

# IRIS Newsletter n°11

September 2018



# Foreword from UNIFE Director General and I



**Philippe Citroën**  
UNIFE Director General

Dear reader,

Every two years, the rail sector gathers in Berlin to show, discuss, exchange and advertise its strengths and innovations in the transport field.

UNIFE will actively support this event and highlight the recent achievements of the industry while presenting the status on ongoing topics.

For IRIS Certification™, InnoTrans is placed at a key timing. Firstly, we are analysing the outputs of the ending transition phase of the companies' IRIS certificates to the rev. 03 level. With IRIS Certification™ rev. 03, the sector now has a tool to measure and foster the product performance of the organisations, for the benefit of the whole value chain. Secondly, the launch of the cooperation at sector level through the International Rail Quality Board (IRQB): The IRQB will be able to develop this success, by fine tuning the methodologies and processes needed to continually enhance the confidence and trust in our industry.

I strongly believe that UNIFE's focus on improved quality since more than a decade is now entering in a new area which will bring the rail sector at a highly competitive level in the transport business. This 11th edition of this newsletter will give you a precise insight on IRIS Certification™: testimonies, figures and future expectations.

Enjoy reading and have a splendid InnoTrans 2018 fair.

With best regards,

A handwritten signature in black ink, appearing to read 'Ph Citroën'.

**Philippe Citroën**  
UNIFE Director General

## UNIFE

UNIFE represents the European Rail Industry in Brussels since 1992. The Association gathers more than 100 of Europe's leading large and medium-sized rail supply companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. UNIFE also brings together 14 national rail industry associations of European countries. UNIFE Members have an 84% market share in Europe and supply 46% of the worldwide production of rail equipment and services.

# IRIS Certification™ Chairman

Dear reader,

The IRIS Certification™ rev. 03 is the first and only quality standard that clearly and unequivocally identifies a company's quality performance through the Bronze, Silver and Gold levels. With the completion of the transition phase on September 14, 2018, old certificates lose their validity and the conversion to the new standard has been passed with great success.

The future evolutions of the IRIS system will soon be conducted by the International Rail Quality Board (IRQB). The IRQB is a unique consortium of international rail sector stakeholders, in which representatives from operators, system integrators and companies throughout the whole supply chain will jointly develop the quality performance of the entire sector. This means that the worldwide quality standard IRIS is now being further developed by an international committee.

Enjoy rail quality during InnoTrans.

With best regards,



**Stefan Siegler**  
IRIS Certification™ Chairman



**Stefan Siegler**  
IRIS Certification™  
Chairman

## IRIS Certification™

IRIS (International Railway Industry Standard) Certification™ promotes high quality throughout the rail supply industry through the implementation of a global system for the evaluation of companies supplying the rail sector.

IRIS Certification™ aims to improve the quality and reliability of the rail products, to implement and further develop a global system for the evaluation of companies supplying the rail sector, and to instill a culture of quality throughout the sector.

The IRIS Certification™ rev. 03 system was developed by rail sector stakeholders and is managed by the IRIS Management Centre.

# Testimonies from IRIS certified companies

## The view of Michael Betz, Quality Management Rail, Schaeffler Connect - about customer satisfaction and stakeholder analysis.



Due to the implementation of ISO/TS 22163 and IRIS rev. 03, a new increased focus had been generated on customers as well as on all affected stakeholder perceptions.

Requirements given by ISO 9001:2015 and IATF 16949 are no longer enough to satisfy the challenging requests from IRIS Certification™. The way to reach

customer satisfaction asks for a more detailed and more precise management.

Customer perception is one of the most important entrepreneurial keys of a successful relationship between the contractual partners. This term is not a stand-alone channel. It is rather a combination of several actions and processes which finally cover internal and external interrelations. Especially within the B2B market for system and product suppliers gathering feedback and evaluations could be challenging. The pro-active gaining of information is one of the essential steps, though additional possibilities like analysis of complaints, monitoring of delivery reliability from different views like sales or production aspects must be recognised. In addition, a complete breakdown of the

stakeholder's expectations must be done regularly and associated to the decisive and mandatory processes of the enterprise. The increase of the effectiveness will be achieved by doing this.

