

Joint Study Group on Interoperability – Final Report- March 2000

Railway Social Dialogue (ETF/CER)

JOINT STUDY GROUP ON INTEROPERABILITY – FINAL REPORT – MARCH 2000

TABLE OF CONTENTS

- 1. HISTORICAL BACKGROUND**
- 2. TOPICALITY:AIMS AND WORK AXES OF THIS SECOND STUDY GROUP (1999)**
- 3. METHODS**
- 4. RECORDS OF THE VISITS**
- 5. SYNTHESIS OF THE VISITS**
- 6. PROPOSALS OF THE STUDY GROUP**
- 7. SYNTHESIS AND CONCLUSIONS:LINES OF FORCES OF THE REPORT**

ANNEXES:

- **MEDICAL ASPECTS**
- **PSYCHOLOGICAL ASPECTS**
- **COMMUNICATION ISSUE**

1. HISTORICAL BACKGROUND:THE FIRST STUDY GROUP (1996)

In March 1995 the joint Committee for the Railways decided to ask to the group one to define a level of international training in interoperability (high-speed) related to the directive EC 91/440. The Group One then created a joint study group on this issue which studied this point in Belgium, Austria, Germany, France, Spain and Italy. The study focussed on networks which already got to grips with a kind of interoperability or with traffic flows which might know an important interoperability; the interoperability practices differed generally from each other and were organised by bilateral agreements between networks. The concerned personnel categories were the train drivers and the train attendants.

The directives dealing with the attribution of licences and with the allotment of the infrastructure abilities were also published in 1995 (95/18 and 95/19). The directive 96/48 on high-speed traffic will then follow. The group wanted to have a general overview of the legal regulations that the Member States were wishing to set up as well as of the railway companies' regulating parameters as far as access to infrastructure for materials and workforces was concerned. The Group also wanted to get a picture of the used methods and training levels within the railway companies and to establish a full list of the vocational abilities that could be applied to the workforce that might have to work on the network of another State.

The results of the survey had to help the Commission in elaborating a supplement to the related directive. During its works, the Group came to the conclusion that most of the surveyed points could be applied to all the cases of access to infrastructure, notably so when the infrastructures are crossed by various types of traffic. The thought process took place within the framework of the implementation of the aforementioned European directives and took into account the already

existing norms in the fields of training, the learning of abilities , attestation process and with regards to the quality of the workforces.

The directives develop a few obligations on the material and about the workforces in order to guarantee a high exploitation security level. Hence the Group worked out suggestions which might help in respecting these obligations. Yet these proposals had to be enough precise so that the security requirements specific to the infrastructure management might be uniform enough to favour interoperability.

As a conclusion to its works, the Group brought forth the five following principles approved by the plenary gathering of the Joint Committee of the Railway Companies at the European Commission hold on 1996-07-08:

- 1° it seems preferable to norm the competencies rather than the training sessions. The option is to focus essentially on the results to be reached and to let each Member State, Infrastructure Management and Railway Company agree with each other on the various means to implement in order to produce these competencies;
- 2° Solely the abilities which guarantee traffic and workforce security require a common position;
- 3° These competencies are specific for the transport services to be done (according to the material, the infrastructure, the signals and the regulations)
- 4° Some competencies are subordinated to psychological and health states which require a uniform approach. Some common norms should be aimed at on that matter.
- 5° The need for communication between the crew and the infrastructure manager implies linguistic abilities whose description must be inserted in the schedule of conditions imposed by the infrastructure manager and inserted in the interoperability agreement.

The Group stressed the necessity of two structures:

- There should be from above a European side-structure to implement and realise the description list of the common competencies standing in for traffic security in interoperability;
- There should then be from below a structure linked to each infrastructure management that would allow the latter to set up conformity audits at various stages of the interoperability agreements.

For the Group, the workforce whose functions contribute to security must be individually qualified and capacitated. A track of the process leading to qualification must be kept during the whole duration of the activities of the workforce member in security functions. The Group suggested then a global attestation process of the training system as well as of the persons responsible for certification and training.

Beside the two personnel categories taken into account at the beginning of the works, the Group came to the conclusion that other functions close to the latter were also concerned by interoperability and that their responsibilities should also be clarified by stipulating competence norms for them. The equipment examiners of the rolling material) are particularly concerned.

