ORR	**RSD Internal Guidance**	RIG-2016-07
	Advice for inspectors on ORR guidance on "Developing and maintaining staff competence"	

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Original 2016 RIG cleared by	Johnny Schute, Deputy Director, Policy, Strategy & Planning, Railway Safety Directorate

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	Information_____x_____ ☐
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	RPP_____x_____ ☐	Inspectors_____x_____ ☐
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Keywords	Competence, non-technical skills, NTS

Summary	This RIG informs inspectors about ORR's guidance "Developing and maintaining staff competence" (RSP1), in particular the content on non-technical skills (NTS).

Original 2016 Consultation	Claire Dickinson (Human Factors); Keith Shepherd (Operations); Neil Anderson (Safety Management Systems); Paul Appleton (Network Rail Division); Gerald Kerr (Rail Operators Team); Ian Bertram (Freight Team); Keith Atkinson (TfL Team).

Subsequent 2018 review	Minor updates only, no consultation.

Detail	1. ORR's guidance booklet RSP1 "*Developing and maintaining staff competence*" was originally published by HSE in 2002 following extensive development by industry representatives. It was well received in the rail industry (and indeed other industries) as outlining good practice in managing competence. In 2007, it was updated to take account of the new ROGS Regulations' requirements on staff competence and fitness.
	2. RSP1 sets out the principles and features of a generic, logical competence management system (CMS), consisting of five Phases, broken down into fifteen generic Principles. Its generic nature makes the overall content inherently "future-proof", and allows the full range of rail duty-holders adequate discretion in devising competence management arrangements to suit their very diverse needs.
	3. Since the 2007 revision, ORR's efforts to ensure that rail organisations have adequate competence management systems included both on-the-ground inspections of CMS arrangements, and nationally-focused efforts including working with RSSB to promote better integration of non-technical skills (NTS) in rail organisations.
	4. As part of ORR's planned programme of regularly reviewing our guidance, in 2016 RSP1 was updated by Specialist Inspectors Team. After internal and external consultation, the clear consensus was that the generic CMS approach advocated in RSP1 was fit-for-purpose due to its high-level, generic nature, and the availability of comprehensive supporting guidance, especially from RSSB. There were no wholesale changes to the updated RSP1, but two aspects were agreed to require improvement and updating, namely:
	a. Adding content on the integration of **non-technical skills (NTS)** into the CMS, including a short new Appendix 2 on NTS, plus small NTS additions to each of the five RSP1 Phases.
	b. **General updating throughout**, especially of the References section, to include in particular the suite of RSSB competence management guidance published since the 2007 edition.
	5. <u>Non-technical skills content</u>
	6. Appendix 2 of the 2016 update of RSP1 outlines what NTS are, and why **integrating** NTS into selection processes and on-going staff development is important in order to properly control risks. Minor NTS additions were also made in each of the five competence phases. Appendix 2 also:
	a. Outlines that although integration of NTS in the CMS is important, it is not in any way a substitute for **good equipment and system design**, which should always remain the priority in eliminating or reducing risk;
	b. Stresses that various classification systems have been devised for NTS, and that in some of these, some of the NTS terms are more closely linked to an individual's personal innate cognitive abilities, behavioural preferences and personality traits (for example conscientiousness, attention to detail and motivation). Such qualities are less amenable to improvement by training and development, and are therefore best addressed during **selection**. When considering how best to ensure that staff have the necessary NTS for a particular role, care is therefore needed to understand the relative importance of :
	i. **selecting** individuals with appropriate personal characteristics and NTS for a particular role at the outset, and;
	ii. **developing** the appropriate NTS in an individual through

training and development.

7. <u>Further NTS materials from ORR inspector NTS Briefing days</u>

    At ORR's request, RSSB ran three NTS Briefing Days for ORR inspectors in spring 2014. Comprehensive materials from the briefing day are on Orrganise / Box at the following link, though inspectors should refer companies to RSSB's website to ensure the latest versions are used https://orr.box.com/s/va76vmr0d5opbmt36r9ty6agh5t56lai .

    In addition, Network Rail outlined how they are seeking to develop improved NTS in key roles including signaller, CoSS and lookout. NR's signaller NTS development DVD-ROM "*Route to Excellence*" is available to ORR inspectors via Specialist Inspectors team.

8. <u>Fitness.</u>

    Appendix 1 of RSP1, which outlines the main requirements on physical and medical fitness aspects of competence, now includes a reference to new, separate more detailed guidance on fitness for work drawn up by Specialist Inspectors Team's Claire Dickinson. This summarises legal aspects of fitness for work and outlines some of the issues arising from recent incidents in rail and other sectors including e.g. medical and psychological fitness and the responsibilities of individuals, employers and healthcare professionals in relation to fitness at work.

