Standards Efficiency Study

Independent Reporter (Part C) Mandate CN/024
Office of Rail Regulation and Network Rail

Report Summary
5 July 2013

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Introduction

The ORR is seeking to understand the scale and deliverability of safety and efficiency benefits that Network Rail (NR) can achieve by implementing its proposals to simplify its existing Standards regime.

Nichols Group, as a Part C Independent Report (IR), has been appointed by the ORR to understand the benefits realised by comparator organisations through the implementation of similar initiatives, to review Network Rail's Executive Rules programme and provide a view as to whether it will achieve its objectives in an efficient and effective manner. Based on the information gathered from the comparator organisations the IR was asked to provide a view of the range of efficiencies and safety benefit that Network Rail could achieve and over what timescale. The ORR requested that the Review focus in more detail on the Track discipline.

This Report was commissioned to inform the ORR in producing its Draft Determination for Periodic Review 2013 (PR13).

Background & Context

Network Rail currently has 844 standards as part of 9664 controlled documents, 4,200 distinct competencies, 222,000 risks within ARM and 3,314 Temporary Non-Compliances (TNC) to the standards.

Network Rail's existing standards regime has evolved over time and has been developed in such a way as to mitigate as opposed to eliminate risk. Many of the standards were built up using historical data and are now reported to be out-dated, affecting their credibility amongst Network Rail and industry staff. A view that the current standards regime is too complex and cumbersome to be truly effective is widely held in Network Rail.

The ORR has highlighted its growing concern that Network Rail's standards regime is not currently delivering the best risk control in the most effective manner, and that alternative approaches may be available that will help drive forwards excellence in health and safety management and also deliver efficiency benefits.

In accord with the principles of devolution of responsibility to Routes, Network Rail recognises the need to move away from the current 'one-size-fits-all' standards approach to one that promotes local decision-making and awareness of risk control. In doing this however, Network Rail has to be confident that it has the right controls, used in the right way and at the right time to prevent catastrophic incidents from happening.

The Executive Rules Programme (which has recently been re-titled as **Business Critical Rules**) was initiated by Network Rail in 2012 to fundamentally reform the standards regime and to provide simple, clear accountabilities for individuals working within Network Rail - outlining what all staff need to do to run a safe and efficient railway.

Network Rail states that the Rules "will provide a framework to encourage local decision making by staff who can rely on a supportive culture and on a set of documentation which clearly summarises mandatory controls and tolerances."

Network Rail has not publicised quantified efficiency benefits from introducing the Business Critical Rules and has emphasised that their focus is on delivering an improved risk control framework properly to deliver safety benefits, and considering that efficiency benefits may take decades to realise, rather than in the next control period.

Our Approach

The Independent Reporter was requested to deliver mandate CN024 in March 2013.

The approach adopted to undertake the Review is set out in Figure 1 below.

Planning Meeting	Kick Off Meeting	Comparator Analysis & Consultation	Interim Findings & Draft Report	Consultation	Final Report
		• Consultation with 3 comparator organisations – MOD, Shell, Other • Review & analysis of evidence provided*			
		Executive Rules Programme Review **Programme Review** • Consultation with ERP Team, Programme Manager, Head of Training & Development, Head of Standards Development, Senior Sponsor • Review& analysis of evidence provided* **Track Benefits** • Consultation with Wessex Route, Scotland Route, Professional Head Track • Review of evidence provided			
Programme overview by Programme Director, to ORR & IR	Overview of programme by Programme Team		Presentation of interim findings to Programme Director & programme team	Additional consultation identified at interim findings, comments on Report	

Figure 1: Outline of Review Process

This Review by the IR has been undertaken whilst the Rules documentation and implementation plans are still being developed by Network Rail. Accordingly, much of the information used to inform the Review has been gathered through structured interviews held with stakeholders.

The IR presented initial findings and recommendations to the ORR and Network Rail on 24 April, followed by a draft report for review and comment by Network Rail and ORR. A final version of the report was issued on 7 June 2013 and this Report Summary is a stand-alone précis of the full final report.

