The Business Critical Rules programme is changing the way we manage safety, financial and reputational risk in Network Rail to make it simpler, safer and more effective.
Business Critical Rules allow us to manage key risks in a simpler, safer and more effective way

**Simpler**
Focuses on managing key risks and clarifies accountabilities and responsibilities

**Safer**
Enables us to deploy resources to focus on the management of key risks and controls

**More effective**
Enables us to tailor our work so that we can control local risks in the most appropriate way

BCR allows you to tailor your inspection and maintenance regimes according to your local risks, environment and needs
Why do we need BCR?

The rationale for the BCR Programme came from:

- No consistent approach to risk management
- The existing Standards approach does not provide a line of sight from our risks to how we manage them
- A lack of clarity in risk controls and consistency in how their performance is monitored
- No system to permit an identical emphasis on local risk management across the routes
- Roles and Responsibilities are not clear in standards
- The current system was designed to evolve reactively (that is, following a major incident rather than putting preventative measures in place).

As a strategic programme, BCR’s benefits will start to be felt in CP5, however, the full impact will be realised in CP6.
Why do we need BCR?

- 2881 Job Titles
- 4,200 distinct competencies
- 220,000 risks within ARM
- 620,000 individually held competencies
- 844 standards, 9664 controlled documents
- 3,314 Temporary non Compliances
Our vision is to fundamentally change our approach to management of risk

**Concept**

What?

Replacing existing ‘standards framework’ with the simpler, risk-based Business Critical Rules framework

Using technology and innovation so that people can easily access the information they need

Making sure that our people have the skills and knowledge they need to use the new framework

How?

Developing the BCR framework and Rules for each asset/national function

Developing e-role manuals providing easy access to the information they need, when they need it

Developing skills and competences so everyone understands how to take a risk-based approach
The framework focuses on understanding major loss events, and their implications

Our Approach

Key Loss Event
- Commercial failure
- Safety Incidents
- Loss of Reputation

Identification of Risk

Articulation of Controls
- Means of Control A
- Rule A
- Critical Limit 1
- Means of Control B
- Rule B
- Critical Limit 2

The Business Critical Rules Framework

BowTies
- Means of Assurance
- CI Process: Incl. PDR & Knowledge Share
- Risk controlled working environment

Rules
- Capabilities and training
- Guidance and Reference Material

Controls
- Behaviour and safety culture

CI Process: Incl. PDR & Knowledge Share

Risk controlled working environment

Behaviour and safety culture

Capability and training

Guidance and Reference Material
The principles of the BCR framework

- Entirely based on risk and our ability to control it
- Simplifies the Standards system by clarifying our information and making it easily available to those who need it
- Role-based, defining clear accountability for the key controls that manage risk
- Continuous improvement review cycle built in to enable control owners to manage risk where it is best understood
- Clarity of the Rules will make enforcement and assurance more straightforward

The BCR framework will tighten control around things that really matter, and loosen control where increased flexibility offers efficiencies and productivity gains.
We already have 10 Business Critical Rules...

- **Working responsibly**
  - Always be sure the required plans and permits are in place, before you start a job or go on or near the line.
  - Always use equipment that is fit for its intended purpose.
  - Never undertake any job unless you have been trained and assessed as competent.
  - Never work or drive while under the influence of drugs or alcohol.

- **Driving**
  - Never use a hand-held or hands-free phone, or programme any other mobile device, while driving.
  - Always obey the speed limit and wear a seat belt.

- **Working at height**
  - Always use a safety harness when working at height, unless other protection is in place.

- **Working with moving equipment**
  - Never enter the agreed exclusion zone, unless directed to by the person in charge.

- **Working with electricity**
  - Always test before applying earths or straps.
  - Never assume equipment is isolated – always test before touch.

...our 10 Lifesaving Rules
What does BCR do for individuals?

• BCR provides a more flexible approach for how you manage your risk content
• BCR links top risk with your training and competence
• BCR gives you an on-line role manual
• BCR links to the assurance and audit regime, and allows you to see how effective your local controls are
What are the principles of our framework?

Our top risks are in our BowTies, which details the controls for how we can manage our risks.

Our Business Critical Rules are rules that we must all follow (including the Life Saving Rules).

The Control Documents tell us what we need to do and who needs to do it.

In the Control Documents we identify who is **accountable** (has to make sure the task or activity is carried out) and who is **responsible** (actually has to carry out the task or activity).

We then make sure those who are accountable and responsible have the skills and knowledge to successfully carry out the necessary processes and tasks, through the Role Based Capability Programme (RBC).
The BCR change programme will link risks to rules, through controls and clarifying role accountabilities.