Action for inspectors:	When assessing the CMS of duty holders, inspectors are recommended to consider how well the development of appropriate NTS is integrated into the CMS, especially in staff carrying out ROGS safety critical work. The adapted RSSB question-set at **Appendix 1** of this RIG can assist inspectors making such assessments. A proportionate approach should be taken – the greater the risks which could arise from poor NTS, the greater the need to integrate appropriate NTS development into the CMS. It follows that inspectors should think about NTS, as well as technical skills, when assessing duty holders against RM3 criterion OP2 on competence management.
Further information:	• ORR Railway Safety Publication RSP1 "Developing and maintaining staff competence" 2016 edition, available on ORR's website. • Comprehensive guidance on NTS is available to registered users on RSSB's SPARK website at http://www.rssb.co.uk/improving-industry-performance/human-factors/non-technical-skills • Guidance on integrating NTS into wider competence management arrangements is available in RSSB's *Non-technical skills integration – Good Practice Guide,* available at http://www.rssb.co.uk/library/improving-industry-performance/2016-07-non-technical-skills-integration-good-practice-guide.pdf • Inspectors wishing to know more about NTS in various sectors may find useful detail in "*Safety at the Sharp End – a Guide to Non-Technical Skills*" by Flin, O'Connor, & Crichton (Ashgate publishing, 2008). • ORR's 2017 Fitness for work guidance For further information contact Jeremy Mawhood or Claire Dickinson in ORR's Specialist Inspectors Team.

Appendix 1
NTS integration: some evaluation questions

The following questions can be used to help inspectors explore the extent to which NTS are integrated across a company's competence management system. The questions are listed under the five Phases used in ORR's RSP1 publication "*Developing and maintaining staff competence*", and reflect key NTS components of a competence management process.

The effective integration of NTS is a gradual process which in some cases may require a significant culture change, as well as substantial changes to competence management processes. If companies have valid reasons why they have not yet completely integrated NTS, inspectors may wish to explore what plans are in place to move forward in the next 6-12 months.

RSP1 PHASE 1: ESTABLISH REQUIREMENTS FOR THE CMS	
1. The relevance of NTS to safety-critical roles	
Areas to explore	**Comments on company arrangements**
a) How has the relevance of NTS to specific technical tasks been explored and documented? Has the company used a well-founded methodology for identifying NTS relevant to their operations, for example the approach outlined in "*Safety at the sharp end*" (Flin, O'Connor & Crichton) or in RSSB's suite of NTS and associated guidance for the train driver and train dispatch roles?	
b) Has the company prioritised NTS integration for any specific roles? What is the reasoning behind this?	
2. Defining what good looks like : Selection criteria and competence standards	
a) Are basic levels of NTS incorporated into the selection criteria used for safety critical staff roles? (For instance, the train driver selection process in RIS 3751 integrates NTS into the driver selection process).	
b) Do the competence standards for safety critical staff make reference to appropriate NTS?	
c) Are NTS embedded into competence standards i.e. used to explain what good performance looks like for specific technical tasks, or treated as a separate "bolt on?" (ORR & RSSB recommend all companies move towards an integrated approach).	
RSP1 PHASES 2 AND 3: DESIGNING AND IMPLEMENTING THE CMS	
3. Upskilling staff : Training	
a. Can the organisation show how training incorporates NTS relevant to the risks in the role in question?	

b) Is appropriate NTS training provided to all staff in safety critical roles (including more experienced staff)? Does this include : • How NTS can help anticipate, identify and mitigate the risks in their role, including human error? • How NTS support technical tasks i.e. used to explain what good performance looks like for specific technical tasks, or treated as a separate "bolt-on"? • On-going training / briefing e.g. highlight risks and how NTS can be used to prevent, manage and mitigate such risks?	
c) Is appropriate NTS training provided to staff (e.g. trainers, assessors, supervisors, managers) involved in managing the competence of staff in safety critical roles? Does this cover : • Effective observation, measurement and feedback on NTS? • How to use behavioural indicators to measure NTS? • Appropriate questioning and feedback methods to support staff development? • That the appropriate NTS culture is not using NTS in isolation as a pass/fail criterion, or as a means to "blame" staff – a certain amount of human error is inevitable.	
d) Is training delivered by enthusiastic, knowledgeable facilitators who engage with delegates, drawing on their delegates' existing skills and knowledge?	
e) Which other, if any, methods has the company used to raise staff awareness of the role of NTS in managing risk (e.g. company magazines with case studies, case studies discussed on safety briefing days etc)?	
RSP1 PHASES 4 & 5:	
4. **On-going support : feedback**	
a) Does the feedback given during assessments include how NTS can help explain positive or negative technical performance?	

b) Does the company support the position that existing staff should not be able to "fail "an assessment based on NTS alone ("failure" should rather relate to failing to satisfactorily perform a technical task)? c) Are performance measurements treated as an opportunity to learn and improve? Are good NTS recognised? Do constructive conversations take place to discuss how NTS could be improved? d) Are performance measurements examined collectively for emerging patterns and themes? Is this information used to feed back into ongoing training and development initiatives?	
5. Evaluation : Training feedback and incident investigation	
a) How does the company capture feedback on its NTS training and feed this into improvements? b) How does the company ensure that staff involved in incident investigation have sufficient understanding of NTS? c) Do development/action plans produced as a result of incident investigation include, where applicable, advice on how to develop NTS? d) What processes are in place to evaluate the effectiveness of identifying contributory NTS in incident investigations? e) Are incident investigations examined collectively for emerging patterns and themes? Is this information used to feedback into ongoing training and development initiatives?	

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