Even by holding numerous certificates and utilizing rather well integrated Management Systems used for Automotive, Industry and Aerospace within the same company, a specific handling will be obliged to fulfill the new railway requirements.

Nevertheless, all necessary efforts will finally end in an assessed benefit: The transition of IRIS requirements and the constant monitoring and improvement of the implemented processes will make us close to the customer.

## The view of Reiner Engels, Quality Manager, FOGTEC - about customer satisfaction and performance evaluation.



Achieving maximum customer satisfaction and long-term sustainable customer loyalty is the key objective of our business activities. Regular customer satisfaction surveys and dedicated analysis of them as part of the management review are proved to be an effective tool. The newly implemented stakeholder analysis promotes awareness for opportunities and risks. As a result, we have rebuilt our key performance indicator system

(KPI's) and structured our financial KPI's, customer-specific KPI's, KPI's for internal processes, KPIs for organizational development and sales, which we believe is a much more target-oriented approach.

In addition to the targets resulting from the stakeholder analysis, the measures and activities addressed based on this analysis have an important role. Such actions and measures are the FOGTEC involvement in the development

committees of norms and standards, the completion of the FOGTEC product portfolio, obtaining new approvals, design optimizations by value analysis, benchmarks of competitors, FOGTEC exhibition participation, exchange of experience and expansion of partnerships with external partners.

The detailed stakeholder analysis and the revised performance indicator system have helped us once again to better focus on

customer needs. The challenge here was to define adequate key figures that are sufficiently meaningful, reproducibly measurable and can be determined with justifiable effort. Many KPI's determined from the ERP system. The simultaneous introduction of our new ERP-System was an additional challenge.

Furthermore, the requirements of ISO 9001:2015 have already shown that processes must be critically scrutinized against opportunities

and risk considerations. In addition, the requirements of ISO/TS 22163 have brought additional key aspects. To manage this, the turtle diagrams were an excellent tool to critically reflect core processes. In some departments, processes have been completely remapped. Even after successfully passing the ISO/TS 22163 audit, we have recognized further potential for improvement in our business management system and will continue to improve it.

## The view of Susumo Sato, General Manager Quality Assurance Department, at Nabtesco Corporation, about ISO/TS 22163 requirements and IRIS Certification™ rules rev. 03.

Which is your experience by the implementation of the ISO/TS 22163 in your organization and where do you see the strengths of the requirements for your organization and products?

Although the configuration of the standard has changed drastically with the transition from IRIS rev. 02 to rev. 03, the standard system is reconfigured in the order of PDCA. It became logical and easy to understand, and Nabtesco found that it became easier to use for business activities.

In terms of the revised points of the requirements, utilization of process approach and an emphasis on risk assessment are characteristics, in business activities. It is important to clearly define necessary elements such as input - output of each process, competence of people, activity indicators, assuming risks and opportunities in advance, are very important tasks, to prevent defects and identify improvements.

I see this quality management system as a “strength” in business activities in the future, leading to improvement of quality and customer satisfaction.

Based on your experience with the transition audit to IRIS rev. 03, what are your expectations related to the IRIS rev. 03 assessment methodology and certification process?

In the IRIS audit, not only the conformity with standards is required, but also the effectiveness and performance of activities are evaluated by the auditors. I believe that utilizing the IRIS Certification™ system is significant. By checking the validity of activities at the gates of each stage according to the IRIS system, we hope that rework will be reduced, hence achieving further speed up and cost reduction.

In addition, the effectiveness of IRIS Certification™, which is a third-party certification, and I believe



that we can be trusted by customers even who have no or a few business records with us, due to acquiring IRIS Certification™. Furthermore, while ISO 9001 has been simplified by reducing the requirements in the 2015 revision, IRIS requires additional requirements, and it is rather tough. Therefore, I expect that the value of IRIS Certification™ will increase further in the future. We hope that IRIS Certification™ will fully demonstrate its effect and lead to the growth of our company as we operate globally.