2. TOPICALITY: AIMS AND WORK AXES OF THE SECOND STUDY GROUP (1999)

The report filed in 1996 was subjected to a follow-through by the group I about the implementation of the competence normalisation. The study group also discussed the results of its works with the DG VII.

In the meantime, the conversion of the directives had taken place in the different countries and were gradually applied. The pieces of information in 1996 had to be updated.

The second Group had to get an answer to the following questions:

- How were the allotments subdivided between the Member State, the infrastructure management and the railway company?
- Which national organ had to subdivide the railway infrastructure abilities ?
- Which were the competencies required from the workforce to gain access to the latter?
- How to check the learning process or the disposal of the required competencies by the workforce, notably as far as the training process was concerned?
- Can we get convergent answers to each of these questions?

This very last question particularly guided our works which started in March 1999. From the answers to these questions, the Group aimed at having a project of advice which would later on lead up to the search for a joint agreement on the access conditions for the workforce to infrastructure, would the social partners agree on that.

The persons responsible for our Group did not omit to include the DG V and VII to our works. We looked for a maximum extension of our task.

Under the aegis of the DG V, the Study Group looked for the harmonised security norms as far as the required vocational abilities were concerned as well as for the psychological and physical abilities necessary to work on the railway infrastructure.

The very fact that this initiative came within the European Committee for Social Dialogue displays the advantage to be acceptable as well as for the railway companies as for the trade unions. The further study of the feasibility of a joint agreement in that matter will be easier. This approach is directly linked to the implementation of articles 137 to 143 of the Union Treaty.

3. METHODS

The study group counted the following members:

Representatives of the workforce

Mr. Jean-Louis Brasseur (CGSP)

President

Mr. Jean-Pierre Binetruy (CFDT)

Mrs Claudia Menne (GdED)

Representatives of the employers:

Mr. Jean-Paul Preumont
(SNCB)

Reporter

Mr. Raymond Hara (SNCF)

Mr. Dirk Imhof (NS)

(replaced for some visits by P. Van Elten

The new study group visited in a first stage six States between March and June 1999:

- Belgium: 18th and 19th March;
- Italy: 20th and 21st April;
- France: 29th and 30th April;
- Germany: 27th and 28th May;
- Austria: 10th and 11th June;
- And Sweden: 23rd June.

As for the previous report, the Group submitted persons responsible for the State, for the organ dealing with the subdivision of the routes, for the Railway companies (with a new operator in Sweden as well), for infrastructure managers (including users from the various workforce categories and the trade unions) in each country to a set of questions in order to establish the responsibility levels brought about by the latest directives in complement to the directive 91/440.

The questionnaire asked the following questions:

1° To the Member States

- How does the State see to defining the norms and the security rules and how does the State control its enforcement?
- How does the Member State determine and control the requirements as far as physical and vocational ability is concerned notably with regards to the required qualifications for the train crews in order to guarantee a high level of security?
- What does the Member State demand about the way the Railway Companies can prove that their crews really have at their disposal the required training to conform to the circulation rules and to respect the security orders?
- What does the Member State demand about the way the Railway Companies can prove the actual training and qualifications of the maintenance personnel?

2° To the Infrastructure Management

- How does the Infrastructure Management implement the control on the enforcement of the norms and security rules?
- How does the Infrastructure Management control the requirements as far as physical and vocational ability is concerned notably with regards to the required qualifications for the train crews in order to guarantee a high level of security?
- What part does the Infrastructure Management play in the process through which the Railway Company proves that their crews really have at their disposal the required training to conform to the circulation rules and to respect the security orders?
- What part does the Infrastructure Management play in the process through which the Railway Company proves the actual training and qualifications of the maintenance personnel?

3° To the Railway Companies

- How can the Railway Company come up against the required demands for physical and vocational abilities, notably about the qualifications of the train crews in order to guarantee a high level of security?

- How can the Railway Company prove that their workforces really have at their disposal the required training to conform to the circulation rules and to respect the security orders ?
- How can the Railway Company prove the actual training and qualifications of the maintenance personnel?

