

## **Knowledge Network for competent bodies**

### **A Practical step to enhance harmonisation of safety assessment**

#### **State of the art**

The need for safety harmonisation has led to several activities in Europe. The CEN / CENELEC standards EN50126, EN50128, EN50129 have been elaborated. These standards form the basis of safety assessment of railway systems.

The interoperability directive for high speed lines has been implemented and the Technical Specifications for Interoperability are planned to be approved in 2001. An interoperability directive for the Trans-European network (conventional rail) is undergoing approval. A directive on safety is being elaborated.

On the basis of the high speed interoperability directive, notified bodies are currently being nominated by national authorities. Member states as well as the European Commission are in the course of preparing means of co-ordination of notified bodies.

The interoperability directives cover the high speed network and the Trans-European Network but leave open all other railway lines outside this area.

The following organisations are currently involved into safety assessment:.

- The European and national legislation regarding legislative aspects, including approval of directives
- AEIF and especially ERC working towards harmonisation of conformity assessment, certification and assessment procedures,
- Competent bodies, acting as safety assessors, testing laboratories, inspectors, certification organisations or notified bodies,
- Railway operators and product manufacturers, partially playing also the role of technical expert organisations.

ERC (European Rules for Certification), a part of AEIF, is elaborating guidelines for certification to be applied in Europe, thus promoting uniform testing and certification in the railway area. The guidelines are intended to promote multilateral acceptance of railway product certificates. The work already done by ERC can be very useful to enhance certification especially in the nationally regulated area and the voluntary field.

Currently, work of safety assessment, expertise and certification is done in the areas:

- European wide regulated area (by European regulations, for High Speed Lines and in the future on Trans-European Networks),
- Nationally regulated area,
- Voluntary field.

### **Problems to be addressed**

The problems lie in the practical, daily work of competent bodies carrying out safety assessment:

- exchange of experience in organising the work,
- need to use technical expertise in a specific country (need to be on site and to know specific regulations as an organisation or person),
- different structure and content of test and inspection reports,
- organising on site inspections in international projects,
- assessment of complex systems with special problems, requiring involvement of specialists of other competent bodies,
- capacity problems.

The problems that are currently encountered can be explained with the following short examples.

A product is intended to be assessed for safety in several countries and the product shall be applied in an area which still is not subject to European regulations. Mostly, manufacturers are interested in a wide range certification or approval, not restricted to high speed lines or the Transeuropean Network. This can be supported by good contacts between competent bodies.

A product shall be subject to safety assessment not only in the European wide regulated area, but also in the nationally regulated area and other areas of application (e.g. urban mass transportation systems). In order to carry out assessment and certification without additional effort, several technical expert organisation must co-operate in order to achieve this result.

### **Approach**

The task of ProM@in will be to enhance communication between the competent bodies and technical expert organisations, authorities,

railways and railway industry working closely together with their organisations UIC, UNIFE and AEIF, especially ERC.

It has to be noted that ERC is working towards harmonisation of conformity assessment in Europe. This work is directed towards a wide applicability.

The work done by [ProM@in](#) will supplement this general approach carried out by ERC by considering practical problems of competent bodies in harmonisation of safety assessment procedures.

The goal is to work towards harmonisation of safety assessment. This will be done by the help of a knowledge network of experts. It is acknowledged that developing harmonised rules for safety assessment is a task that is beyond the scope of a thematic network. However, [ProM@in](#) can serve as a driver towards this goal in enhancing contacts and understanding of the parties involved in safety assessment.

### *Phase I*

In the first phase, a study has to be elaborated covering the following issues:

- Gather experience of collaboration of competent bodies, especially on existing bilateral contacts and contracts regarding practical work, as e.g. organising a safety assessment that is suitable as basis for safety approval in two different countries according to the national regulations or organising a safety assessment of a piece of equipment in the railway area in parallel with a safety assessment in the urban mass transport applications. (work to be done by [ProM@in](#))
- Gather information on important national safety regulations and standards currently used besides European ones (ERC and [ProM@in](#)). A list of regulations, standards and instructions will be a valuable result assisting in practical work.
- Current status of existing competent bodies. It should be noted that ERC has already performed a study on this topic for four European countries (Italy, France, Great Britain, Germany). This study can be updated by ERC within [ProM@in](#).
- The results will be distributed via the [ProM@in](#) website, partially for all users, partially exclusively for members and experts of the [ProM@in](#) Thematic Network.

Results are:

- Exchange of experience regarding collaboration of competent bodies,
- Information on regulations, standards and instructions applicable in different countries.

- List of competent bodies, forming an European pool of experts.

### *Phase II*

A workshop will be conducted for competent bodies, authorities and representatives of railways and manufacturers. This workshop is intended to become the start of a consulting group of competent bodies, driving further collaboration in a European perspective.

Possible multilateral contacts / contracts are encouraged.

Other work to be done in phase II is mainly based on the outcome of the study performed in phase I.

### **Benefit**

The benefits from this approach are twofold:

Safety assessment bodies will become fit for new regulations much faster.

Knowledge from European wide regulated area can be spread faster to other areas (e.g. nationally regulated), accelerating evolution in those fields that are still not regulated European wide and thus enhancing rapid implementation of new procedures and guidelines. Competent bodies can benefit very much from exchange of their experience and knowledge European wide.

Manufacturers wishing to get their products certified in several European countries and wishing to apply the products not only within highspeed rail or the Transeuropean Network but also within other areas will benefit from the co-operation in safety assessment of competent bodies, even if still existing different national regulations have to be taken into account.

### Organisations involved in Safety Assessment

