



SMIS+

Presented by Alex Moor
15 January 2018

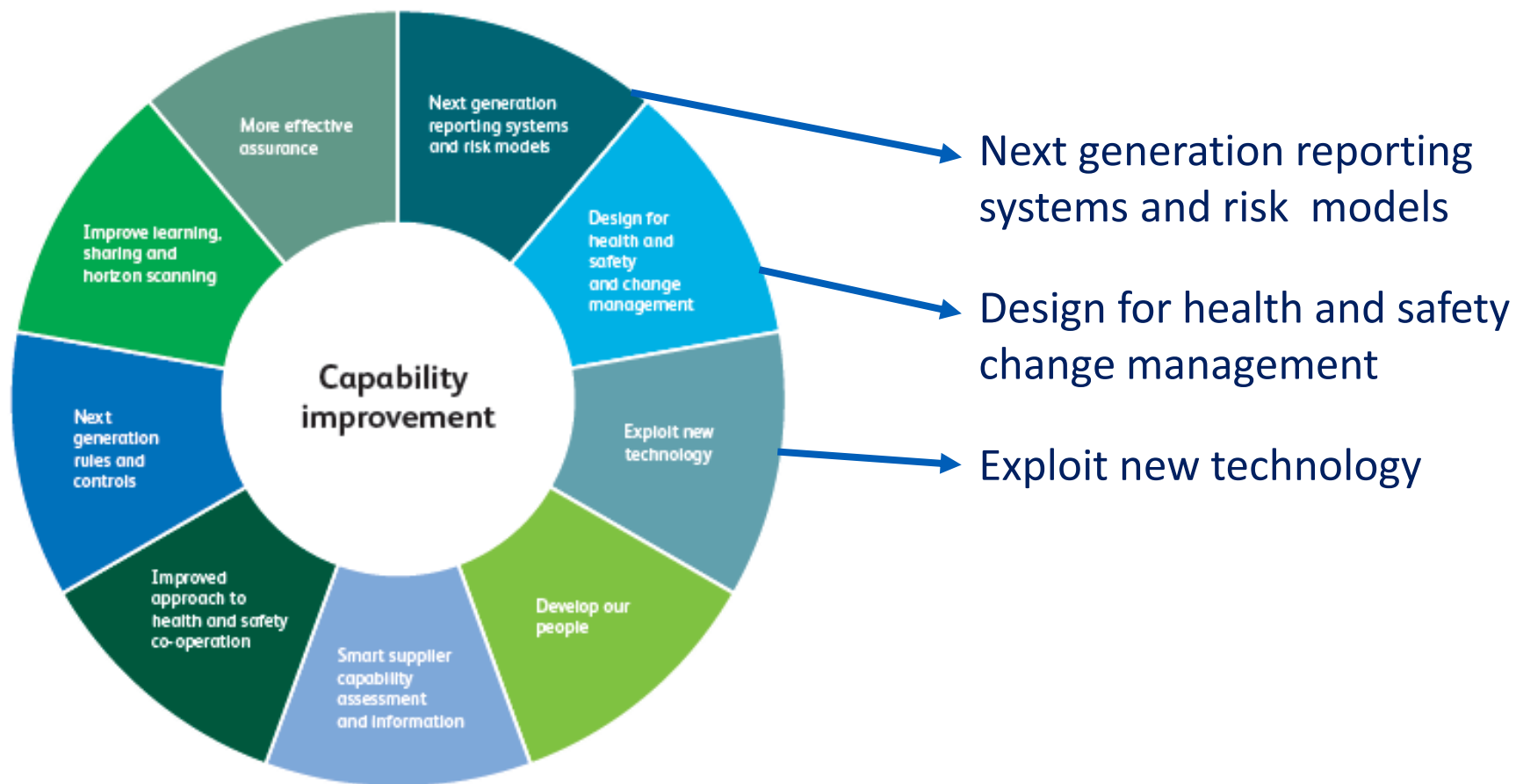


Content

- SMIS+ vision
- New data model
- Data migration
- Combined data model and business intelligence
- New system
- Benefits and applications
- Future roadmap



GB rail's health and safety strategy



What is SMIS

- The Safety Management Intelligence System (SMIS) replaced the Safety Management Information system (also SMIS) on 6 March 2017

What it does:

- Records safety incidents
- Business process workflows
- Tracks investigations and recommendations
- Automated regulatory reporting to the ORR
- Business intelligence



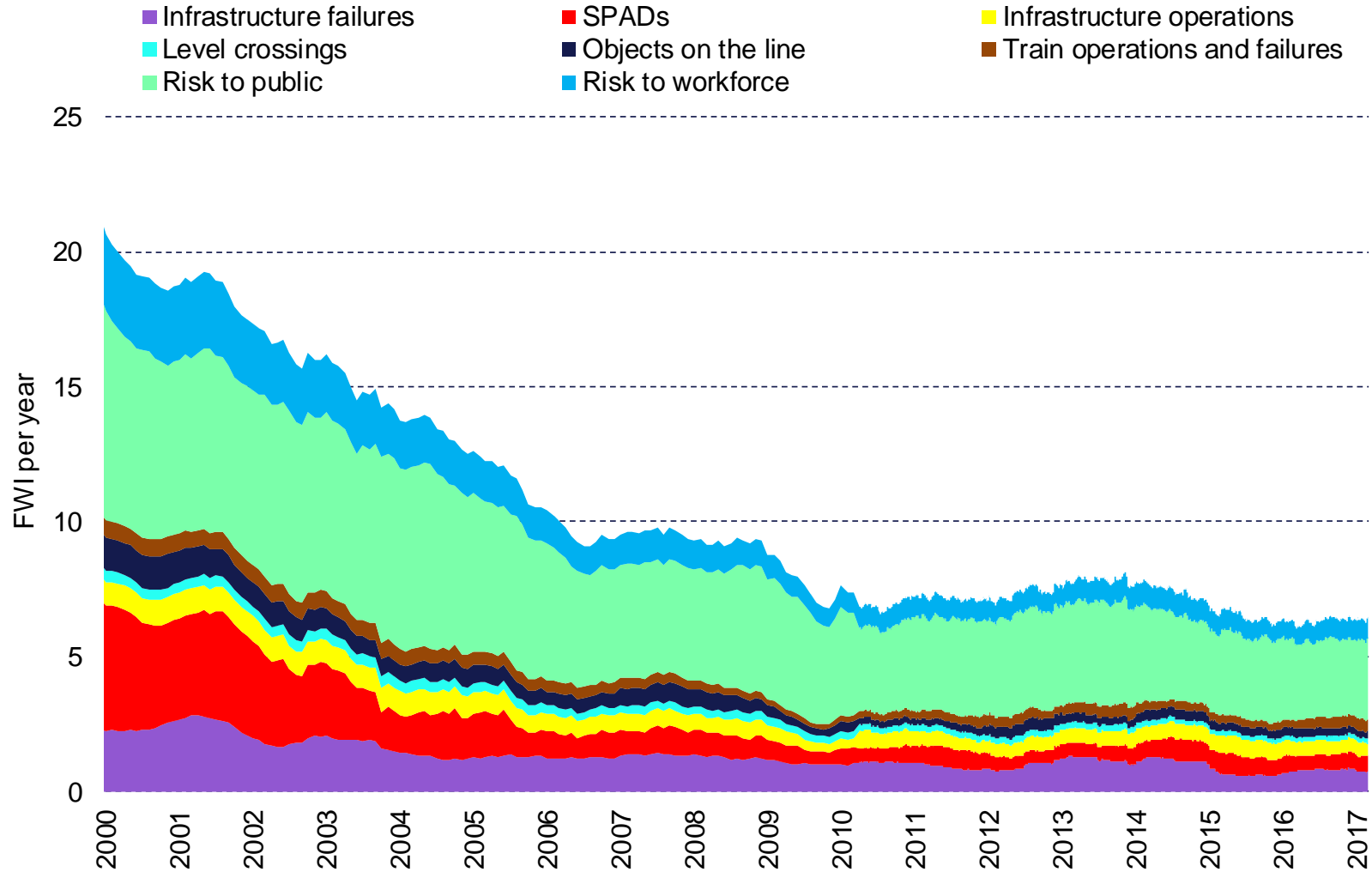
SMIS+ vision

SMIS+ vision

Reduce safety risk on the GB mainline railway

- Create a platform on which future developments can more easily be developed
- Better monitoring of safety performance and risk
- SMS functionality, for example routing tasks and integrated risk management

The next step in safety performance....



