Safety Performance Measurement for Service Providers

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for
SM ICG Metrics Workgroup
Why Measure?

You can’t manage what you can’t measure (Drucker).

What gets measured gets managed.

• but...

If you measure the wrong things, you’ll manage the wrong things.

Careful measurement is essential in safety decision making!
Types of SP measures

Process measures:
• WHAT WE DO

Outcome measures:
• WHAT RESULTS

• May be both leading, lagging indicators
• Usually by means of lagging indicators
Operational Definitions

- **Safety**: how well **risk** is **managed** (state of being)

- **Safety performance**: **capability** to **manage** risk

- **Measurement of safety management**: capability in terms of **SM processes** (What)

- **Process measurement** (How – measurement strategy)
  - **Process**: Leading/Lagging indicators
  - **Outcome**: Ultimate benefits, results (Lagging indicators)
‘Components’ of safety performance

Operational (core processes)
- Risk 1
- Risk 2
- Risk 3

Impact of external factors
- competition
- new technologies
- changes in regulations
- etc...

Systemic
- support processes
- reporting system
- qualification & training
- compliance management
- etc...

Safety Culture

SAFETY OUTCOMES
Compliance and Safety Risk Management

• Most rules refer to technical/operational processes
  o Design standards
  o Operating limitations
  o Training standards
  o Maintenance requirements, etc.
• Rules are made for “common cause” hazards - affects all of a “class”
• Rules shape risk controls
• However, other risks exist...
Compliance and SRM

Compliance

Effective Regulation

Risk Management

Illegal

Unsafe

SMS

Common Cause

Unique Cause

No Risk
Process to develop/review SPIs

1. Designate responsibilities
2. Review safety policy & objectives - identify key issues and main focus
3. Determine data needs
4. Define indicator specifications
5. Collect data and report results
6. Analyse results and act on findings from SPI monitoring
7. Evaluate SPIs and make changes as appropriate
Risks and challenges:

• Finding the right balance:
  – process measures / outcome measures
  – indicators to monitor / indicators to drive performance

• Being able to deliver the bigger picture
  – challenge results
  – assess indicators in combination

• Integrating SPIs with Safety Risk Management

• Indicator ‘seduction’ (Overreliance on positive results / complacency)
  and:

• Management involvement and commitment
Next steps

soon to be published on Skybrary

Your feedback will be most welcome!

I. Concept
II. Process
III. SPI examples
“Carelessness and overconfidence are more dangerous than deliberately accepted risk”

Wilbur Wright, 1901

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Thank you for your attention!

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