# Control of the IRIS scheme

The launch of the IRIS rev. 03 system on the 1st of June 2017, marked the start of the transition phase for companies already IRIS certified according to rev. 02. Due to the fact that the IRIS Certification™ system is based on the ISO 9001, the deadline for the transition phase was set on September 14th 2018, in line with all other topical management systems.

**All IRIS certificates rev. 02 expired on September 14th 2018**, even if a later date was mentioned on the certificate document. This has been communicated several times since June 2017, to all stakeholders by different means and mainly through the IRIS Portal.

The past fifteen (15) months have demonstrated a considerable interest and work from all involved parties to achieve this target, taking into account that the implementation of the ISO 9001, published since 2015, was not fully implemented in all rail companies.

**The challenges of the main parties could be summarized as follows:**

**IRIS certified companies:** understanding the rail specific requirements from ISO/TS 22163:2017 and implementing them in their own organization by ensuring the fulfillment of the IRIS Certification™ rules, especially the new elements: performance evaluation and reinforced customer satisfaction.

**IRIS approved certification bodies and auditors:** managing the planning, scheduling the transition audits and supporting their clients in this process, as well as the coordination of the IRIS approved and re-trained auditors, to ensure the audits at their clients worldwide.

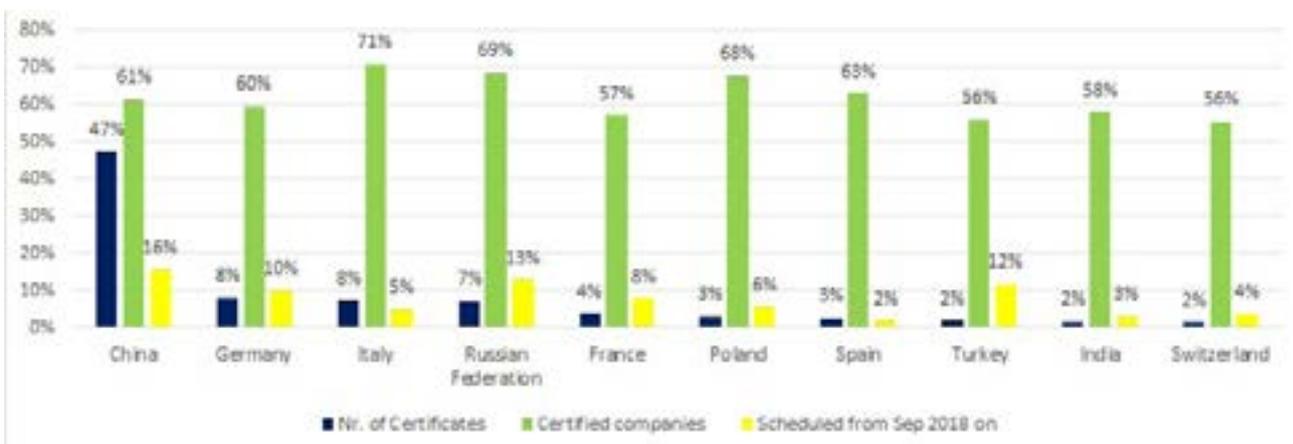
Furthermore, the IRIS Boards were following the monthly status of the transition phase, to ensure the proper support to the stakeholders. One of the essential steps in ensuring the proper deployment of the new IRIS Certification™ system, was the re-qualification of all approved auditors in the first semester 2017 and additional six (6) IRIS trainings in Europe and Asia for initial qualification of new IRIS auditors.

Monthly status reporting from the certification bodies and feedbacks from companies, were the input for further actions, such as e-seminars, letters to companies, trainings and further qualification of auditors, through scope extensions and/or lead auditor upgrades and clarification documents.

