Simplification to support a dynamic market

The opening in February of the new One-Stop Shop for vehicle authorisation applications marks a key step towards the introduction of simplified certification processes under the technical pillar of the Fourth Railway Package.

In June, the European Union Agency for Railways will formally take over responsibility for vehicle authorisation, safety certification and ERTMS trackside approval for cross-border applications under the so-called technical pillar of the Fourth Railway Package. This centralised regime will bring Europe one step closer to the long-anticipated common market for railway systems and services.

The momentous chance marks the final step in a lengthy and difficult process of pan-European harmonisation and integration, which has taken four packages of EU legislation over more than two decades. Other transport sectors, such as aviation and automotive, have long enjoyed common standards at an international level, which now allows them to operate in dynamic global markets that foster innovation, growth, and economies of scale.

Railways, at least in Europe, have been struggling to keep up with the pace of change in other industries, and have been stuck in the process of de-nationalisation which has left a legacy of long innovation cycles. The so-called ‘fourth industrial revolution’ presents a unique opportunity for railways to become fashionable again. The global economy needs environmentally-friendly transport for both passengers and freight (p38), and thanks to the digital revolution, railway companies are better placed to absorb existing ‘soft’ innovation in order to deliver modern, customer-focused services.

Market harmonisation of Europe’s rail sector may be late in coming, but this may yet prove to be the right time, thanks to rapid progress in digitalisation. A good exercise for creating a common market is to get the different authorities and national organisations to learn to work together, and that has been a key factor in the development of the One-Stop Shop through which ERA will channel all applications for safety certificates, vehicle authorisation, and ERTMS trackside approval. The single unified IT tool is a vital instrument that represents the digitalisation of technical standards and processes for railways across Europe.

Open and flexible

When the ERA management board, representing all of the EU member states, agreed the functional specifications of the OSS in late 2017, one of the most important requirements was openness. The aim was to create a system that would be fit for future needs and adaptable to technical upgrades. From the outset, the IT has been designed to support the business needs and processes of its customers, while enabling the processes to gradually adapt and improve once it has been deployed.

During the development phase, system integrity was tested through so-called learning cases. Throughout 2018, agency staff worked with their counterparts at the national safety authorities on more than 20 vehicle authorisation and safety certification projects. This allowed the new processes to be fine-tuned and prepared for launch in June 2019. It also helped the agency to develop the interfaces between the OSS and the IT systems used by the different NSAs, which will be vital to facilitate a smooth interaction between European and national players while ensuring an improved level of service for applicants.

The interaction between ERA and its national counterparts is regulated through individual service level agreements, but collaboration is key, as all of the NSAs will retain important functions in the new regime. Business continuity is guaranteed through a horizontal network of tasks and responsibilities, in which the ERA acts as central coordinator but relies heavily on the work of the national authorities.

Integrated, accessible and secure

As well as interfacing with the NSAs’ national IT systems, the OSS will gradually be integrated with the agency’s own databases that are needed to support the new authorisation processes. For example, the European Railway Agency Database of Interoperability & Safety (Eradis) is due to be linked to the OSS from June, followed by the European Centralised...
Virtual Vehicle Register (Ecvvr), and the European Register of Authorised Types of Vehicles (Eratv). System users — the train operators, infrastructure managers, and rail equipment manufacturers who wish to operate across Europe — will only require one set of credentials to access all of ERA’s IT services that are relevant to their business.

Data protection and IT security is a clear priority anchored in the technical requirements. Railway companies and suppliers must rely on the agency to protect their confidentiality when using the OSS, so the necessary steps have been undertaken to guarantee security. The cloud-based service is being hosted for ERA by a specialised company in Germany operating at the highest standards of IT security.

A major challenge which required a huge amount of effort and resources was the issue of translation. The OSS must operate in all 24 official languages of the EU, to ensure that all operators from countries large and small can understand the new processes. A pool of national experts has been put at the applicants’ disposal, including specialists on vehicle authorisation, safety certification, and Ertms trackside approval from all over Europe, who can provide the necessary services at any time and in any language.

The user interface for the One-Stop Shop has been designed for clarity and ease of use.

Ready at last

Developing the OSS required a thorough degree of mutual understanding and intense collaboration on behalf of everyone involved in the process — from the agency, the railway sector, and the many national bodies. This collaboration continues today as the different players are thoroughly testing the system ahead of its official launch. The first release of the OSS went live on February 16, enabling applicants and NSAs to get used to the new system ahead of the cut-over on June 16. The tests completed so far have all produced positive results, which should provide reassurance for the European rail sector that the new processes are ready.

However, it had become clear by December 2018 that a majority of EU member states would not complete the transposition of the technical pillar until June 2020, taking advantage of a one-year preparatory ‘gap year’ provided for in the EU legislation. The agency and its national counterparts will be able to use this time to fine-tune and improve the authorisation processes that will soon be the technical cornerstone of an integrated market. The digitalisation of technical certification in Europe has become a reality.