Background
This project reviewed the current situation in the industry and highlighted areas for improvement in the professional development of trainers and trainer managers. Railway Group Standards RT/GO 3251 and RT/GO 3260 are due to be withdrawn, and the industry defined a need for some other form of guidance in these areas.

This research builds on comparisons between current rail industry practice and best practice in other safety-critical industries and has delivered a number of competence checklists and recommendations which have been agreed with and are being taken forward within the industry.

Aims
The underlying aim of the project was to analyse and define what knowledge and skill level trainers and trainer managers need to enable them to deliver effective, competent training and development programmes for the rail industry. Within the rail industry, a trainer's role is expected to cover the following:

- analysing training needs
- designing curricula and programmes
- designing training material
- selecting suitable training methods
- delivering training
- creating a learning organisation
- assessing the trainee
- providing feedback to the trainee
- conducting training evaluation
- continuous professional development

Current procedures and processes were examined and compared against best practice to assess where gaps may exist. Recommendations were made to align rail industry practice with best practice in other safety-critical industries.

Project delivery
The project involved a review of the best practice literature in the ‘trainer competence’ domain. This included revisiting previous rail-industry-specific reports and relevant good practice guides produced by the Rail Safety and Standards Board. Consideration was also given to on-going RSSB research, such as the investigation into the use of e-assessment.

In addition to rail industry literature, a review of academic and research literature was carried out.

Another important element in this work package was to review current practice in other safety-critical industries. Case study examples from the British armed forces, the aviation industry and the Fire Service were provided.
Current practice in the rail industry was assessed through interviews with a broad range of stakeholder companies, including train operating companies, infrastructure engineering companies, Network Rail, external training suppliers, and GoSkills.

The research project was brought together in a one-day workshop, attended by representatives of relevant areas of the industry. Action plans were formulated which highlighted who was responsible for the proposed action, and timescales suggested for completing it.

**Findings**

In the main report, the literature review and current practice findings are clustered into themes that reflect the main tasks that had been identified by RSSB for investigation:

- training design
- training delivery
- training evaluation

Under each theme the associated benchmark competences are provided for trainers.

The report also provides the findings from the stakeholder action planning workshop, which aimed to formulate a way forward for current industry practice and a method for conducting future research that had buy-in from the relevant stakeholders. A number of key priorities were discussed, as follows:

- review of current trainer population, and recruitment and selection to highlight future issues
- balance between technical knowledge and training capability
- use of the new training technologies to support training needs analysis design and delivery
- the form that trainer qualifications / continuous professional development should take
- the support that trainer managers need to carry out their role, and how they can be better supported by industry
- how a fragmented industry can encompass best practice models.

The findings from this discussion on current practices are summarised here:

- Many current recruitment and selection processes do not apply trainer competences in the selection of candidates for trainer roles. Developing a competency-based selection process is an area that requires further consideration.
- The current advertisements for trainer vacancy roles do not always effectively 'sell' the role. Consideration should be given to how to incorporate the attractive elements into advertisements. This may help to increase the pool of applicants for trainer roles.
- Although technical competence is critical, there is no common standard available detailing the skills of delivering training. A minimum set of criteria or qualifications should be considered.
- Further consideration is required of training management competences and how the training management role supports best practice across the whole of the training function. Formalised methods are needed for measuring competence to show whether training functions are delivering what is needed.
- The incorporation of training design activities (such as training needs analyses and course design) into the
training function should be considered.

- The exploitation of e-learning, e-assessment, and other technology advances should be supported, as it was found that some companies demonstrate weakness in these areas. Network Rail and other companies have made progress here, and there are other research projects which could offer guidance. (Previous RSSB project T444)
- Training evaluation improvements are needed, with common evaluation practices required and with an emphasis on raising the frequency and quality of level 3 and 4 evaluations.

Consideration should be given to how good practice can most effectively be shared across the industry, and synergies between companies exploited.

**Recommendations**

A key outcome of the industry workshop was some recommendations to help enhance the competence management of trainers and trainer managers in the future. They are, in brief:

- A planning phase should be undertaken to agree on an approach to achieve the recommended set of actions (referred to below). This could be best addressed by RSSB facilitating a meeting of stakeholders.
- Effort should be focused on those tasks agreed during the stakeholder workshop in the following areas:
  - developing a behavioural competency framework for trainers
  - appropriate use of training technologies
  - developing rail industry-specific trainer qualifications
  - providing support for the Training Manager
  - exploiting best practice
  - Progress and targets should be reviewed at regular intervals.

**Where to Next?**

Some of the initial work has already been incorporated into the Good Practice Guide for Training RS/220. There is considerable interest among the train operating companies to develop a Good Practice Guide covering aspects of trainer competence and management. RSSB plans to disseminate the outcomes at various industry workshops early in 2007. An industry seminar to capture stakeholder input to the next steps of the research may also be helpful to ensure that benefit is disseminated across the industry.

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