The involvement of all stakeholders and the above described activities, supported the success of the transition phase. More than 85% of the IRIS certified companies successfully passed the transition audit and are now IRIS certified according IRIS Certification™ rev. 03. Few companies are still in the process of closing their CARs within the allowed timeframe and others will perform a rev. 03 audit in the coming months.

IMC will still continue monitoring and controlling the system through witness and office audits, to ensure the application of the IRIS rev. 03 rules and thereby give all stakeholders the needed trust and expected confidence.

We still encourage the remaining companies, that have not undergone the transition audit and/or have not decided thus far, to accelerate their decision and start the process to ensure their supplies to the rail sector.



**Figure 1: TOP 10 countries - market share vs transition implementation**

# Feedback on requirements application

The IRIS Certification™ rev. 03 is composed of two primary references: the ISO/TS 22163:2017 and the IRIS Certification™ rules:2017.

The ISO/TS 22163:2017, is owned and managed by ISO. It contains the requirements of the ISO 9001:2015 Standard and the supplemental rail-specific requirements. These requirements are assessed during an IRIS rev. 03 audit for compliance to the standard and to the IRIS Certification™ rules:2017 published by UNIFE.

The number of performed IRIS rev. 03 audits gives an objective overview of strengths and weaknesses of the rail sector based on the application of requirements and the results of the audits.

The following analysis shows the grade of implementation of the requirements based on the raised Corrective Actions (CARs) and the potential areas for improvements with the raised Improvement Actions (IARs) during the transition audit.

It may illustrate a trend, however some points need to be taken into consideration:

- Limited period for the transition phase
- Different understanding of requirements and therefore light implementation
- Short time for organization actions and improvements

### Corrective Actions (CARs)

The analysis of CARs (see Figure 2) is based on a representative number of audits IRIS rev. 03 (1000 audits), with an average of 2.5 CARs per audit. This analysis demonstrates that the major number of CARs (86%) are scored in the assessment sheet with “poor” (1

point) and the ones scored with “insufficient” (0 point - requires a Re-Audit on site) are limited. Main weak areas are addressed for “poor” in the rail supplemental requirements, such as Special processes (8.5.1.2), reinforcing the importance for having maintained and strengthened this key requirement in the rail related standard, which was taken out by the ISO 9001.

Also the process reviews (9.4), as new supplemental requirements in the ISO/TS 22163:2017 seems to be a challenge for implementation in the rail companies organizations. In the future, this will show the adherence to processes and improvements of the process performance, to ensure product quality by being transparent while sharing feedbacks with the process stakeholders.

It seems strange that the results of the CARs assessed with “insufficient” (0 points) are mainly related to ISO 9001 requirements, especially when required by ISO since several years, like Internal audit and Management review.

Focusing on Clause 8: Operations, this clause is set with the most number of CARs, whereas it contains also the most number of requirements.

### Improvements Actions (IARs)

The analysis of IARs shows that the major number of IARs have a correlation to the areas of the CARs and are mostly related to the supplemental rail requirements.



Figure 2: Distribution of Corrective Actions (CARs)

## Testimonies from Rail Operators



With the constitution of the IRQB, IRIS Certification™ will have a broader foundation in the railway sector. Digitalization and market liberalization are trends which foster 3rd party audits as one of the most effective ways to ensure quality in the supply chain. With ISO/TS 22163 an international standard for quality is established, which allows continuous improvement through the entire industry. Within 2019 SBB will start to require conformity to the requirements of ISO/TS 22163 according to IRIS rev. 03. By this measure we aim to reduce the number of audits and improve quality of rolling stock and spare parts to provide an excellent service to our passengers and freight customers.

