IRIS WIDE OPEN

WITH MORE THAN 450 COMPANIES WORLDWIDE HAVING COMPLETED THE SCHEME, THE IRIS ‘SEAL OF QUALITY’ FOR RAIL IS GAINING TRACTION WITH OPERATORS AND MANUFACTURERS ALIKE. FOUR YEARS AFTER ITS LAUNCH, THE INTERNATIONAL RAILWAY INDUSTRY STANDARD IS ON TARGET TO DELIVER 500 CERTIFICATES BY INNOTRANS IN SEPTEMBER 2010, AND 600 BY THE END OF THE YEAR.

is endorsed and implemented by all the majors in rail production and operations such as Bombardier, Alstom, Siemens and Ansaldo, as well as French Railways (SNCF), Russian Railways (RZD), Swiss Rail (SBB), London Underground and others. The system comprises a standard, an evaluation process plus an audit and scoring methodology supported by software and a website. Using these tools, independent and approved certification bodies are authorised to audit candidates. About 20 audits are at all times under way – either in the final stages or before the certificate is issued – and up to six certificates are issued every week. Today the certification covers rolling stock and signalling parts, but infrastructure will be included shortly.

Similar to the ISO 9001 standard for quality promoted by UNIFE, the European rail industry, the IRIS standard is dedicated to rail. It provides best practices from the sector to give all players – from both industry and operations – a model for sustainable organisation in order to fully comply with today’s specifications and needs. The evaluation process involves four mandatory stages:

- **Readiness review:** this assesses the candidate’s level of preparation and how it meets IRIS prerequisites. Before starting the whole certification process the company must fulfil 12 key questions and if unable to complete them, the process stops here. The responses are checked in the ‘readiness review’ that takes half to one day, depending on the size of the company. Here the auditor pre-analyses the company before
starting the full audit. This avoids wasting time and money for all.

- **Certification audit:** This first complete audit is performed on the full scope of company activity, resulting in a three-year certificate being issued, if successful.
- **Surveillance audit:** 12 and 24 months after the above, a partial assessment confirms the certification.
- **Recertification audit:** 36 months after the certification, companies must be re-assessed to revalidate their certificate for a further three years.

An integral part of the IRIS process is its questionnaire. Successful applicants must provide satisfactory responses to all the 259 questions related to requirements. With just one wrong answer the certificate is refused and the company has exactly 90 days to rectify the weakness or fail. Evidence must then be provided to the auditor that the problem has been resolved. At this point, if the required standard is still not met, the certificate is denied and the applicant must start the whole process from scratch.

**BENEFITS FOR ALL**

Improving business management of rail by incorporating more efficient and effective processes delivers cost reductions across the whole supply chain. With small outfits, having IRIS certification is clearly a competitive advantage: it displays a high level of organisation and the quality of their products. For medium or large companies IRIS is a form of recognition that endows them with a ‘visiting card’ to meet the four major players Bombardier, Alstom, Siemens and AnsaldoBreda and join their supplier list.

Further benefits include improving the quality of products in the supply chain, a more efficient assessment and approval of rail products, lower costs for manufacturers and suppliers, plus more comprehensive and accessible data. The IRIS database www.iris-rail.org provides all interested stakeholders with easy access to all listed certified companies. IRIS aims at being accessible for the whole rail sector by providing several translations of its booklet (English, French, German, Italian, Spanish, Czech and Russian) and also by enabling all IRIS-approved Certification Bodies to participate in the further improvement of the system.

**ORIGINS AND CONTEXT**

Created in 2006, IRIS was the first initiative taken by the rail industry to set a standard for itself. Although market liberalisation is now underway in Europe, the then incumbent operators (excluding the U.K. where the market was already open) owned the trains, issued specifications and were fully responsible for operating them.

Four years ago, the two drivers for establishing IRIS were complaints from operators that the quality of trains was deteriorating and that overlapping audits were costing too much time, energy and money without any marked improvements in the final results. One idea put forward by Alstom, Bombardier and Siemens, plus equipment suppliers Knorr Bremse and Faiveley, was to bring best practices together and build on them. From the earliest days onwards, the philosophy behind IRIS was that when a third, independent party audits a company, then all the others will trust in the results and stop any system audits, to focus solely on auditing their products. This meant that all members could audit according to their own needs for their specific contracts and products. Before that everyone was trying to improve each other’s systems at a very low success rate.

