

## IRIS sets the quality standard

Jörg Friedel and Guido Huke\*

**M**AY 18 saw the formal introduction of a new set of international standards for the rail industry, allowing equipment manufacturers to apply to a certification body of their choice rather than go through direct auditing by the main systems integrators.

Published in March 2006 by UNIFE, the International Railway Industry Standard (IRIS) is the culmination of a lengthy process to develop an international quality management standard for the rail vehicle sector.

IRIS builds on ISO 9001 (right), so firms which have been accredited to IRIS will not need a separate ISO certification.

IRIS marks the adoption by the rail supply industry of a process already established in the aircraft and automotive industries. A common evaluation system will allow buyers to compare market players world-wide and reduce significantly their expenditure on supplier audits.

Development of the new standards has been undertaken by UNIFE by specialists from Alstom, AnsaldoBreda, Bombardier and Siemens, amongst others. UNIFE has set up an IRIS Management Centre in Brussels to manage a database of approved certification bodies, certificates issued and audit results. An internet portal gives access to the IRIS audit tool and related systems.

### Supply chain focus

The quality of finished goods and the efficiency of the production process can only be improved if all actors in the supply chain contribute equally. Thus the IRIS standard should apply to component sub-suppliers as well as vehicle manufacturers.

IRIS provides a basis for benchmarking suppliers and assessing their quality capability. Unlike ISO 9001, this will not be a 'yes/no' decision, but a point-by-point assessment to give a differentiated ranking for each company. We believe that in practice this will increase competition by

exerting additional pressure on companies' internal improvement processes.

IRIS has created a system of standardised requirements applicable to all suppliers and accepted by any rolling stock manufacturer world-wide. Thus the requirements of rolling stock manufacturers which were fragmented can be harmonised.

The certification of quality management systems according to IRIS will be undertaken by certification bodies authorised by UNIFE, of which there are currently six.

Each evaluation comprises a total of 253 questions, of which 10 are so-called 'knock-out' questions. Open questions are valued at up to four points each, and closed questions at up to two

points each. Subject to the agreement of individual supplier, the evaluation results will be made available on the internet database, and we expect the point score to become a major criterion in the selection and approval of suppliers.

### Building on ISO 9001

The existing ISO 9001 standard has all the benefits and limitations that are associated with a universal standard applicable to any business. However, the underlying principles are suitable as a basis for the development of specific sectoral standards.

Some key aspects of IRIS are an extension of ISO 9001 practice. Others have been supplemented by sectoral-specific details (Table 1), for example 'Review Input' and 'Review Output', 'Design & Development Outputs', 'Purchasing' and 'Control of Monitoring & Measuring Devices'. These will require additional documentation for the quality management system.

Although IRIS is based on ISO 9001, we recognise that its implementation may cause some problems, particularly regarding RAMS and LCC, and the increased requirements for documentation and verification. There is also an initial lack of experience in implementation and use.

Thus the first version of the standard will be subject to additional specifications regarding content and structure. We assume that there will be an initial review of IRIS in the foreseeable future. This will ensure a more comprehensible and consistent integration of the extra requirements into the existing fully-developed structure of ISO 9001.

Despite the inevitable problems of implementation at the beginning, we believe IRIS will become established as a sectoral standard step-by-step. We have been heartened by the evident unity of manufacturers, the commitment of UNIFE and, last but not least, the successful introduction of sectoral standards in other industries. ■

\* Dipl-Ing Guido Huke is Managing Director of Railistics GmbH, and Dipl-Ing Jörg Friedel is responsible for quality management consultancy



Table 1: Key aspects of IRIS - extensions from ISO 9001

- Knowledge management
- Project management on several sites
- Customer relationship management
- Inquiry management
- Project management
- Prototype testing management
- Configuration management
- Supply chain management
- Production planning
- Implementation and after sales service
- RAMS/LCC requirements
- Customisation
- Handling of faulty processes

## GE plans Kazakh assembly plant

GENERAL ELECTRIC announced on May 16 that it is to build a plant in Kazakhstan with the capacity to assemble up to 150 Evolution Series locomotives a year for countries in the former Soviet Union. The following day the Kazakh Prime Minister and the US ambassador laid a ceremonial first brick at the factory site near Astana.

The plant is being developed in conjunction with national rail operator KTZ, which purchased more than 250 locomotive modernisation kits from GE under orders signed in 2003-04. Production of twin-cab locos with AC traction motors will begin in 2008, using 12-cylinder GEVO engines manufactured in Pennsylvania. ■

## Caterpillar progress

CATERPILLAR Inc announced on May 16 that it would acquire Progress Rail Services Inc from One Equity Partners for \$425m in cash, \$375m in stock and stock and assumption of \$200m of debt. JP Morgan Chase buy-out unit OEP had acquired Progress Rail for \$438m in 2005.

Progress Rail has around 3 700 employees at plants in 29 US states, Canada and Mexico. It supplies remanufactured locomotives, wagons and track products and undertakes rolling stock repairs.

'The rail aftermarket services business is a strong fit with our strategic direction and will leverage our remanufacturing capability', said Caterpillar Chairman Jim Owens. ■

### Industry News in Brief

Signalling and control system modelling and development specialist **The Railway Engineering Co** has been bought by **Strainstall Group**. TRE will operate as a separate business within the group.

In April Frankfurt-based transport financing specialist **DVB Bank** registered **DVB Capital Markets LLC** with the US Securities & Exchange Commission as a broker-dealer serving the rail and other land and sea transport markets.

Vossloh Information Technologies' Polish subsidiary **Vossloh IT Polska** officially opened an office in Warszawa on June 1.

On June 14 Dresden University of Technology and Siemens Transportation Systems signed a co-operation agreement covering joint research, teaching and training, with a focus on electric traction systems. Siemens will fund PhD scholarships and provide a honorary professor.

On June 2 trading firm **Alta** signed a €50m contract to supply workshop equipment from seven Czech manufacturers to Yekaterinburg-based wagon builder **FGUP Uralvagonzavod**.