*Swiss Federal Railway - SBB/CFF/FSS  
Mr. Reinhard Otto,  
Head of Quality Management  
System SBB Passenger Traffic*



“NS expects IRIS to contribute to better product quality” says Wiert Kalkwijk, Head of Quality Supply Chain Operations at NS (Nederlandse Spoorwegen). With IRIS rev. 03 (incl. ISO/TS 22163) we expect a better control of the production facilities with as result a better product. We have invested as NS in the development of IRIS rev. 03 by supplying knowledge and resources. We will continue this support with the International Rail Quality Board (IRQB). The IRIS growth model and the assessment methodology are essential in assessing the quality level in the production facilities throughout the supply chain. NS encourages suppliers to meet the requirements of IRIS rev. 03 although this is not yet a knock out requirement for delivery to NS. Our own component maintenance workshop in Tilburg meets the requirement of IRIS rev.03 which gives us first-hand experience in the effective implementation of IRIS rev 3. Both as a customer in the supply chain as in cooperation with industry partners for railway maintenance.

*NS (Nederlandse Spoorwegen).  
Mr. Wiert Kalkwijk,  
Head of Quality Supply Chain  
Operations*



SNCB expects the IRIS rev.03 certificate to go beyond a conventional certificate, and add real value in realizing our goals i.e.:

- offer safe, punctual and comfortable transport to our passengers
- the efficient and effective management, maintenance and renewal of our rolling stock
- offer full comfort to our customers in serviceable stations

An IRIS rev. 03 certificate will be considered proof that a supplier is a trustworthy partner, and supplies products and services that meet the SNCB's quality requirements.

The different Quality Performance levels (bronze, silver and gold) must reflect the supplier's customer focus as well as transparency and performance. In the future, SNCB will automatically award a supplier qualification to “gold” level suppliers.

*SNCB  
Mrs. Marijke Vandenberghe,  
Quality Coordinator*



For Metro de Madrid, being IRIS certified has helped us improve the process and management controls of the Rolling Stock Maintenance and is a recognition of the continuous improvement of the quality in our organization.

Regarding the future of IRIS certification™, we expect that the standard will improve the quality of the whole industry and, as a result, the quality, safety and reliability of our providers will increase and help us improve the satisfaction of our internal clients as well as all the users of Metro de Madrid.

*Metro de Madrid  
Mr. Carlos Braña Pastor,  
Quality Manager*

Deutsche Bahn was and is still involved in the improvement of IRIS requirements, during the transition to an ISO/TS 22163 and most notably in the development of the IRIS Certification™ rev. 03 rules, together with other operators. This is because we are firmly convinced that we must raise the level of quality of products and delivery performance, jointly with all players in the sector to ensure that our delivery and performance commitments are always according to the benefits of our customers (passengers).

We expect the new standard and certification scheme to establish a more effective, risk-based control enabling transparent and result-oriented way of collaboration along the entire supply chain.

We firmly believe that this is the right path for the global sector, and therefore we will continue to work for better supply chain collaboration in the future, which is now reinforced with our participation in the International Rail Quality Board.

*Deutsche Bahn AG  
Mr. Volker Buhrmester,  
Head of Supplier development*

For SNCF as an operator, IRIS Certification™ must aim at:

- creating reliable products for optimized inventory management and improved train availability;
- reducing quality interventions with higher added value at suppliers' premises;
- increasing the French railway sector competence to support our SMEs in the global market,

With 3 key factors for success: the mandatory requirements, the evaluation of the performance, the achievement of the standards of excellence.

*SNCF  
Jean-Paul Marzec,  
Head of Organization Methods  
Quality & Supplier Performance*



The IRQB will be setting up working groups with its experts in order to achieve the targets in defined specific topics, to support the sector in the IRIS implementation. It will be one of the operative tasks, as well as the contribution to the international ISO working group (ISO/TC 269 WG5) through their active members, to potentially improve the requirements.

The IRIS Management Centre (IMC) is acting as coordinator for the day to day business and the operative implementation of the IRQB decisions. This also includes

the liaison with the IRIS Certification Bodies and development of the IT Technologies.

The governance and structure of the IRQB is shown in the Figure 3 on page 10.