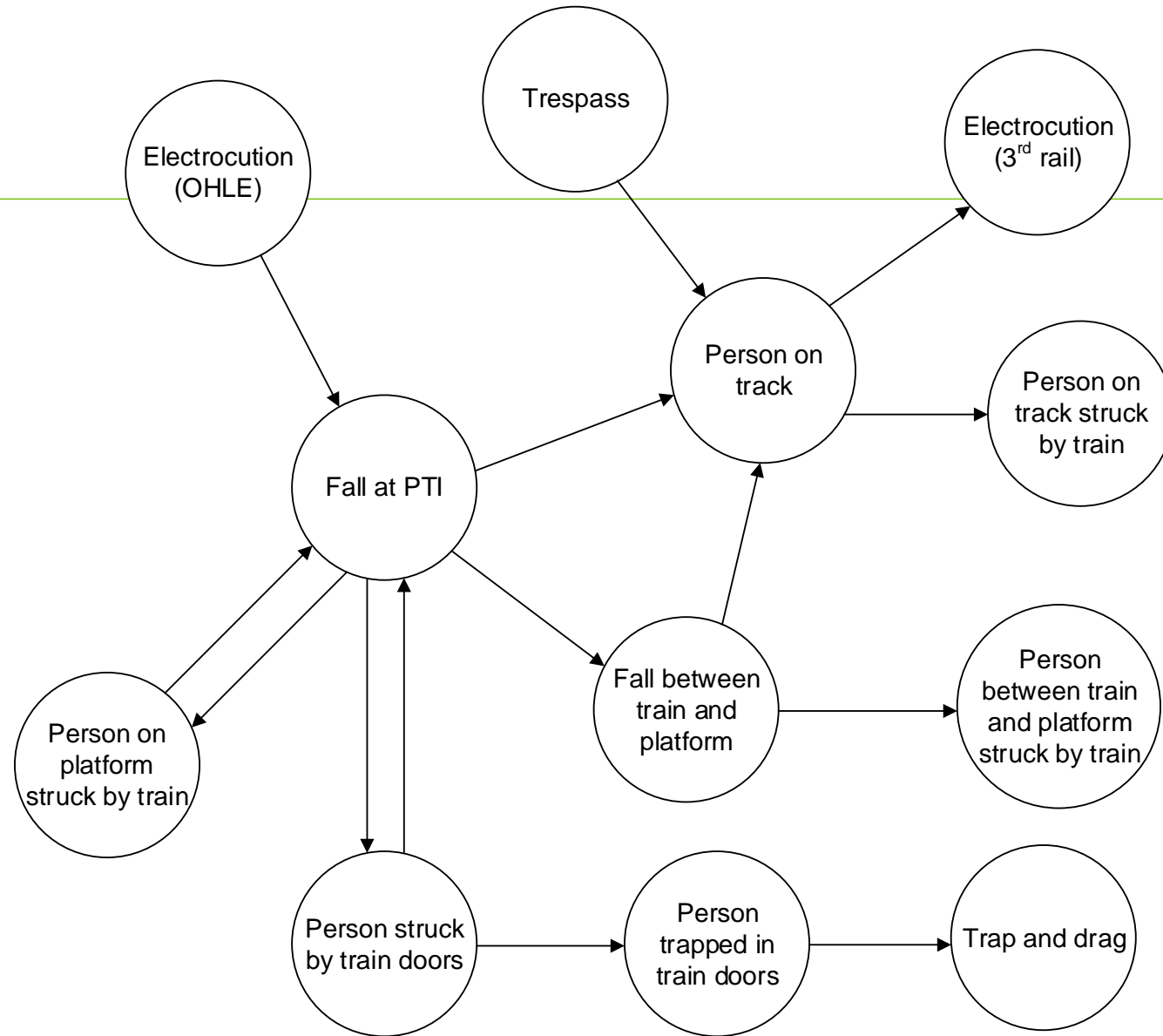
New data model

What we're trying to solve

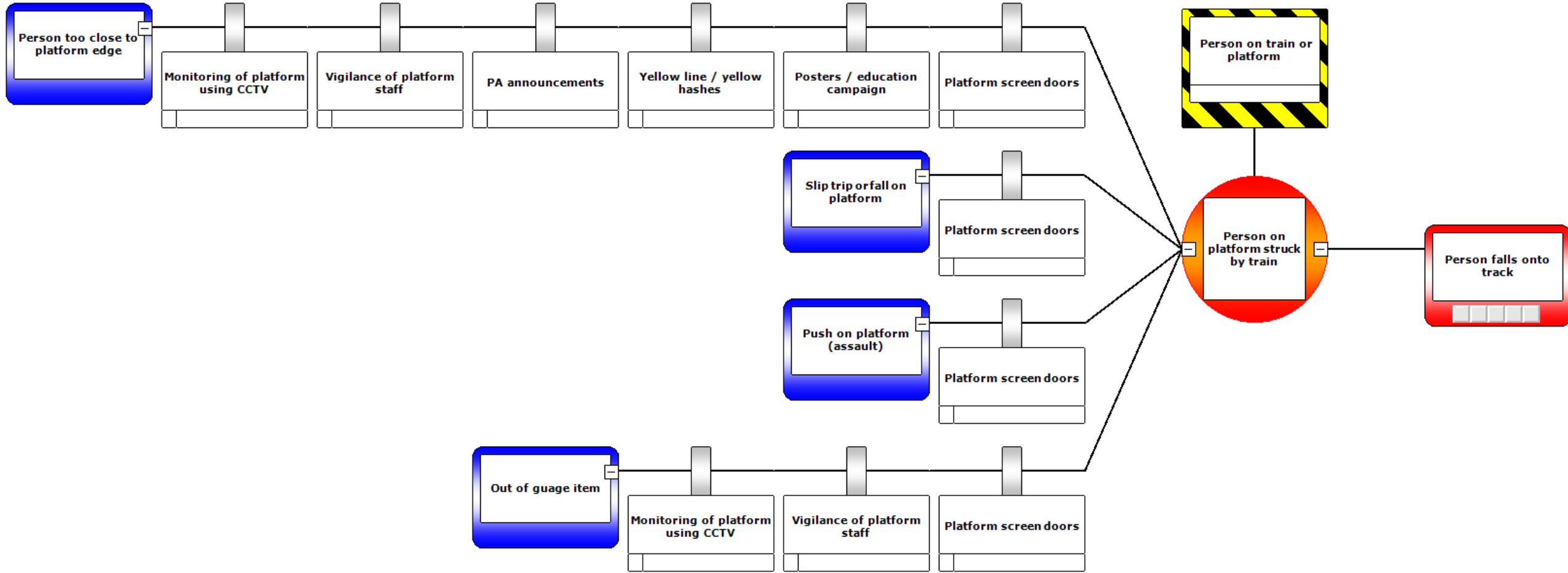
- Categorisation focussed on the worst thing; rather than the whole event
- Don't capture all relevant information for understanding risk
- Historical variations in how different risk areas are captured
- Better inform decision makers on risk and emerging issues

