# Italian railways on track with ISO 14001

by **Daniele Pernigotti** and **Massimo Guidarelli Mattioli**

*Italferr, the major Italian railway engineering company, is progressively requiring contractors to implement ISO 14001 on a selective basis – but not necessarily to seek certification. This experience shows how the implementation and maintenance of an effective environmental management system can take precedence over certification.*

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The ISO 14001 environmental management system (EMS) standard is known by many enterprises as a means to achieve third-party EMS certification. However, the primary reason for its development was to help organizations implement an effective framework for managing environmental problems and less so for those seeking certification only.

As such, part of the scope of ISO 14001 states that the International Standard is applicable "to any organization that wishes to establish, implement, maintain and improve an environmental management system … seeking confirmation of its conformance by parties having an interest in the organization, such as customers …."

It clearly foresees the possibility of creating direct business relationships with customers and suppliers to help define and then confirm the conformity of an EMS to the standard. Therefore, certified organizations that may wish to use their ISO 14001 "influence" on suppliers do not necessarily need to demand that these suppliers become ISO 14001-certified, but rather that they support them in EMS areas of particular importance.

## The Italferr case

With this in mind, it is interesting to analyse the case of the Italferr engineering company, a member of FS (*Ferrovie dello Stato*), the Italian state railway group. Its customers include other companies of the group such as RFI SpA, the Italian railway network.

Although Italferr is responsible for planning, contracting and supervising projects, the major environmental issues are managed directly by contractors.

*The new Bologna railway station is one of the current contracts being managed in an environmentally friendly manner by Italferr.*

Generally, this situation does not impact on the quality of the deliverables because the high level of responsibility that Italferr accepts on behalf of its customers ensures that both Italferr and contractors deliver a high quality product, and meet time and financial obligations.

However, it *could* be difficult to meet all or some of the customer requirements without compromising the quality of product if a significant environmental impact were not managed properly.

Furthermore, Italferr's responsibility becomes even more of an issue when one considers that its customers are mainly public entities that finance jobs and services from public funds.

## Selective ISO 14001 implementation

Due to the increasing number and complexity of railway projects, Italferr decided to use more efficient ways than those required by "normal" compliance with ISO 14001 to control some of the most critical aspects of the railway infrastructure.

Thus in 2002, an environmental clause was written into new railyard contracts in Italy worth over EUR 15 million, calling for the implementation of several ISO 14001 requirements. It obliged the major contractors to sign contracts with Italferr where the terms of the project, such as planning, technical and economic issues are well defined and clearly detailed.

It was decided that conformity to certain clauses of ISO 14001 such as 4.2, *Environmental policy* and 4.3.3, *Objectives, targets, and programme(s)* would not be required since they were considered less significant and mere additions to the contract.

Instead, attention was focused on requirements aimed at enhancing knowledge and environmental management, such as 4.3.1, *Environmental aspects,* 4.3.2, *Legal and other requirements*, and the entire sections of 4.4, *Implementation and operation*, 4.5 *Checking*, and 4.6, *Management review.*

*Construction of the new high-speed Milan to Bologna rail connection, carried out by Italferr and other companies and contractors of FS, the Italian state railway, is managed in accordance with an ISO 14001-based EMS.*

*Another view of the construction of the new high-speed Milan to Bologna rail connection.*

This approach made it possible to switch from a system in which the major actors – Italferr and institutional entities like the Italian Government's Environmental Office, or public offices like ARPA (the local environmental control agency) and AUSL (the local sanitary authority) – controlled the contractors' activities to a system which demands a closer collaboration between customer and client to meet environmental requirements.

It also asks the contractors to establish, implement, maintain and improve their own EMS tools in order to manage critical issues better.

## More to gain

It is understandable that contractors should initially express reluctance to this approach, where they appear to lose some autonomy. However, once they realize how much more control they gain over critical environmental issues, they will recognize the competitive advantages, and how their image improves in the eyes of customers.

Italferr is now able to focus its work more precisely and has more control over its network of contractors. In return, its contractors can give more assurance to customers of a job well done and with greater environmental awareness.

## To certify or not?

So, control of activities is now part of a logical EMS where documentation is first checked and then audits are carried out by Italferr.

In 2003, probably as a result of this strengthened environmental commitment and output resulting from the environmental impact assessments of railway projects, the Environmental Office began requiring of the companies themselves, as output of the environmental impact assessments of railway projects, an environmental management system in accordance with either ISO 14001 or the European Eco-Management and Audit Scheme (EMAS).

It is interesting to note that simply having contractors manage the operational aspects of major environmental issues, and by having documentation defining these contractors' responsibilities to Italferr, has raised environmental awareness within the organization even before it began developing an ISO 14001-based EMS itself.

In fact, Italferr has only recently begun implementing its own EMS in accordance with ISO 14001, in order to control key internal management processes and work supervision.

Attention was focused on requirements aimed at **enhancing knowledge and environmental management**

By requesting contractors to implement EMS requirements in advance, the Italian state railway companies find themselves in a position where work in 13 major railyards (worth almost EUR 2 million) is managed via an EMS. That amount is expected to double within the year.

The Italferr experience demonstrates how ISO 14001 can influence major contractors without requiring them necessarily to pursue ISO 14001 certification. While certification is an option, it may not always be the most efficient solution. •