**Risks**
- Systematic assessment of risk using the **BOW TIE** method

**Rules**
- Core technical and cultural requirements for **everyone** in Network Rail

**Roles**
- Specific guidance on relevant risks, means of control in the role and competency required

**A simpler, safer, more effective railway**
Role Based Capability will provide the framework to equip staff with the skills they need.

Applying a risk based approach to competence management

Building role based programmes covering all aspects of the role, not just technical

Values & Behaviours

Application Leadership & Management

Business / System skills

Technical skills

Reduced workload in managing low risk activities

Applying additional effort to managing high risk competence

This system will develop the confidence to challenge unsafe activity and can work more collaboratively in order to improve overall performance.
The BCR Framework consists of the elements necessary to sustain and enhance risk control in the future.

- Maintain BCR Control Framework Products
  - Provide ongoing review and change control for BCR framework products – Rules, Bowties, Means of Assurance, Limits, Specifications and Role Based Capability.
- Develop and operate BCR on-line
  - A vehicle to deliver the BCR control framework products to the business, and run the Document local change control process.
- Control Status Reporting
  - A vehicle to capture the output of the Line Management self assurance process, and real time reporting on status of individual controls, providing lead indicators for key corporate risks.
- Identify and Promote Good Practice
  - Facilitate a structured process of good practice identification and continuous learning.

The control framework is designed to principles that are consistent with Network Rails existing assurance framework, and flexible, practical and proportionate to risk.
What are the benefits?
Benefits - outcomes of the PLT Trial

• Track Engineers are driving changes as they are seeing the potential benefits locally – will give them greater freedom to use resources that are freed up to carry out other tasks
• Able to see potential benefits in man hours saved and productivity
• Wales/ LNW and Wessex have put forward a number of proposed changes to their means of control
• We’re seeing Means of Control changes that reflect local needs
• Introducing safer ways of working, such as less staff exposure to trains
REPLACING FOOT PATROLS

LNW - replacing foot patrols with trolley patrols

Currently patrol using a Giesmar trolley, three patrols out of four. Every fourth patrol is a foot patrol.

Idea from Preston TME
Use the Giesmar trolley to carry out all patrols.

No red zone working
Less risk of slips, trips and falls
Trolleys can carry tools to do minor repairs
Saves 42 days protection staff days per year

To find out more email bcreamms@networkrail.co.uk
Weld Inspections

Business Critical Rules means of control change

Wales - changes to weld inspections

Current way of working is time-consuming and repetitive

Travel Cast the weld Travel

Within 28 days

Travel Inspect the weld Travel

Current way of working is time-consuming and repetitive

Idea from Wales RME

Competent welding inspector will check a track weld at the time it’s done - instead of the inspector going back to check it within 28 days

Less driving

Defects identified immediately

Reduces red zone working

Lower vehicle running costs

Saves money in travel and hotel costs

Saves weld inspectors one day per week

Compliance backlog?

Switches & crossings enhancements?

To find out more email bcrcomms@networkrail.co.uk
Express Rail Change

**Business Critical Rules**
means of control change

Current rail change process is time and labour intensive, driven by short possession times - costs £494k per year

**Woking delivery unit (Wessex) – express rail change**

4
2
10

4
2
10

**Temporary speed restrictions**

**Overtime**

**Full time**

**Contract welders**

**Idea from Woking TME**

**Express rail change process saves £290k per year**

**Resource cashable £118k**

600 shifts released (£84k)

**Time on track reduced**

**Temporary speed restriction annual delay minutes – better 0.6 per cent 2,250 minutes £90k**

**Opportunity to redeploy 600 unallocated shifts**

- L2 defect removal?
- Vegetation clearance?
- Compliance backlog?
Cab Ride Reduction

**Business Critical Rules**
means of control change

Cab riding to inspect LNE assets is time consuming...

Ideas from Newcastle TME

Suggested changes to cab-riding frequencies - risk assessed change enabled by increase in use of measurement trains

Enables continuous improvement

Helps release benefits from other programmes

Safer - less driving

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**Newcastle (LNE) - cab ride reduction**

- **Track Maintenance Engineer - every 13 weeks**
- **Section Manager - every 8 weeks**

- **Travel to site:**
  - **9½ hours per year**
  - **5½ hours per year**

- **Cab riding:**
  - **322 hours per year**
  - **186 hours per year**

- **Travel back from site:**
  - **9½ hours per year**
  - **5½ hours per year**

- **Paperwork:**
  - **25 hours per year**
  - **13 hours per year**

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**Saving 156 hours per year**

- Compliance?
- Get the benefits from other change programmes?
- Backlog?

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**Business Critical Rules**
We’re all part of it
For more information: BCRPMO@networkrail.co.uk