Network Manager
nominated by
the European Commission

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Safety Investigation and Justice

Stakes, Objectives, SMS Issues, Just Culture and the holy grail

In summary

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21 Nov 2013 - Madrid

[ES]² 2013 Programme

THEMES	CONTENT	TARGET AUDIENCE	DATES	LOCATION
WS 1-13 *SW Assurance*	Software Safety Assurance SWALs, Industry and ANSPs contributions in Safety Assessments and Software Assessments (98 participants + web broadcast)	SW and HF experts, Safety Managers, Safety Specialists (OPS & TECH), NAA, EC , EASA, PRU	07-08 May	IANS Hosted by EUROCONTROL in IANS Luxembourg
WS 2-13 *Safety HP*	Safety Human Performance Conference (138 participanst)	Human Factors and Safety experts, Projects Managers, Safety Managers, NAA/NSAs EC and EASA	26-27 September	Dublin Hosted by IAA
WS 3-13 *Safety Investigation*	Best Practices in Occurrence Investigations Safety 1 and Safety 2 State of the art Tools e.g RAT Just Culture environment (150 participants)	Safety Investigators, Safety managers, safety Specialists (OPS & TECH), AAIB, EASA, EC, Airlines, Prosecutors, Judiciary	21-22 November	Madrid Hosted by APROCTA with AENA support

March 2013 → CEO Safety Conference in Bled

Next CEO Conference 2015

http://www.eurocontrol.int/services/es2-experience-sharing-enhanced-sms

Just Culture – on old issue
Code of Hammurabi (1795-1750)

If a physician heals the broken bone or diseased soft part of a man, the patient shall pay the physician five shekels in money. If he were a freed man he shall pay three shekels. If he were a slave his owner shall pay the physician two shekels.

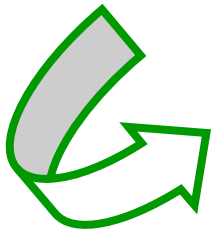
If a physician makes a large incision with an operating knife and cure it, or if he open a tumour (over the eye) with an operating knife, and saves the eye, he shall receive ten shekels in money. If the patient be a freed man, he receives five shekels. If he be the slave of some one, his owner shall give the physician two shekels.

If a physician makes a large incision with the operating knife, and kill him, or open a tumour with the operating knife, and cut out the eye, his hands shall be cut off. If a physician makes a large incision in the slave of a freed man, and kill him, he shall replace the slave with another slave. If he had opened a tumour with the operating knife, and put out his eye, he shall pay half his value.

(after prof. Hollnagel)

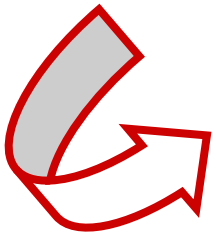
“Forensic” of the Concept of Just Culture

Actions, omissions and decisions expected from someone with your level of training and experience