We would like to thank the Network Rail team for their co-operation during this review and and for their openness during interviews and the reporting process.

Overview of the Executive Rules System

Network Rail has taken a systematic approach to identifying the key risks and hazards facing the organisation (safety, economic, reputation) and then looked at safety risk from a passenger, public and workforce perspective, and identified potential loss events. The approach is underpinned by the 'bow-tie' methodology, where each 'bow-tie' links threats, hazards, consequences and controls.

Through a series of workshops, Network Rail then rationalised to a smaller number of effective barriers which provide the required risk controls. Each barrier has a 'Means of Compliance' (MOC) which are either specified as mandatory or advisory. The other simplification for operational staff is that the relevant Means of Compliance are packaged into a smaller set applicable to each role. A simplified overview of the Executive Rules system is illustrated in Figure 2 below.
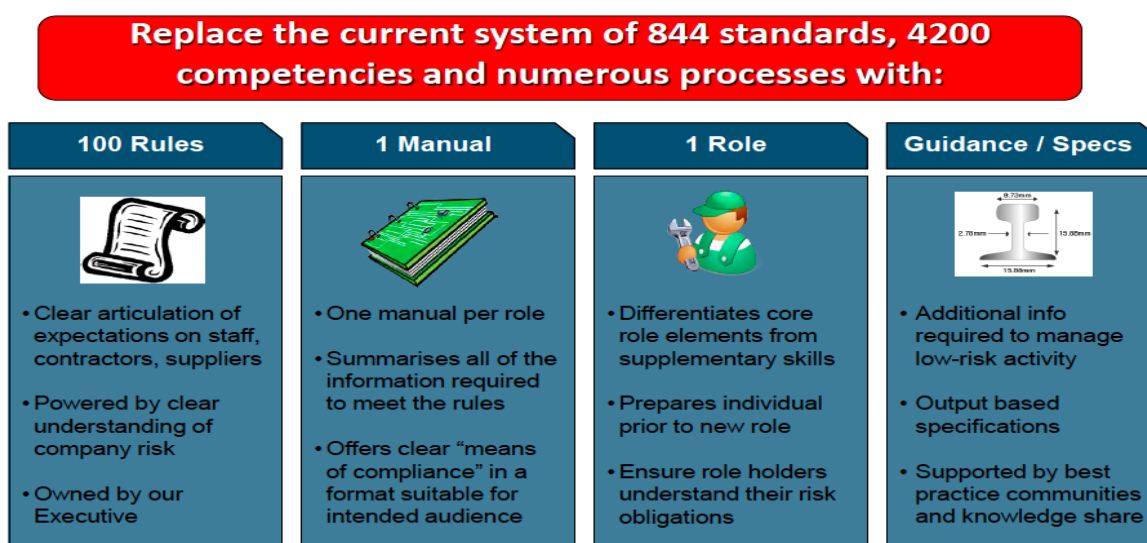

Figure 2: Overview of the Executive Rules System

Summary of Findings

1. Comparator Analysis

Consultation was undertaken by the IR with other similar organisations ('comparators') to understand whether they realised any benefit through implementing similar Rules based regimes; and what was the scale of that benefit. Network Rail identified and proposed the comparator organisations to be consulted.

From our interviews with the comparators, we found that in general the benefits being sought by the comparators are: simplification of their equivalent of the standards regime, and/or safe, reliable and compliant operations. Critically however, we found no evidence of comparators implementing such a system with a primary aim of achieving efficiency benefits.

It is clear from our review that 'compliance' is a key benefit sought by both Network Rail and the comparators. Although the NR Executive Rules Programme has not formally defined 'compliance', we understand it to mean addressing all high-risk operations on a sustained basis.

The comparators did not share if or how benefits were quantified and the level realised following implementation. In terms of timescales, all of the comparators took around 12 to 18 months to achieve simplification changes to their standards systems and between 5 to 7 years to implement across their organisations.