After these visits, as the budget contract foresaw, an intermediate report was filed to the DG V in order to draw preliminary conclusions about the experience and to obtain a follow-up to the research by the implementation of additional visits. These visits were made by a limited delegation of the social partners among the countries left unvisited by the Group during the first stage of the works. The aim of the follow-up visits (maximum of 6) was to complete the study and to ask to the various players about the solutions suggested by the group and hence to validate its conclusions. In such a framework, the limited Group went to Denmark, Luxemburg and Spain.

4. RECORDS OF THE VISITS

Please find hereafter for each visit the list of the participants as well as a record of the very visit.

5. SYNTHESIS OF THE VISITS

5.1. PARTICIPANTS TO OUR MEETINGS

Our group met in all the visited countries representatives of the Railway Companies, of the Infrastructure Management and of the Trade Unions. The Member State was also represented in each country. Yet the State was not there in Germany but we could nevertheless count on a representative of the Federal Office for Railways during our meetings. In Sweden, representatives of new operators joined us.

Finally, a representative of the DGVII took part to the meetings in Belgium, France and Austria. A representative of the DGV was there at the Belgian meeting.

5.2. CONVERSION OF THE DIRECTIVES

During our visits, the directive 91/440 had been converted into the legislation of the guest countries. This was not so for the directive 95/18 and less so for the directive 95/19. In some countries the writing process of the conversion texts was about to be finished and the texts were to be published soon. The German representatives did not see the relevance of a specific text for the 95/19 because they found that the existing national laws allowed to work without a safety attestation.

5.3. STRUCTURAL EVOLUTIONS

a. Within the networks

In relation to the conversion of the directives or not, some visited countries were definitely involved in a process of deep restructuring (Italy, Germany); others were more in a follow-through process as well as in an evaluation process of the recently

set up structures (France, Austria, Belgium). Sweden was satisfied with its specific model former to the European set of rules and thought about light adjustments.

In order to grasp the roles and responsibilities of the different players, the group had to survey the evolution of the structures and more particularly the context of: **the organisation of the splitting of the infrastructure management and of the transport activity as such**. Two major trends are distinguishable:

- for the majority, this splitting is purely an **accounting** separation: the will of the concerned states was mainly to maintain the unicity of their network. It is worth mentioning that in such cases the responsible organ for the infrastructure management can easily be identified within the network. This is true for Belgium, Italy, Germany and Austria. The situation of France is remarkable on that level: a new entity appeared : the Réseau Ferré de France (French Railway Network – RFF) owns the railway infrastructure and defines its management objectives. The SNCF fulfils in this way the role of “delegated IM”)
- In Sweden, the splitting is **structural**. The IM consists of a firm whose statutes and assets are public (BANVERKET) which functions under the aegis of the Industry Department.
- In all the visited countries, the State still owns the infrastructure.

b. The Railway players

We have witnessed a variety of present players in the railway field from many different sides.

As far as the Railways companies as operators are concerned, their number has significantly increased the last couple of years within these countries (such is the case in countries such as Germany, France, Belgium, the United Kingdom and the Netherlands with the THALYS and the EUROSTAR).

As far as Infrastructure is concerned, France split the property and the policy (RFF) from the daily management (SNCF).

As far as the States are concerned, organs appear either within or beside the Departments, notably to help these in making decisions about the sharing out of the Infrastructure capacity.

5.4. ACCESS TO INFRASTRUCTURE

With regards to the access to infrastructure within the framework of interoperability, the visited countries generally stick to the contents of Article 10 of the Directive 91/440 (the international groupings and the railways companies settled or soon to be settled in a Member State which organise combined international goods transports).

Yet , a representative of the Austrian state found that a foreign grouping could go through Austria only if reciprocity was included.

Sweden opened the access to its infrastructure to new urban transport operators and has hence reopened the thought process about norms which ought to be reached and respected on this issue.

When cross-border interoperability already exists, co-operation agreements are the most used management way . Two situations still exist side by side as far as access to infrastructure in interoperability is concerned (border crossing).