Not prosecuted

Gross Negligence or Willful Misconduct



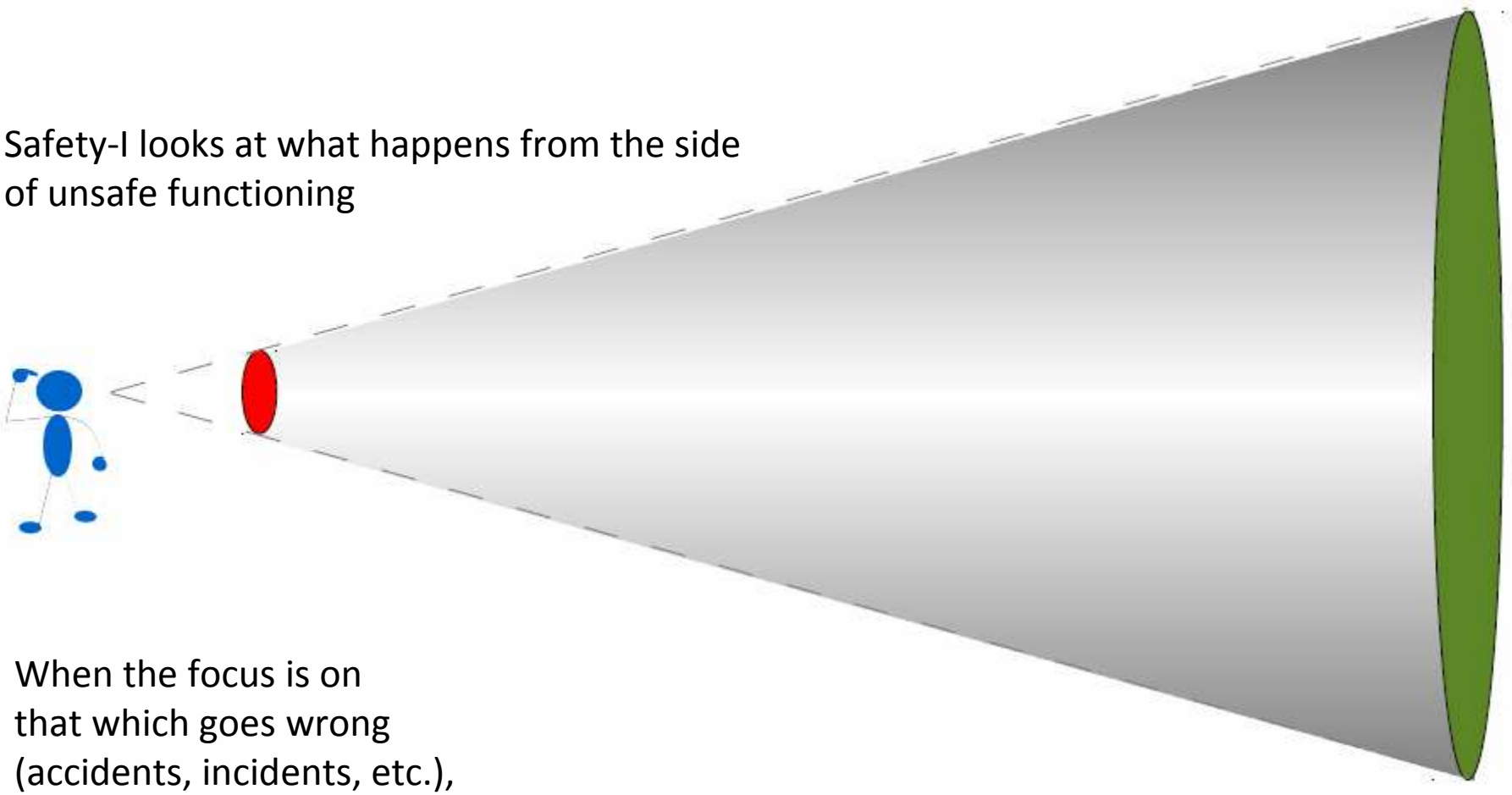
Not tolerated

BUT WHO DRAWS THE LINE ?

The Judiciary of course !