2. ERP Programme Achievability

The IR's view is that the objectives of NR's Executive Rules Programme can be achieved; the programme has been initiated with a "sound basis", however it is still in the development stage and there are a number of key threats to its success that NR will need to manage proactively on an on-going basis. Some of the positive attributes that provide the "sound basis" for the programme are set out in Table 1 and a number of key threats noted by the IR are listed in Table 2.

"sound basis"	Explanation
Concept and vision	These are well founded and proven in other comparable organisations
Systematic approach	e.g. 'bow ties' are being used to document risk/hazard causes and effects
Learning from others	NR have actively sought to learn from other organisations
Senior Commitment	NR's CEO and Director of Safety are champions of ERP

Table 1: Positive Attributes providing a "sound basis"

Threats	Explanation
Implementation	The implementation strategy presented as evidence lacked strategy and detail i.e. it was still being developed at the time of the review. Key issue for implementation is ensuring that there is sufficient knowledgeable support from the ERP Programme team available for the Route teams.
Understanding & 'buy-in' by the Route teams	Positive support for ERP was evident within Route stakeholders; however there was limited understanding of what was coming, how it would be implemented and what support they would be given. Note that briefings of the Route leadership teams was about to start at the time of the review
Continuity of Leadership	The programme enjoys very good senior sponsorship from the Executive at the moment. To make changes on the scale of ERP it will be important that this level of sponsorship is maintained throughout implementation. We heard from comparator organisations the importance of this continuity of leadership and that implementation could take 5 years
Competence	Concerns over the size of the task to build competence of Operational Staff was a regular issue raised during the review and had several facets: • What were the gaps in current competence needed to achieve compliance with mandatory rules • Re-framing Training & Development to be orientated around a role rather than for a specific competence • Development of behavioural competencies necessary to enable more local risk-based decision making
Programme Schedule	The IR only reviewed the schedule to complete the initial ERP product which is forecast to be complete by end of 2013. Completion of this was highly dependant on timely inputs from the Professional Heads to approve the contents of the 'bow-ties' and 'means of compliance'

Table 2: Key Threats to the success of the ERP Programme

3. Investigation of Track Benefits

The ORR requested that the IR investigate the application of ERP to Track standards in more detail. To do this, we interviewed Asset Management staff from both Wessex and Scotland routes. The IR team included a Senior Track Engineer from Aecom, part of the Nichols Group Reporter consortium.

Plain Line Rail asset management was chosen by NR for the proof of concept pilot as the current requirements are already self-contained in one standard TRK001. For the purpose of the pilot this standard has been included as an appendix to the Rail Management Engineer (RME) Role Based Manual (RBM) to make the transition easier.

In developing the 'Track Means of Compliance', the 'Red' and 'Green' levels have been set based on the existing requirements in the Standards. New Limits will only be set if none currently exist.

From the interviews with the Routes, it was anticipated that the key benefit that ERP is likely to bring is to reduce the administrative burden of the Track Section Manager (SM) dealing with non-compliances; currently this is keeping the SM in the office when they should be out on site inspecting the track and monitoring work being done. Also freeing up administrative time for TMEs and SMs will allow them to focus more on the higher risk issues therefore making the Route more compliant than that currently being reported.

Wessex has made a negligible provision for cost saving as a result of standards changes (not explicitly ERP) in CP5. In context this saving is approximately 0.26% for the 5 year period. Scotland route have made no provision for ERP related savings.

The Route representatives view is that ERP implementation will be less of an issue for Track as they are already 'challenging' standards; however Electrification & Power (E&P) and Signalling & Telecomms (S&T) were considered to not be so used to challenging standards.

4. Overall Efficiencies & Benefits

In Network Rail's Strategic Business Plan for CP5, the ERP is introduced and highlighted as a key means of improving safety. Network Rail does not however make the case for or quantify any specific benefits resulting from the implementation of the ERP in CP5.