- The train stops at the border and there is a staff change. This situation is for many speakers full of economical and commercial disadvantages;
- The train crosses the border with the same staff. Until now, this possibility was mostly restricted to the cross-border traffic for short journeys in the visited country and on precise main lines (for instance Paris-Brussels-Cologne since a few years)
- New railway products have developed and gone past the cross-border interoperability. EUROSTAR and THALYS were quoted as examples. New ways of applying co-operation have been commercially developed. The concerned staff (train drivers and attendants) are trained to the required knowledge in their network by “ teachers” of their country of origin. These teachers are beforehand trained and certified by the visited country for a set period of time. The participating companies agreed to organise audits on conformity on the whole of the line on an independent basis.

5.5. SECURITY ATTESTATIONS (95/19) AND LICENCES (95/18)

In each of the visited countries the delivery of security attestations is based on the criteria published by the Department concerned after a proposal made by the IM. These criteria end up in a schedule of conditions. As the case may be, the security attestation can be delivered by the Member State (through its Department concerned or through a competent public organ in this subject) or by the infrastructure management of the country. When the Department is competent, it creates a railway supporting service.

Most of the visited companies have introduced a licence application. At the time of our visit, none of these owned it.

5.6. SHARING OUT OF THE RAILWAYS INFRASTRUCTURE CAPACITY (95/19)

As a reminder, the Directive 95/19 had not been converted in all the countries at the time of our visit.

In the countries where it had been converted, different situations occur:

- The IM is competent in the subject. An appeal is possible to an official State organ and to justice as a final resort;
- The capacity application is expressed from an official organ and is studied by the IM. When the application gets refused, an appeal is possible to the Department.

5.7. VOCATIONAL ABILITIES REQUIRED FROM THE INTEROPERABILITY STAFF

a. General points

In each of the visited countries, **the concerned workforce categories** (train drivers and attendants) are subjected to recruitment and activity upholding procedures based on defined criteria. The staff responsible for the traffic of the trains (station master and equipment examiners) was also considered by the study.

As far as inland traffic is concerned, these criteria and procedures vary for each concerned category. It is worth noticing that the countries where old or new private operators work within the borders (mainly Germany, Sweden and Austria), these companies enjoy a larger degree of independence in stipulating these internal criteria and procedures. For instance, in Germany, the law leaves to the company the entire responsibility for the quality of the workforce. The criteria and procedures vary in a significant way between the countries.

Yet, Belgium, France and Italy have an IM which requires a control level equal to that which is required for the “national” workforce.

For the interoperability traffic, these concerned countries opt either in a formal way or by their co-operation practices by concluding bi- or multilateral agreements. Nevertheless, differences result from one country to another between the recruitment criteria and procedures, between the criteria and the procedures for the statutory aspects of the training, for the knowledge upholding in activity and for evaluation. The main thread in all the networks is to go on guaranteeing a high traffic security level.

b. Vocational abilities and training production

The issue of vocational abilities refers to that of the training of the workforce, its organisation and to the evaluation of the abilities. The implemented methods vary from one country to another. This conclusion refers to the first principle brought about by the former study group. This principle said that it would be more desirable to norm the abilities rather than the training sessions. With the opening of a bridge on the “BELT”, the Scandinavian countries have initiated a working party whose aim was to develop and harmonise the railways training sessions.

The aim of the training sessions is to allow the workforce to learn the vocational abilities required for the job. Generally speaking, the training process ends up by an evaluation of the candidate during the integration phase. The aim is to control the completion of the learning process of the abilities. If he/she succeeds in that, the candidate is **certified** competent and he/she can practise the activity for which he/she was trained. This sanction can also be applied to the company where he works. The companies will later on implement a periodical training which functions notably as a basis for the renewal procedure of the network attestation, if it exists.

Within the framework of the Scandinavian co-operation or of the THALYS, the traditional RC have developed various information exchanges and have acknowledged the training and attestation processes developed in each of these companies. The system functions on the basis of mutual confidence.

The situation is and will get more complicated for the other operators, mainly the new ones. As we wrote earlier, a large degree of independence is left to these operators as far as training is concerned. The situations can significantly vary from one country to another. As we wrote earlier on, the IM leaves in Germany room for the RC to manoeuvre. The Office for the Railways (EBA) has the opportunity to check the contents of the training sessions and to deliver pieces of advice if such is the wish of the IM.