As stated earlier, the IRQB is a worldwide set up with following founding rail companies as members, who signed the Consortium Agreement on 18th September 2018 :



Figure 4: IRQB member companies

In the future, further rail companies may join the IRQB and work together to:

- Implement a quality culture in the organisations:
  - Define needed processes with targets and measurements
  - Promote awareness and responsibility
- Instil a performance transparency
  - Share results
  - Improve
- Focus on customer
  - From inputs to feedbacks

Expected benefits for the rail sector

- Rail sector standard similar to other sectors such as Automotive & Aerospace
- Common approach to enhance product quality
- New approach in transparency and performance measurement
- Reduced workload of audits within the sector by
  - Trusting third party results
  - Using information from the database actively
- Qualified third party audits help rail customers in call for tenders
- Alignment of the entire sector towards ISO working group works
- Mitigation of potential competing/weak schemes through a worldwide recognition

# Quality Performance Level evolution

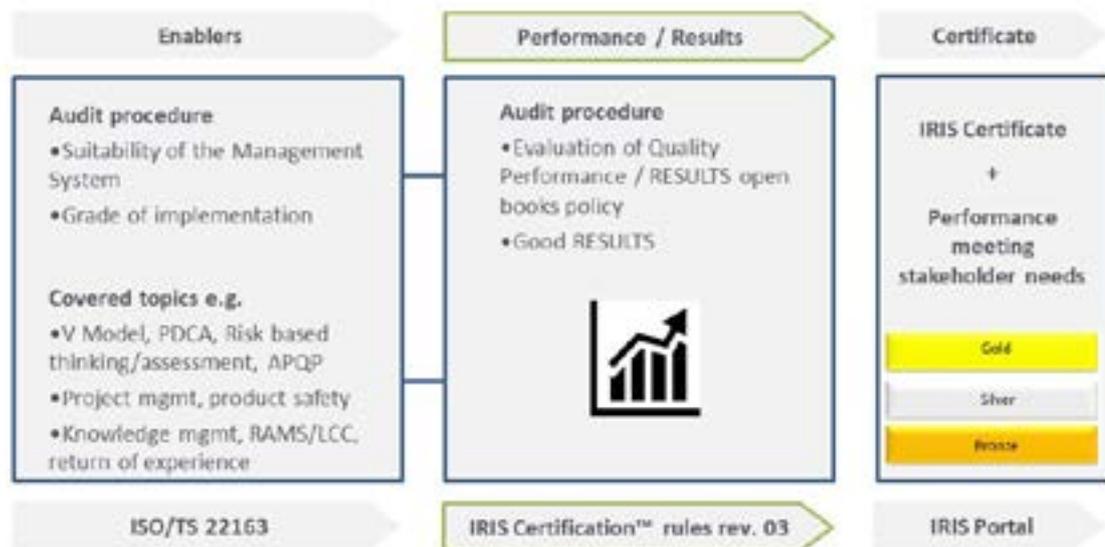


Figure 5: A promise for product quality

With the launch of the IRIS rev. 03 system in 2017, the focus on customer satisfaction and process performance to achieve product quality has increased considerably.

A successful transition to the IRIS rev. 03 will increase the visibility of the IRIS certified companies on the market. IRIS certified companies according to the IRIS rev. 03, are receiving an **IRIS Certificate** and a yearly **Quality Performance Level statement**, which are both visible and stored in the IRIS Portal ([www.iris-rail.org](http://www.iris-rail.org)).

The **IRIS Certificate rev. 03** is issued by an IRIS approved certification body, for a certification cycle (3 years), based on the ISO/TS 22163:2017 and IRIS Certification™ rules:2017.

The **Quality Performance Level statement** is issued by the IMC, based on the **result of evaluation during each yearly audit**, by considering:

- The maturity of the organization
- The result of the performance evaluations
- The focus on customer satisfaction

All companies having performed and successfully passed a transition audit to IRIS rev. 03, and all new IRIS certified companies based on the IRIS rev. 03 are visible in the IRIS Portal with the Bronze Quality Performance Level.