In the U.K. there are leasing companies who purchase the trains, engineering offices who develop the needs and specifications for the trains and operating companies, like Virgin, who run the fleets. This has led to three different entities, plus the industry, providing the rules and quality standard for products. However in the 26 other European Union Member States these three activities are grouped into one entity, i.e. the operator. This means that there is a strong tendency, once trains are built and in operation, for maintenance and refurbishment to be carried out by the operator rather than another better placed third party.

Today the industry is keen to take over this servicing task, rightly claiming that the constructor can do a better job. And so increasingly train builders are introducing maintenance into contracts. For example when Virgin purchased its Pendolino trains for the West Coast Mainline [see Vehicles, p.100], it also signed a 15-year maintenance contract with supplier Alstom. Although the situation is slowly changing, the industry still tends to perform specific tasks such as servicing brakes, where high levels of technical expertise are required, with operators still handling maintenance. This is why IRIS applies to operators like the SNCF, NS and SBB who are trying to adopt best practices in terms of organisation.

Rail operators are joining the IRIS group individually and each developing their own policies or strategies. For example NedTrain (Netherlands) and SBB (Switzerland) want to apply IRIS standards to their maintenance shops, without aiming to obtain global certification for all their operations immediately. Others like the SNCF (France) are considering applying IRIS to their whole supply chain.

Today the initiative to further improve the IRIS system is coming from both industry and operators alike.

A global scheme like IRIS is not yet mandatory in rail, whereas in the automotive and air and industries no product can be delivered if the company is not TS6949 or AS9110 certified; here the bottom line is, "I need the certificate to deliver the goods." Today our objective is not to make IRIS mandatory in order to deliver products, but mandatory in terms of recognition. Put into practice this means focusing on the progressive uptake of best practices. For railway system integrators, successful implementation of IRIS creates a win-win situation in many respects. The benefits to be reaped include:

- enhanced product quality increases across the entire supply chain
- more efficient evaluation and approval of rail products
- lower costs for manufacturers and suppliers
- data is more comprehensive and accessible

**GLOBAL REACH**

The majority of the IRIS board members represent European companies and to date there are no U.S. or Asian member companies. However more than 40 Asian...
companies are currently certified and, in the light of president Obama's decision to invest in rail, in the US IRIS should play a key role in the certification process from the start.

Since 2009 the IRIS Management Centre has held several awareness training sessions in Moscow, where the translation of the new Rev.02 Russian booklet has been presented. The events concluded with a self-check questionnaire to allow participants to assess their understanding. This action is linked to an agreement with NP-UIRE and Russian Rail (RZhD) to back the plan to improve organisation of the Russian supply chain, and ultimately the quality of rail products. Russian Rail has set 2015 as the cut-off date for their suppliers to be IRIS-certified. An IRIS conference took place at the end of July this year in RZhD premises, to address the commitments, assess the status and define steps for progress.

In 2010, another IRIS experience sharing session was organised by ABB and CC-Rail for Swiss companies. The event highlighted the following strengths of the scheme:

- IRIS is used and accepted as a tool for continual improvement in the Swiss rail industry as well as on operator level
- IRIS sets high level requirements and herewith increases the sector standards
- IRIS is becoming increasingly state-of-the-art
- IRIS facilitates synergies with product certification

The remarkable output of IRIS after just four years is the result of constructive team efforts across the rail sector. Operators are now part of
A contract manufacturer of electrical equipment, electrical cable harnesses for railway, trams, carriages, aircrafts as well as for industrial applications.

Scope of products:
- cable harnesses,
- control panels,
- junction boxes,
- terminal blocks,
- electrical cabinets

Our Quality Assurance System is compliant with:
- ISO 9001:2009
- IRIS v02
- EASA Part 21.G as POA

Contact:
AVIOTECH Electric Sp. z o.o.
Klaudyn, ul. Ekonomiczna 14/16
05-080 IZABELIN, Poland
+48 22 752 8305
Fax +48 22 752 8315
E-mail: office@aviotech.pl
www.aviotech.pl