOs?

**The CEO steers the organisation**

**Everyone pays attention to the CEO's signals**

**Absence of a signal is still a signal,  
& mixed signals will be interpreted as signals**



**The belief that safety is truly important depends  
on what signals the CEO sends out**

# Safety Best from the Top...



- But what exactly?
- Just to say 'Safety first'?
- These are smart people
- How do they think about safety?
- What should they know about safety?
- What should they ask their board members?
- Their safety directors?
- How can they see through the smoke-screens?



# Which one is the odd one out?



# CEO Safety Culture Quiz – part 2



- What are the top five risks for your ANSP?
- What are the actions ongoing to tackle them?
- How does someone at the bottom of your organisation warn upper management of a developing dangerous situation? Does it happen?
- A state prosecutor decides to prosecute one of your controllers for an incident. What do you do?
- Under what contingency conditions should you shut down your airspace?
- One of your safety cases says a new operation is unsafe – how do you query its results?

Which one don't you need for an effective incident learning process?



# Further CEO Questions

- Safety first – but safety is a cost? How does a CEO determine safety expenditure in a cost-conscious industry?
- How do you balance safety with other market drivers: expansion, capacity, environment ... ?
- What are the lagging and leading safety Key Performance Indicators for your organisation?
- If your organisation suffers an accident tomorrow, and you find yourself on the news channel, what are you going to say?



# Safety Culture Workshop for CEOs, Dec '08, Rome



## **Safety Culture Workshop**

Safety Culture 'Guru' insights

Becoming Safety Culture 'Smart'

Safety Culture Best Practices

Enhancement Techniques

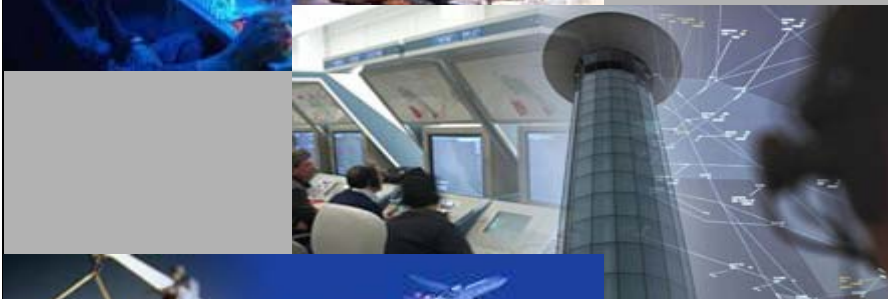
## EUROPEAN ATM SAFETY SAFETY CULTURE WORKSHOP



Unleashing the Power  
of Safety Culture



December, 2008  
Rome



Opening Address  
Mr. David McMillan  
Eurocontrol DG

Keynote Speakers  
Paul Barron  
NATS UK CEO

Sverre Qvale  
Avinor CEO

Jose La Cerda  
NAV-P CEO

Prof. Rhona Flin  
Aberdeen





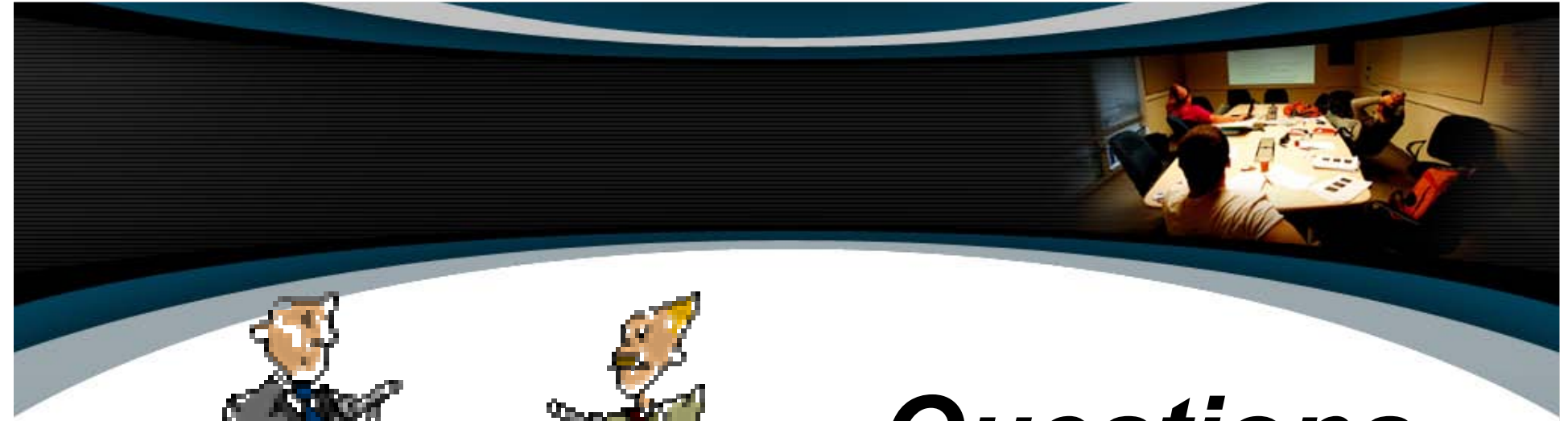
# Conclusion



Safety Intelligence is looking at decision-making relating to safety, at all levels, but with a special focus at the upper levels

It aims to ensure that safety is given due consideration in strategic, tactical, and opportunistic decisions

We need to harness the power at the top, the people who steer organisations, as well as the crew



***Questions***  
**?**

# Safety Culture & SMS