The Bronze level is currently the only available level and gives the companies the opportunity to first focus and implement the new IRIS rev. 03 requirements and afterwards continuously improve their performance.

In the future, three Quality Performance levels will be established (Bronze, Silver, Gold) and introduced progressively. The IRIS Rail Quality Board (IRQB) will define the strategy for the implementation and the respective

timeline considering the current situation of the rail companies in line with future expectations. Further communication about the different levels and timelines will be communicated via the IRIS Portal.



Figure 6: Example of Quality performance level statement



## ISO/TC 269/WG 05 – A journey to an ISO 22163 standard

Following the strategic orientation of UNIFE to move the IRIS requirements to an ISO Standard, the publication of the ISO/TS 22163:2017 on May, 24th 2017 by ISO was an important milestone.

The ISO/TS 22163:2017 Railway applications — Quality management system — Business management system requirements for rail organizations: ISO 9001:2015 and particular requirements for application in the rail sector is fully under the responsibility of ISO, including distribution and translations. All specificities and evolutions are managed under the umbrella of the ISO/TC 269 – ISO Technical Committee for Railway Applications.

ISO/TC 269 decided in its plenary in June 2017, to establish a working Group ISO/TC 269/ WG 05 “Railway quality management system” with the main task to become a full ISO 22163 and to integrate other existing rail quality systems.

The Kick of meeting of the ISO/TC 269/ WG 05 was held in London on November, 24th 2017. This Working group has registered around thirty (30) members, representing different countries from the ISO member countries,

such as France, Germany, China, Japan, Israel, Belgium, Switzerland, Denmark, United Kingdom, Italy. UNIFE is also a member of the working group through its “A” Liaison. This ensures a worldwide participation and consideration of different experienced stakeholders.

The working group members have already started discussions and exchanges in its April 2018 meeting in Beijing, and will further concentrate on the preparation of an ISO 22163 based on the current ISO/TS 22163:2017 with consideration of feedbacks received, identified corrections and sector evolutions. The ISO/TC 269 plenary nominated Bernard Kaufmann from UNIFE, as the convenor of the WG 05 on May 31st, 2018. The timeframe to establish the ISO 22163 was fixed to 48 months.

Bernard Kaufmann said: *“I’m proud to lead the creation of the ISO quality management system standard for the railway sector. It will definitely bring more visibility and confidence to all industrial stakeholders by giving the right inputs for a global recognition.”*



## Testimonies from IRIS stakeholders



IRIS Certification™ now also considers performance results, on top of compliance with requirements for management systems. Accordingly, we expect that our suppliers certified with IRIS rev. 03 are going to improve the quality of the products they deliver to us. We also expect that more suppliers will be certified and convinced of the benefit of this certification. Internally, being more focused on the effectiveness of our processes regarding our customers' needs, we expect that this new revision will contribute to the increase of their satisfaction. We are looking forward to work in the IRQB with the customers to boost IRIS Certification™.

*ALSTOM Transport S.A.  
Mr Leon Linders,  
Vice President Quality & Continuous Improvement*



The requirements for companies with the IRIS rev. 03, have significantly improved our quality management system.

Numerous former customer requirements are now an integral part of the new rev.03.

Since we also have a certification for aviation (EN 9100) at MEN, we have recognized a similar approach in the IRIS rev. 03, with the focus on performance and customer satisfaction.

Our vision on the future of IRIS rev. 03, is that the standard should cover the customer requirements of the entire railway industry, in order that customer audits are reduced or not even needed.

Our expectation is also that IRIS Certification™ receives the same importance in the railway, as the IATF in the automotive industry, which means that only companies with IRIS Certification™ receive a customer order.