Sub-events

Risk based approach

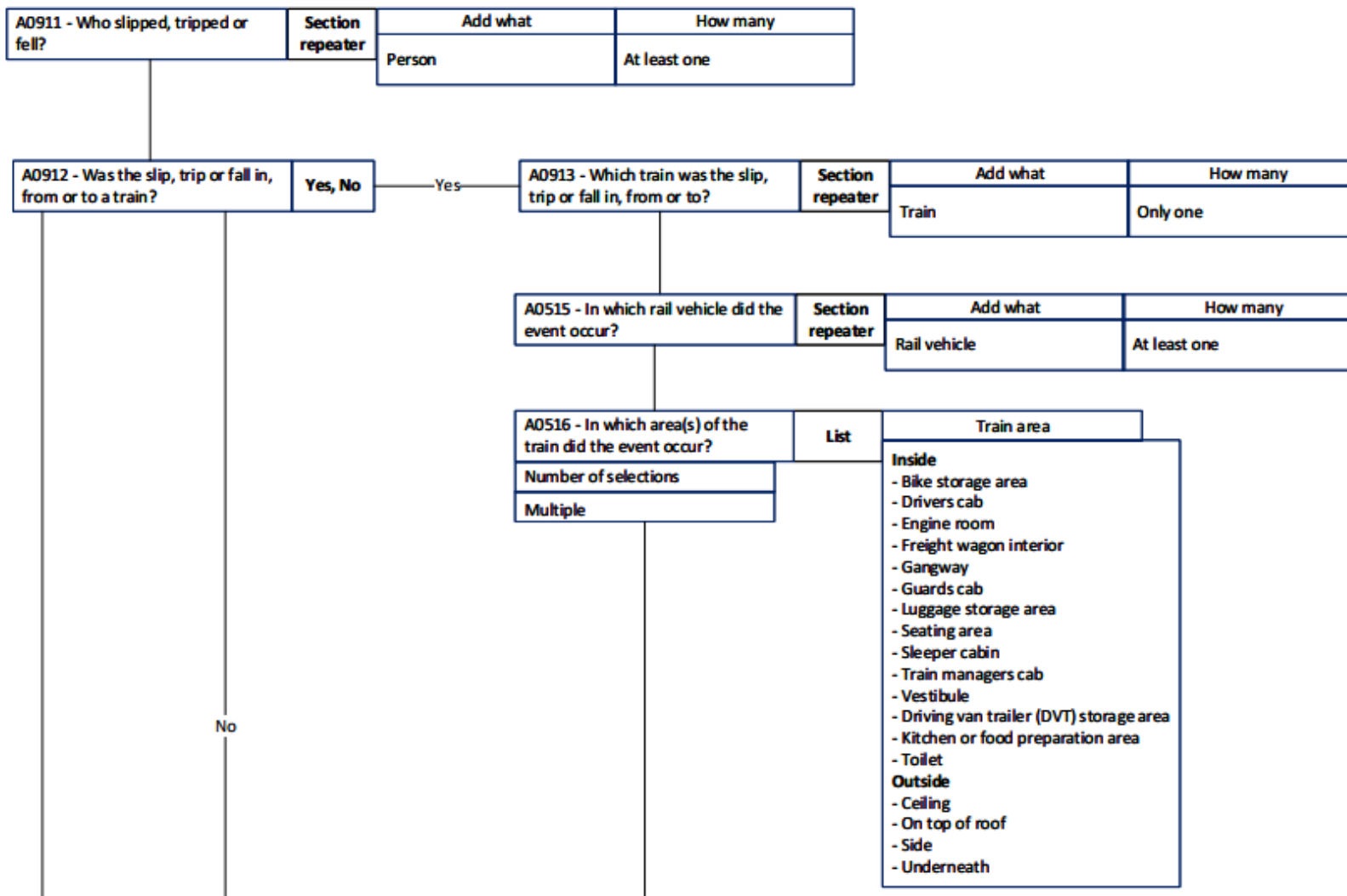


Risk based approach



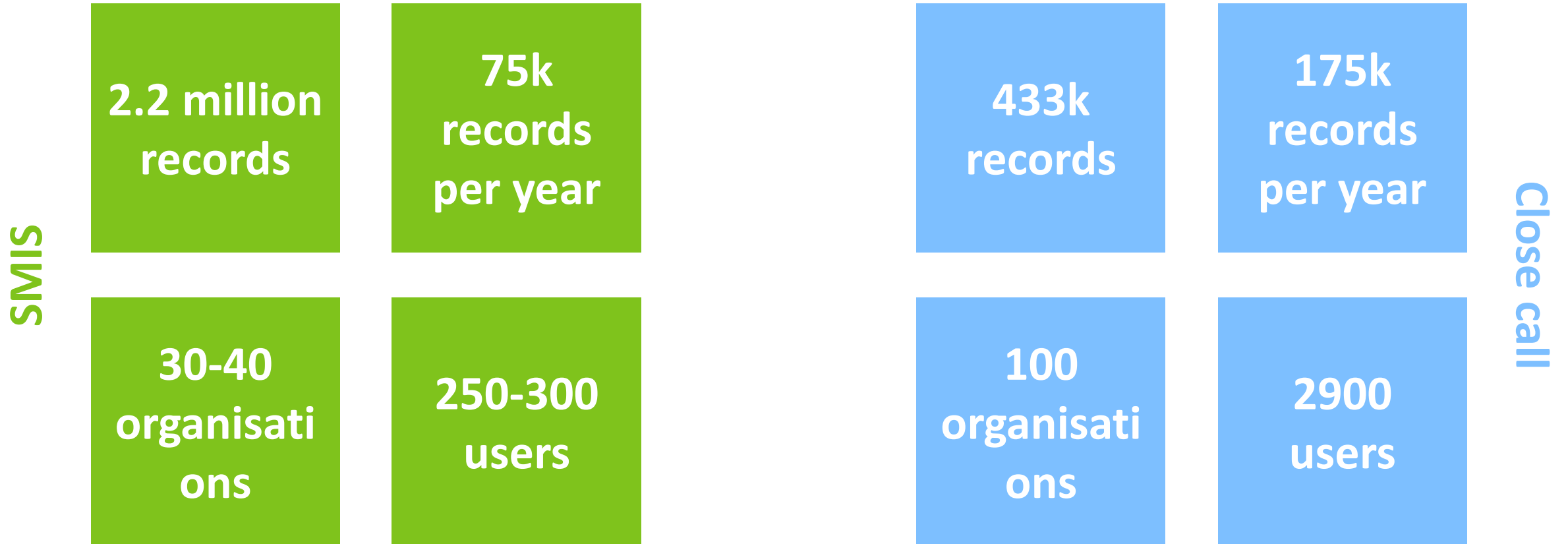
Risk based approach

FS084 - Slip, trip or fall

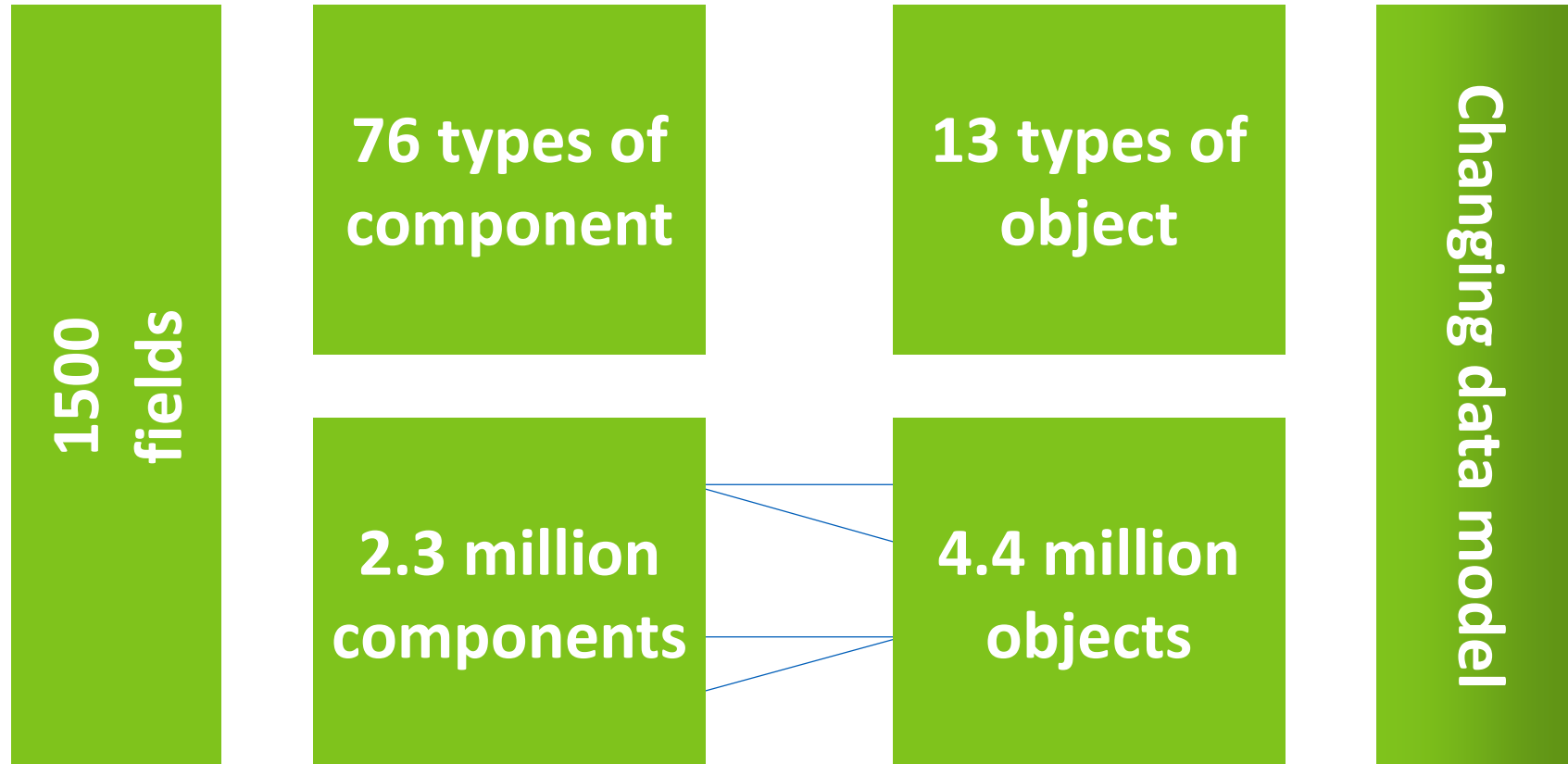


Data migration

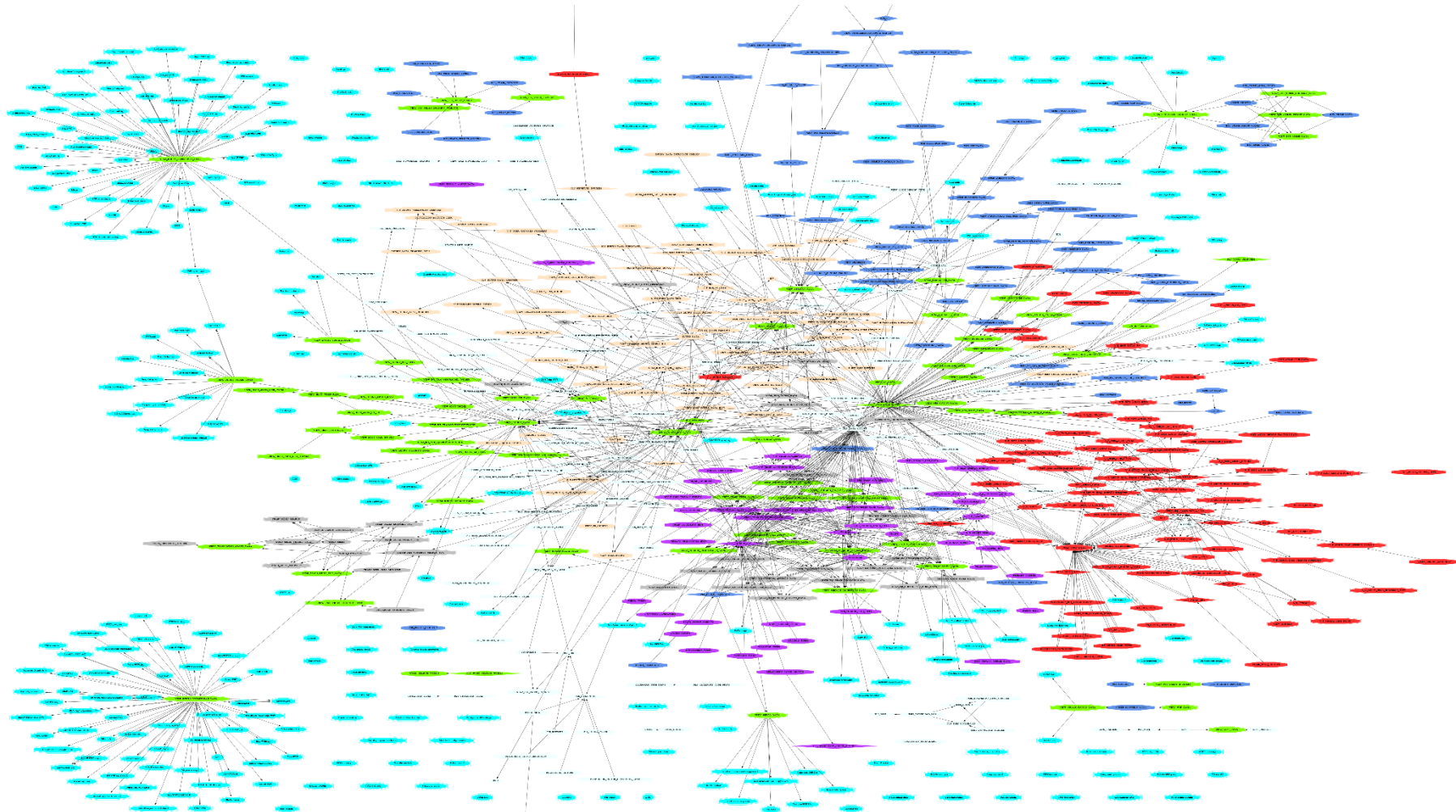
Data migration