Safety I – Focus on what goes wrong

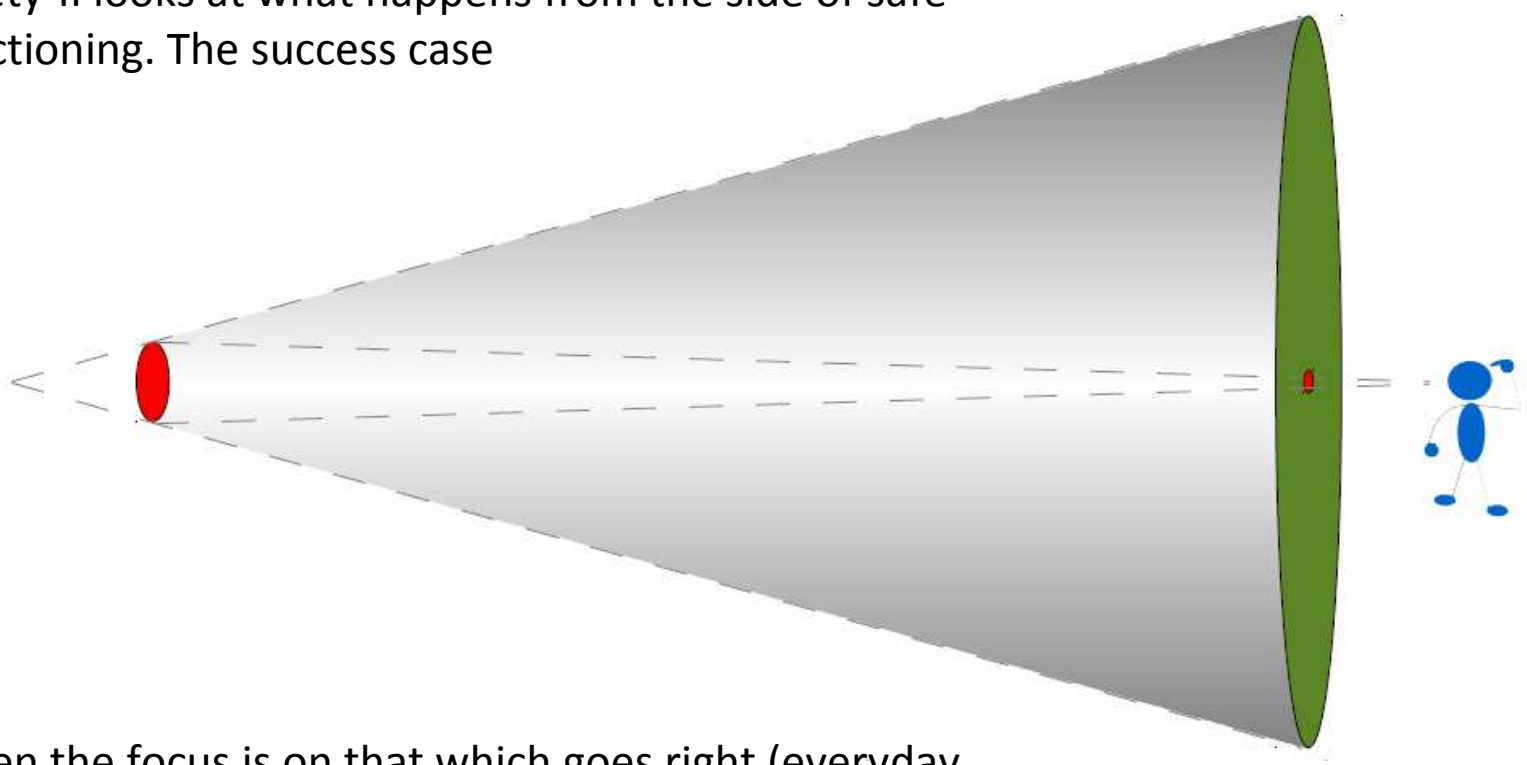
Safety-I looks at what happens from the side of unsafe functioning



When the focus is on
that which goes wrong
(accidents, incidents, etc.),
then it is difficult to see that which goes right.

Safety II – Focus on what goes right

Safety-II looks at what happens from the side of safe functioning. The success case



When the focus is on that which goes right (everyday performance), ‘failures’ no longer dominate the picture.