*MEN Mikro Elektronik GmbH  
Mr. Efstratios Petrellis,  
Director Integrated Management*



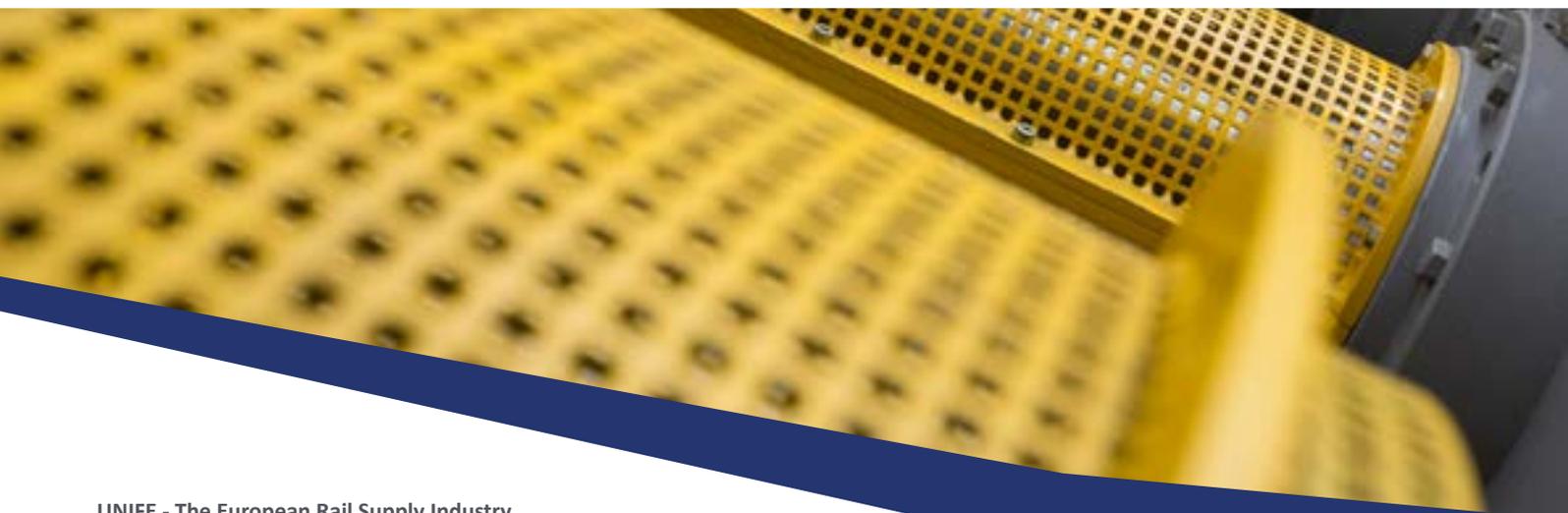
In our market, companies having RBT based certified systems had advantage for IRIS rev 03 transition. Due to the short transition period, we continuously held communication & collected data on the subject for efficient audit planning and performance. Audits demonstrated that companies need improvement in special processes, where specific standards may be applied; and also sufficient time should be given to process reviews while internal audits and management reviews help in identifying weak points and action planning. We advise in collecting performance feedbacks on all KO processes and their KPIs prior to audits. With continuous improvement in all aspects, IRIS will help companies for business excellence.

*Russian Register  
Mr. Hakan Esgin,  
IRIS Lead Auditor for Certification Association*

The new ISO/TS 22163 and IRIS rev, 03 were released a little bit over a year now and already some interesting benefits have been achieved. One of the positive benefits has been an increased in process performance and customer satisfaction. Another benefit, and not the least for many organizations, is that some customers in North America have been opened at accepting the results of a positive IRIS rev. 03 Audit as an equivalent to a CMMI-DEV V1.3 Level 2 Appraisal (with some specific additional conditions). The future looks promising by having both IRIS Certification™ and CMMI Institute to collaborate in order to increase the Rail Sector Supply Chain Organizational Performance, Capability and Maturity.

*LRQA  
François Ouellette,  
IRIS Lead Auditor and CMMI V2.0 Lead Appraiser*

[www.iris-rail.org](http://www.iris-rail.org)



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