Data migration



Data migration

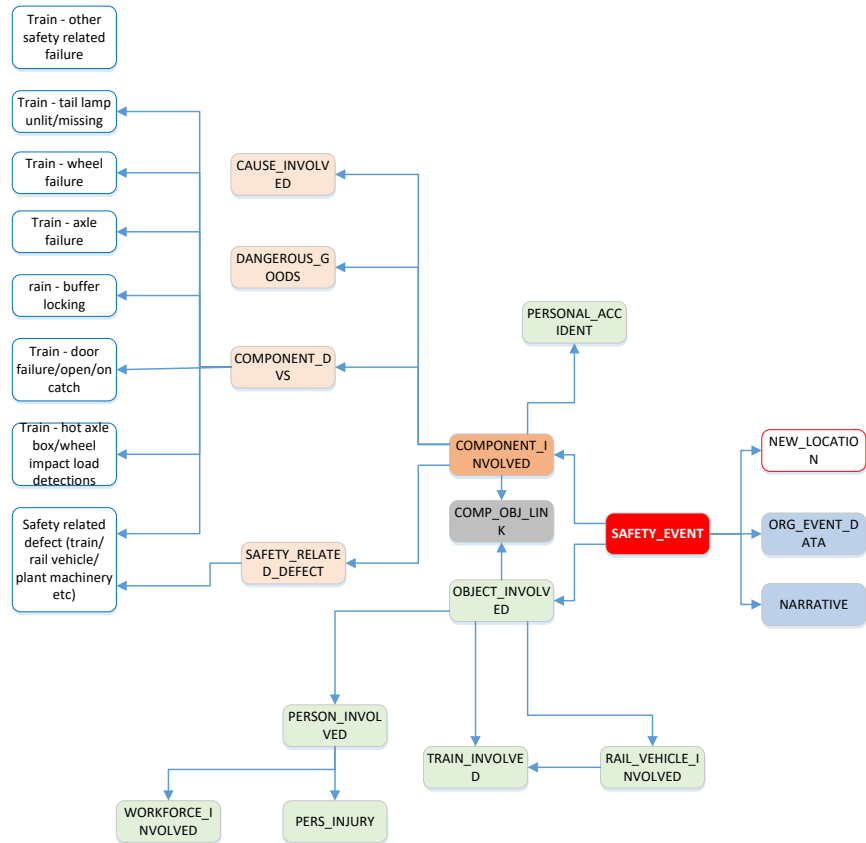


Combined data model and business intelligence

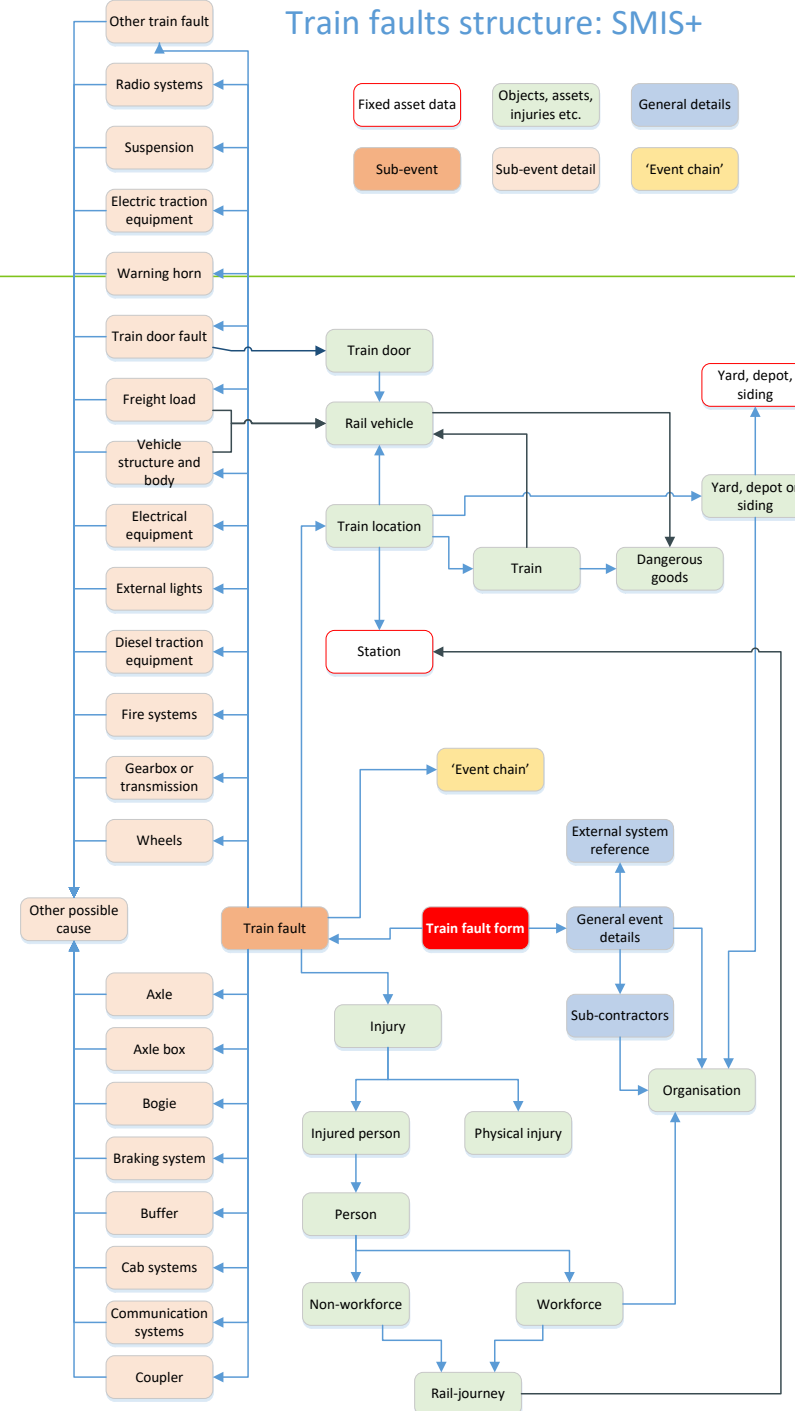
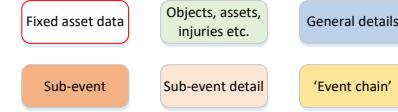
Combined data model



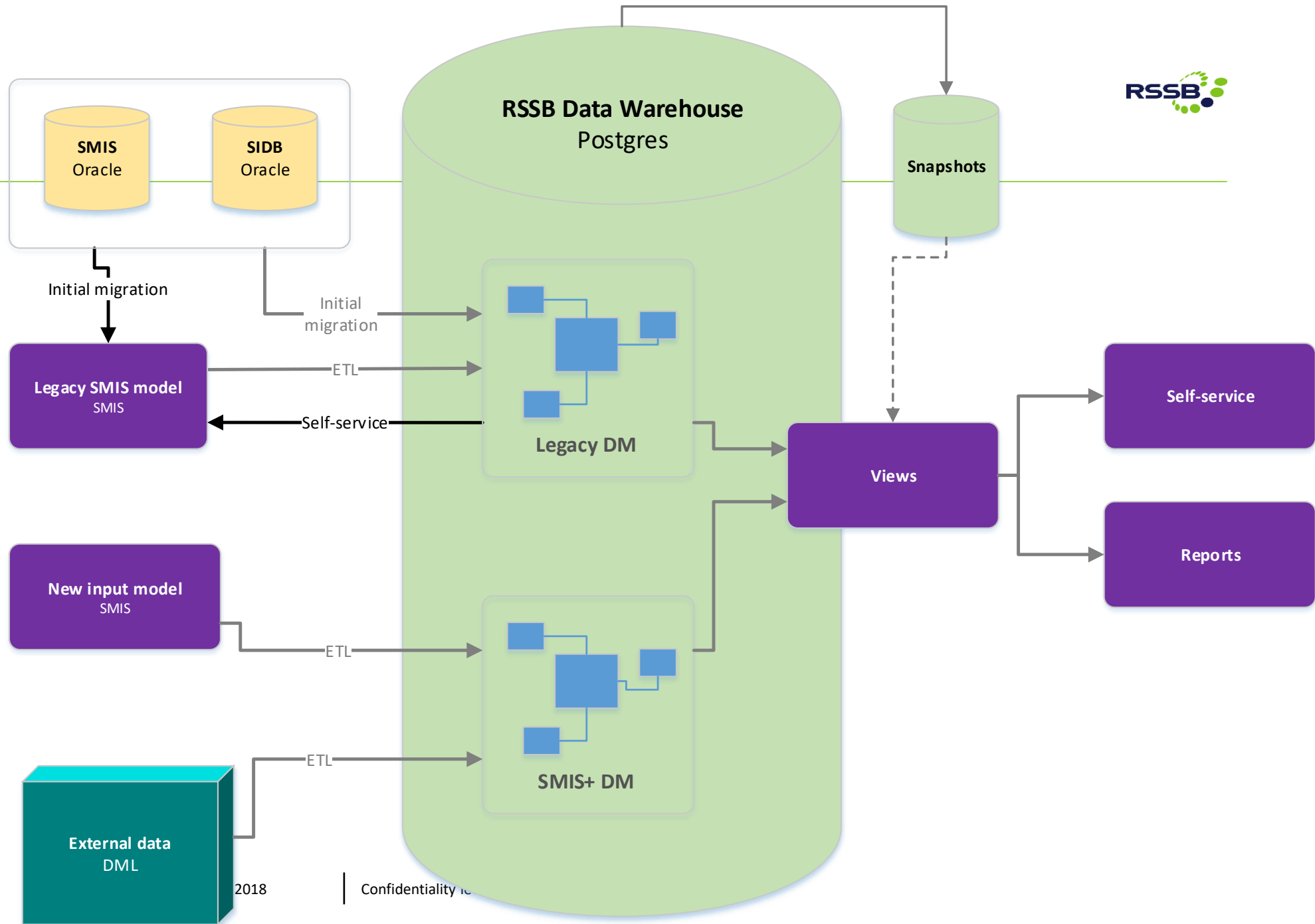
Train faults structure: SMIS



Train faults structure: SMIS+



Architecture



New system

New interface

OPEN
SMIS231161 Person interacting with animal, object, vehicle or another person
▼

Owner Alexander Moor	Organisational Unit RSSB	Raised Date 01/06/2017	Raised By Alexander Moor
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Category
⏪ Please select...