How to find out what goes right…

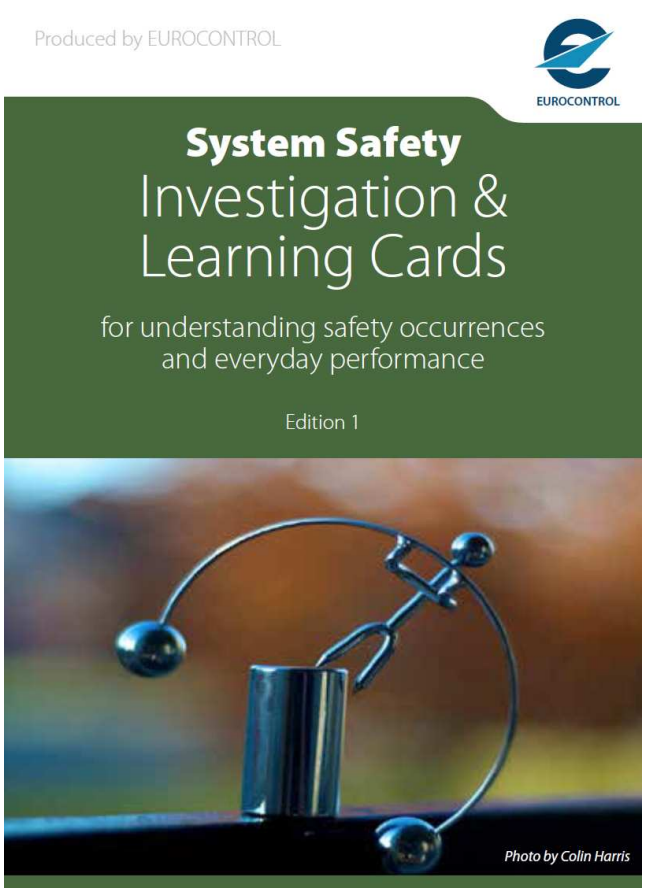
Safety Investigation

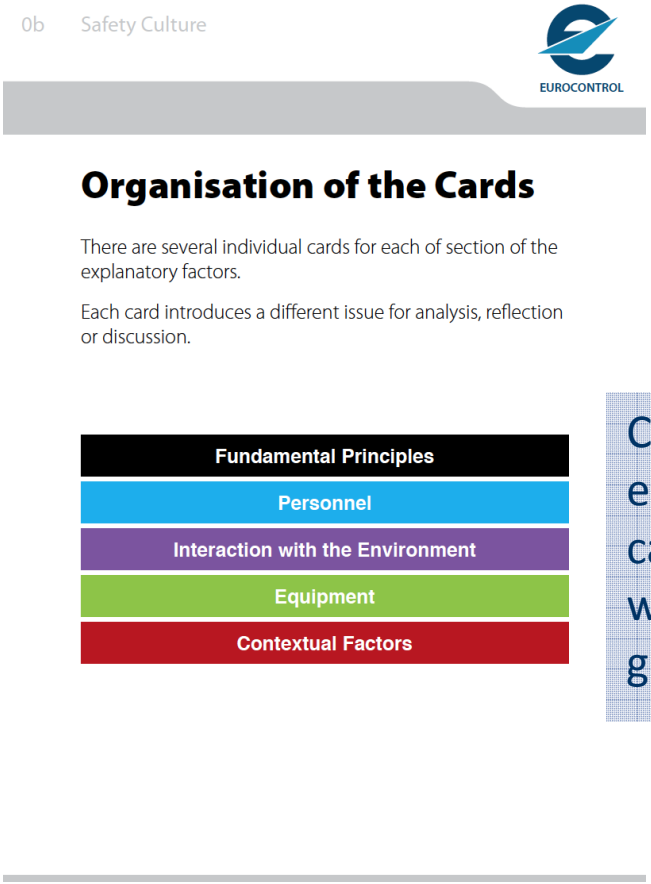
Ten principles of systems thinking for safety improvement

Purpose

- Enable safety analysis of adverse events, routine performance, and exceptional performance, including what went right as well as what went wrong
- Maximise historical compatibility
- Enable multiple uses
  - Investigations
  - Normal operations safety surveys (e.g. to choose markers)
  - Risk assessments (e.g. Structured What-IF Technique checklist)
  - etc

Investigation & Learning Cards





Cards for each major category within these groups

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Fundamental Principles

Principle 9. Efficiency-Thoroughness Trade-Off (ETTO)

People have to balance the thoroughness and efficiency of performance in a complex and uncertain environment

Consider how people balance efficient and thoroughness, from their point of view, and understand the tactics they use to maintain efficiency (e.g. multitasking, recognition) and thoroughness (e.g. checking).

Photo by Haaveilla

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Fundamental Principles

Principle 6. Demand, Production Pressure & Goal Conflict

Pressures relating to efficiency and capacity have a fundamental effect on performance

Performance needs to be understood in terms of demands, resulting pressures and conflicts between goals of production and protection


Photo by autowitch

Front

A3 Safety Investigation Cards

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Personnel

Decision

Judging or projecting the accuracy of spatial or temporal information and forming a decision or plan to achieve an intended outcome

Judgements and decision-making requires continuous adjustments to the context and conditions. Decision making must be considered from the point of the view of the person, including goals, knowledge, understanding of the situation and focus of attention at the time, as well as the context of work.