We note that none of the comparators provided any evidence of quantified benefits from the implementation of a similar regime. They, as does Network Rail, stated that introducing these regimes will improve safety through compliance and are not directly seeking to drive efficiency or cost savings.

Given the timeframes to achieve full compliance noted by the comparators, the compliance benefit to Network Rail will take a considerable time to realise – and there is a risk that it may be compromised if Network Rail is not able to adequately bring its staff up to the requisite level of competency for compliance.

It is clear however that there should be some efficiency savings, due to improved productivity and reduced bureaucracy. For example, it is expected that 'false' non-compliances will be substantially reduced by risk assessing the elements of the current standards that the Routes feel are unnecessarily prescriptive. This will also reduce workload on critical staff such as Section Managers e.g. reduction in reprioritisation of backlog. These have not been quantified by Network Rail or as part of this Review.

The longer-term efficiency saving benefits are linked to achieving a behavioural cultural change which will allow front-line leaders to be more aware of risks/controls, and to enable them to make decisions, when competent, and will encourage staff to think more about the task.

Indirectly, Network Rail notes that a 22% efficiency saving can be achieved in CP5 as a result of rationalisation of HR support 'culture transformation and improved manager capability… rationalisation of standards and competencies which drive the training needs of the workforce and a reduction of training volumes'. This saving is expected to be achieved by re-aligning Training & Development to be role based and therefore more efficiently delivered.

Conclusions

In general, we conclude that the principles behind NR's Executive Rules Programme (ERP) are "sound" and widely supported by those stakeholders consulted.

Whilst much development work has already been undertaken by NR to date, it is clear that there is a very considerable amount of work still to complete development and implementation planning plus there are a significant number of unknowns – particularly around the scale of the gap between the current and future requirements for resource competences.

The comparator organisations consulted struggled to quantify the scale of benefits achieved from the changes to simplify their standards systems. The benefits for these organisations centred around cultural and behavioural change leading to safety, compliance and reliability benefits.

Network Rail has not quantified the efficiency benefits that they expect to achieve through the implementation of ERP in Control Period 5 (CP5). However NR should achieve safety benefits from improved 'compliance' and close monitoring is required to help ensure these benefits are realised.

A number of critical success factors were by identified by the comparators; these included:

- Focusing on the effective management of change

- Educating the whole company in the importance of the system

- Articulating what 'good' looks like

- Establishing performance measures to monitor progress towards full compliance

- Clarifying priorities for compliance

- Regularly reviewing the effectiveness of the system

- Having a small core team that owns, understands and can provide guidance on how the system is meant to work

- Maintaining continuity of the Champions for system implementation.

In assessing Network Rail's current performance against each of these success criteria, we note that Network Rail is generally on the right track for most of the success factors in the development phase.

Recommendations

Given the significance of the changes being brought about and the pace of change being sought through the implementation of the Executive Rules (Business Critical Rules) Programme, it is important that further independent reviews are undertaken to provide both Network Rail and the ORR with an external perspective on the state of implementation, as part of building assurance that the actions Network Rail is taking are appropriate and likely to deliver the intended benefits.

Accordingly, we recommended that a further independent review is undertaken once the findings from the pilot implementation on Plain Line Track have been gathered and a more mature Implementation Plan has been developed in around 6 months from now.

In the meantime, Network Rail should:

- Quantify the scale of the task to close the competency gap and finalise a detailed implementation plan to address this.

- Establish 'go-live readiness' criteria for implementation of each tranche of the Executive Rules.

- Consider and ensure that lessons learnt from the Comparators are addressed in the Implementation Plan e.g. provide proactive support from a team of experts in a central team to the Routes to provide education and support for compliance assessment.

- Quantify the scale of benefits that are sought from the implementation of the ERP and commit to an appropriate timeframe to achieve these benefits e.g. develop a trajectory of forecast compliance achievment

- Undertake closer liaison with other inter-related key programmes, e.g. ORBIS, to highlight interdependencies and potential synergies across change initiatives.