REPORT
WORKFLOW
EVALUATION
HISTORY
MAP

- General Event Details
- Person interacting with animal, object, vehicle or another person
- Investigation
- Attachments

▼ **General Event Details**

Which local management area is responsible for the event?
Please select...

When did the event happen? ⊕
30/05/2017 13:30
📅

Briefly describe the event ⊕
A person was struck by a suitcase

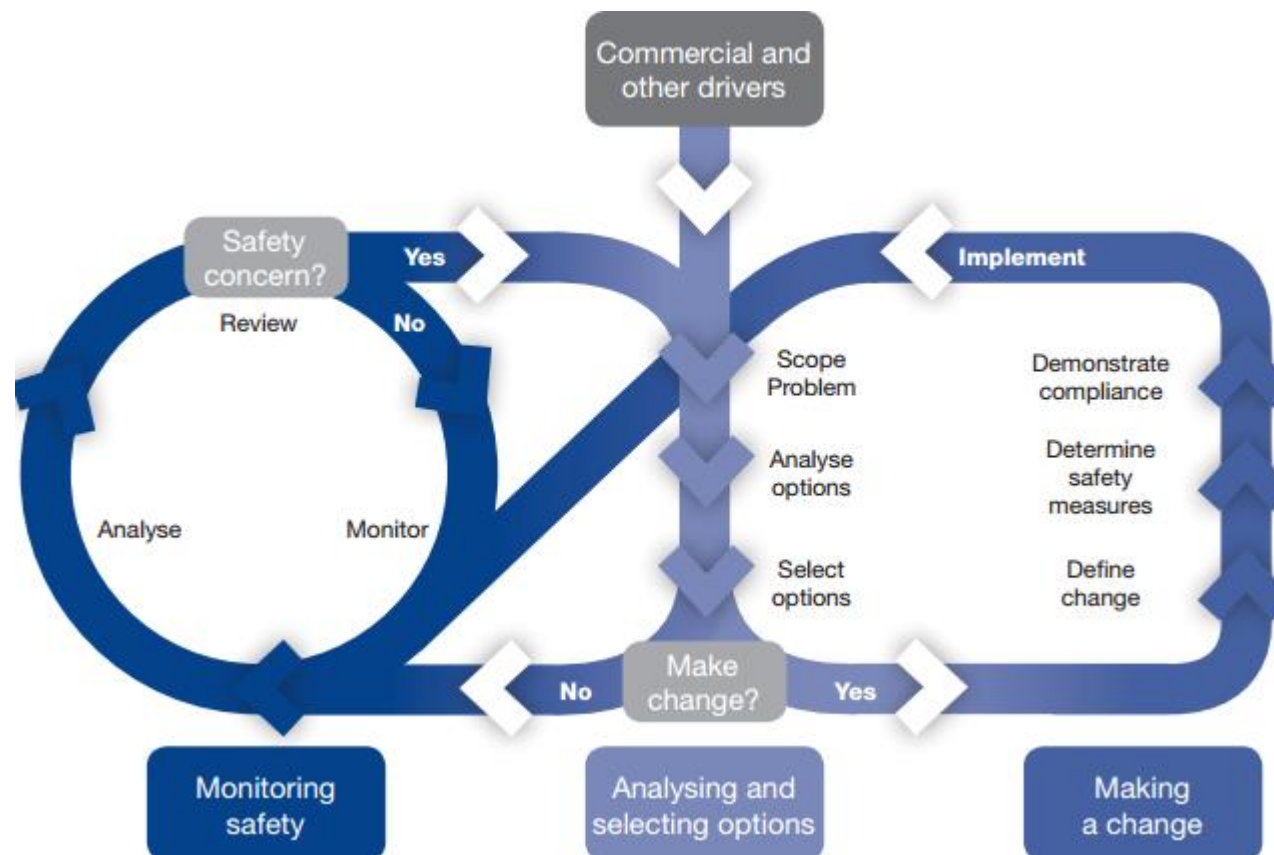
Describe the event in more detail ?
A person was struck by a suitcase which fell from the overhead rack

New workflow

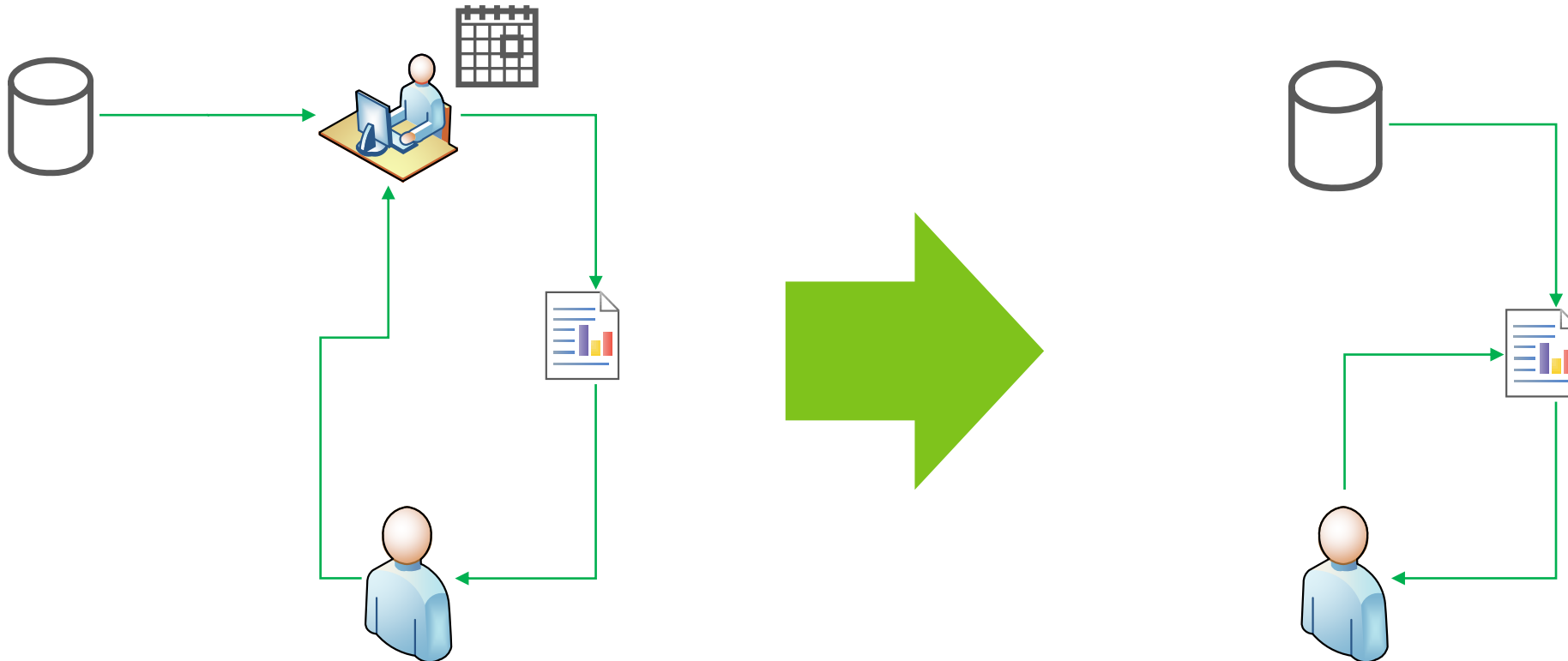
The screenshot displays a workflow management interface. At the top, a dark navigation bar contains icons and labels for REPORT, WORKFLOW, EVALUATION, HISTORY, and MAP. On the left, a sidebar titled 'Workflows (1)' shows a list of workflows, with 'Basic Workflow' selected. Below this, a summary shows 0 stages completed, 1 stage in progress, and 1 stage not started. The main area shows the 'Basic Workflow' details for the 'Task, Transfer and Information Management' stage. The stage status is 'In Progress', the owner is 'Assign Person / Group', and the target date is '08/06/2017'. It also shows 'No Guidance' and 'No Response'. A 'Tasks' section is visible with a plus icon to add more tasks. Below this, a blue arrow points down to a task titled 'Accept the task' with a status of 'Not Started'.