Photo by Andrew Tarrant

Back

Safety Investigation Cards

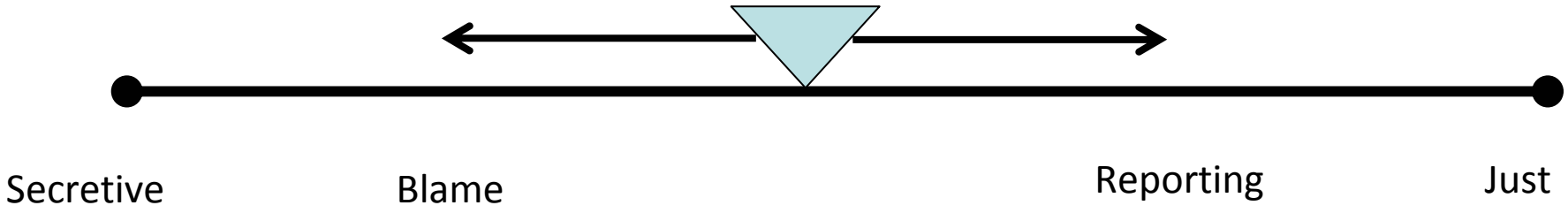
A.3. Decision

A3-1. Judge / project
A3-2. Decide / plan ('correctness'/workability)
A3-3. Decide / plan (sufficiency)
A3-4. Decide / plan (timing)
A3-5. Decide / plan (presence of decision/plan)

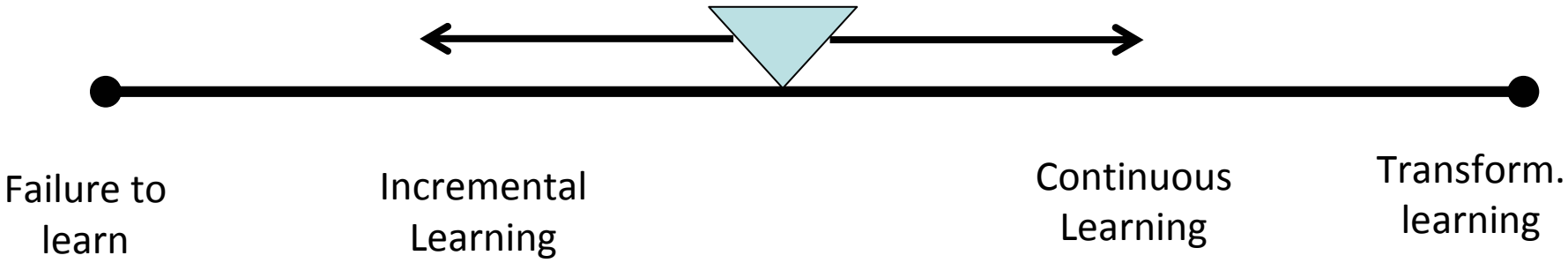
RAT explanatory factors

Accountability vs. Learning

"The Accountability Scale"



"The Learning Scale"



Adapted from SC M.S. Patankar

[ES]² 2014 Programme

THEMES	CONTENT	TARGET AUDIENCE	DATES	LOCATION
WS 1-14 *FAB Safety*	FAB Safety FAB SMS Roadmaps	Safety Managers, Safety Specialists (OPS & TECH), NAA, EC , EASA,	22-23 May	Cyprus/Amsterdam (TBC)
WS 2-14 *Safety HP*	Safety Human Performance Conference	Human Factors and Safety experts, Projects Managers, Safety Managers, NAA/NSAs EC and EASA	24-26 Sept	Lisbon
WS 3-14 *Just Culture*	Just Culture and Prosecutors	ATCOs, Safety Experts, Investigators., Safety and OPS managers, Prosecutors	20-21 November	Amsterdam/Rome

Any Other Volunteers for Hosting the events ?