Benefits and applications

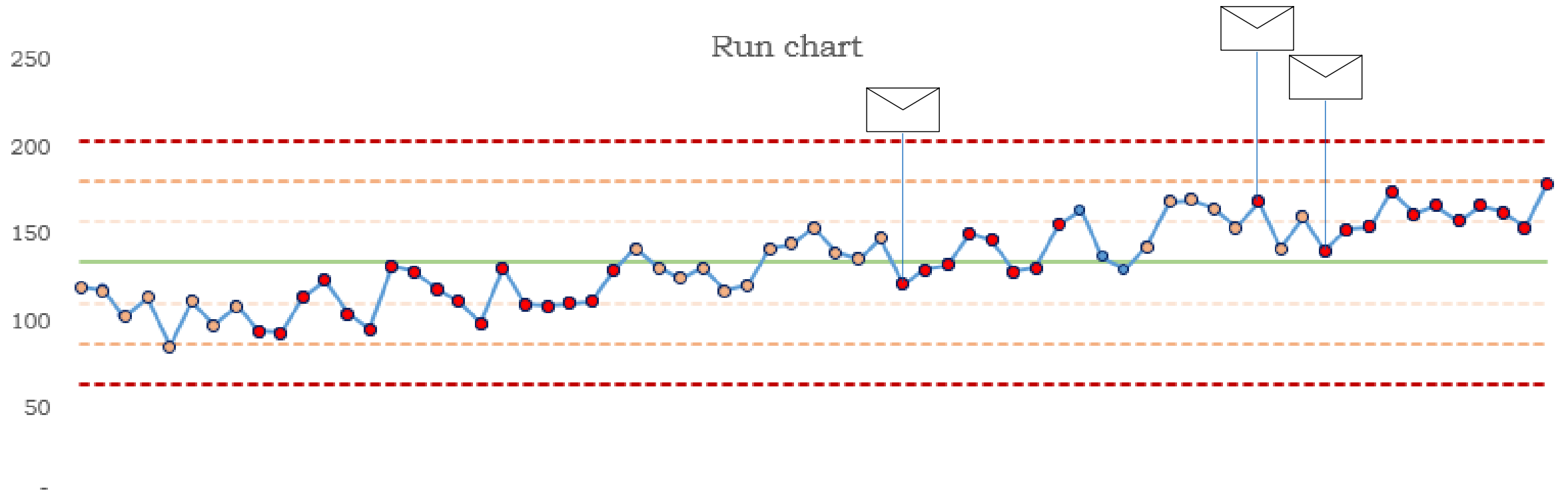
Taking safe decisions



Self service reporting

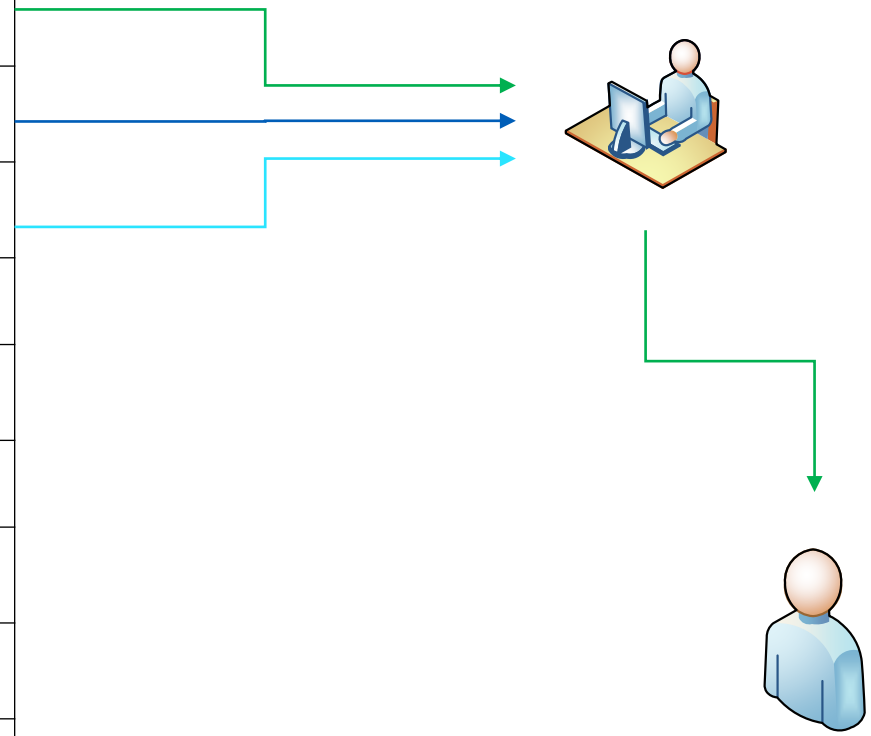


Automated monitoring and alerting



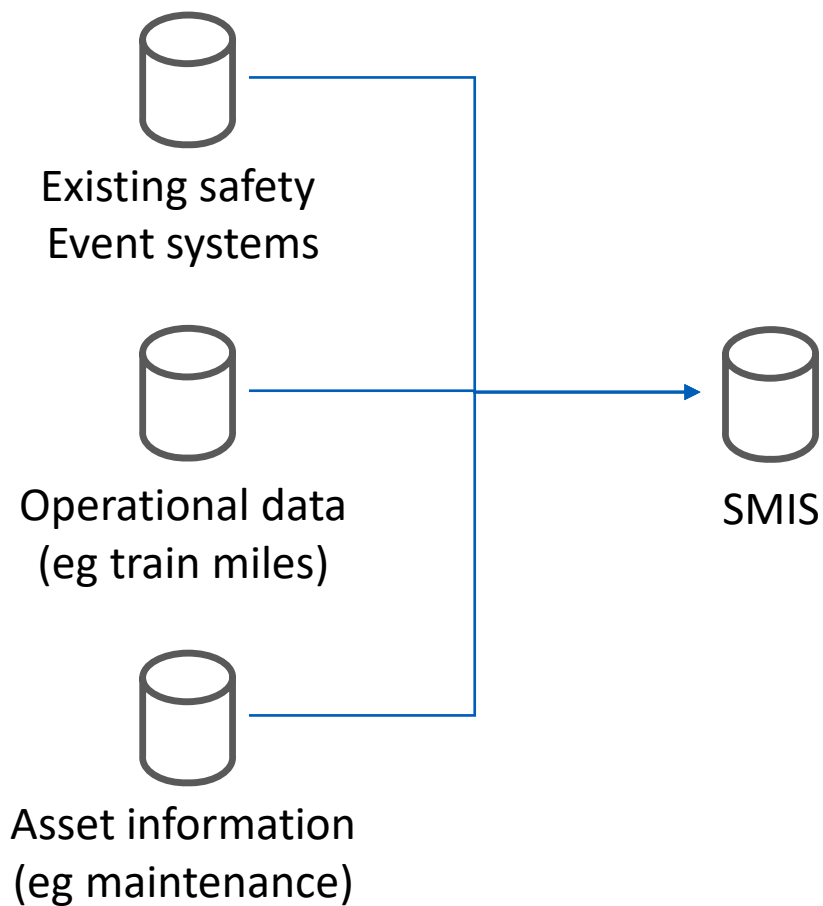
Filtering automated monitoring

measure	stat_test
Monthly assault and abuse incidents	Warrants investigation
Monthly awkward body movement incidents	Warrants investigation
Monthly congestion or crowding incidents	Warrants investigation
Monthly electric shock incidents	Expected observation
Monthly environmental contamination incidents	Warrants investigation
Monthly fire or explosion incidents	Warrants investigation
Monthly incorrect usage of level crossing incidents	Expected observation
Monthly intervening in a suicide or self harm event incidents	Warrants investigation
Monthly irregular signal aspect sequence incidents	Expected observation



Future roadmap

Linking to existing systems and datasets

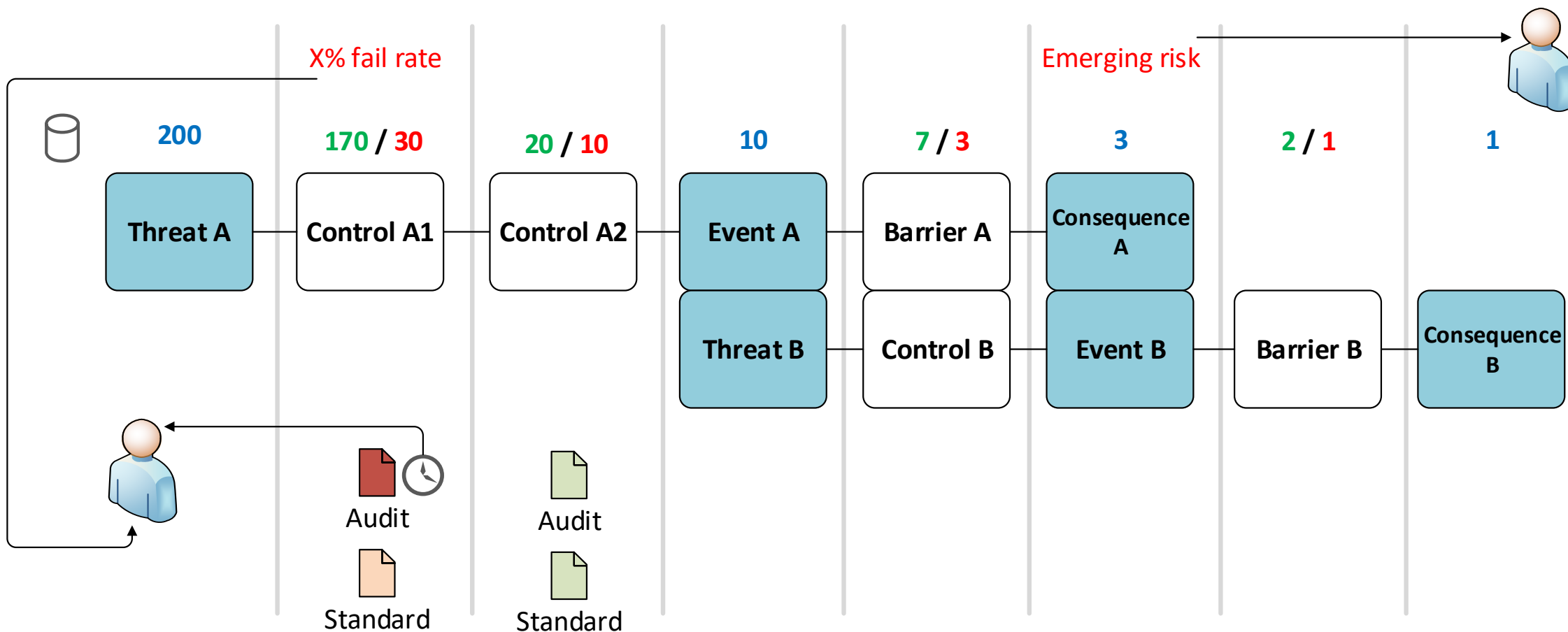


Cost savings (single input)

Single version of the truth

Greater understanding of risk

Integrated bow-ties and risk management



Integrated bow-ties and risk management



Unusually high number of near miss events at level crossings with last maintenance over one year prior



System alerts level crossing manager



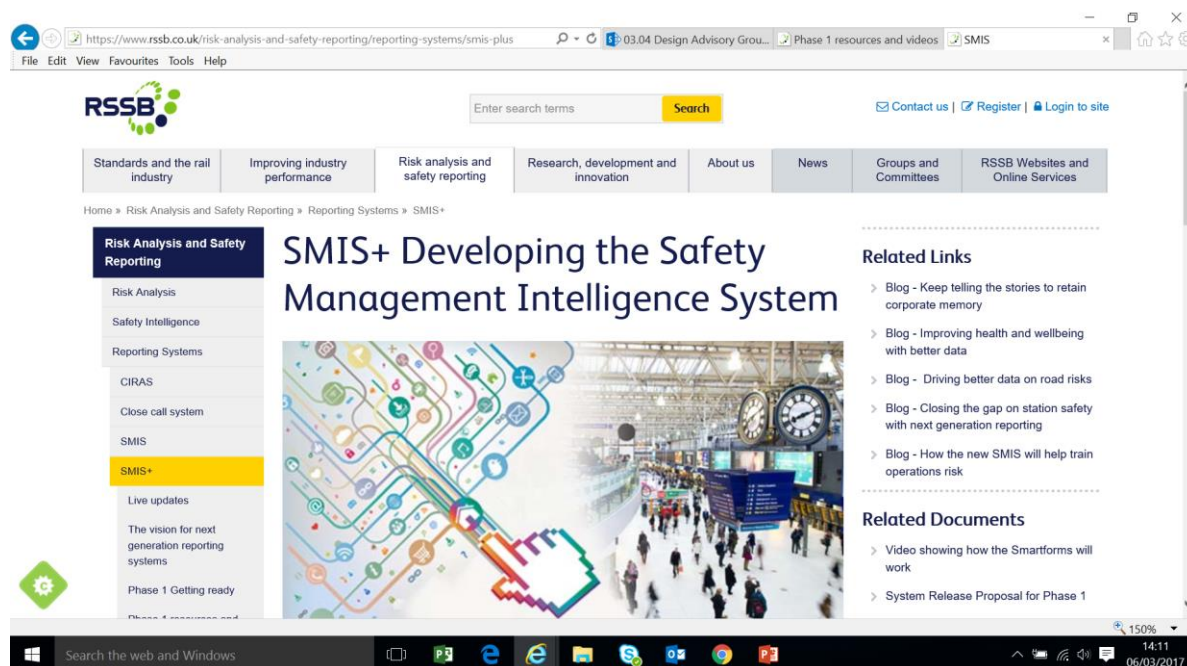
Audit

Maintenance cycle at this level crossing over one year prior

Additional benefits

- Enables future development to incorporate more strategic elements of risk management, including:
 - Training and competence
 - Audit and Inspections
 - Improvement planning
 - Compliance to Group Standards
 - Document Management

More information...



You can also talk to us, or drop us a line at SMIS+@rssb.co.uk

The image features a central horizontal band of bright blue color. Above this band are three vertical rectangular blocks: a light green block on the left, a dark teal block in the middle, and a vibrant green block on the right. Below the blue band are three more vertical rectangular blocks: a medium blue block on the left, a dark navy blue block in the middle, and a dark forest green block on the right. The text "Thank you" is centered within the blue band.

Thank you