In Sweden the responsibility for the training activities also relies on the operator. But it is imperative for the latter, if it wishes to be acknowledged, to prove that it has at its disposal a credible organisation as far as training is concerned. The Railway Inspection may control that at any moment. Furthermore, an order giving a

precise definition of the training obligations is currently being prepared. As for the facts, many training sessions organised by these new operators are prepared in co-operation with the traditional Swedish RC (SJ).

How is the control on the learning and the upholding of these abilities in interoperability?

How can we be sure that the staff involved with the traffic security possess the required abilities? Various trains of thought have been developed:

- the mutual confidence between the various concerned parties remains the preferred method for the traditional RC;
- the checking of the mechanisms and of the contents of the training sessions is sometimes required. The principles of the audit and of a quality insurance are sometimes taken into account. The emphasis is put on the knowledge and on the upholding of the real vocational abilities. Can be added to this mechanism random sample controls;
- Periodical exams for the concerned workforce are organised by some of the visited networks.

c. Drivers

It is worth noticing that the drivers are part of a category subjected to the publishing of a list of required abilities in the Official Journal of the European Communities of the 21st December 1992)

Among the networks already dealing with cross-border interoperability, the access to international service is particularly linked to the experience of the drivers and to their vocational evaluation (THALYS).

This category of staff members gets, within the RC too, a 'national' training policy during his/her entire career. Following the training processes, their attestation at the beginning can be:

- valid constantly without new exams (the training system is then subjected to an audit)
- a periodical control at the end of the training (cyclical)
- or renewable through an exam (this is so in Belgium where an exam takes place every three years.

In some countries, the drivers are certified for a specific type of railway line or for specific line sections. The knowledge of the place where the signs are as well as of electrification frequently arouses additional or specific regulation security measures.

In the field of cross-border interoperability, the access to the network to be covered varies case by case and consists in:

- an audit of the training system of the concerned driver's RC ;
- a comparison of the training sessions of the foreign driver's RC (when there is a gap, the driver follows a training and passes an exam , if need be , in order to be certified in the country where he will drive);
- a systematic knowledge exam takes place for the driver before he/she starts driving on the foreign network (control follow-up , or even periodical renewal exams).

The issue of several pieces of documentation left at the disposal of the driver is very important.

On modern material, formatted dispatches are available for the cabin driver.

This last point refers to the required linguistic knowledge for the driver in interoperability. If the IUR requires a minimum knowledge of the languages of the crossed countries, an upper level is sometimes required. As for EUROSTAR, the drivers are normally certified in the language of the visited country. This implies a good level of **linguistic knowledge**.

d. The Train Attendants

The access conditions to international service are for them also linked to their experience and to the quality of their service within their originating network. These staff members fulfil not only a security task but also a commercial one. The emphasis lies more on one aspect in the countries and it differs greatly.

In the interoperability cases, the mutual confidence system applies. It is worth noticing that EUROSTAR and THALYS are particular in that the attendants are trained in their country of origin by a trainer of this very country. The latter was trained and regularly certified in the visited country. The attendants must know certain set of rules of all the crossed countries. If this does not create problems when the concerned route only involves two or three countries, this might turn out to be rather different with the increase in number of the networks (exploitation types) used by the same train. It will indeed be difficult for the staff members to get to know all the required knowledge.

The linguistic knowledge is part of the required demands to fulfil this function. According to the gathered pieces of information, some staff members know all this as soon as they start or follow courses voluntarily. Before they start working, their knowledge is validated by an exam. Some operators nevertheless offer to their workforce proficiency training sessions so that they can efficiently fulfil their task.

The issue of the availability and of the translation of the regulation documentation has been discussed. Some members of the group opt for a validated translation of the concerned documents.

French representatives have stressed an informal experiment based on a feedback experience: meetings between train masters are organised. It is then possible to gather various pieces of information which might be at the basis of various evolutions for the workforce and of adjustments to the training programs.

5.8. MEDICAL ABILITIES

a. Medical Criteria.

The concerned medical criteria for interoperability are those required for the national exploitation. They rule the fact that the staff member may go on working for his/her employer. Each country applies for each vocational category its own specific criteria. It is not always possible to find a written list of the applied criteria. Such is the case in Germany where the criteria are 25 years old. The Scandinavian countries are currently busy with a possible harmonisation of these criteria on their own level. Others let their procedures regularly evolve.

New or more classical problems grow: drugs and alcohol abuse. The solutions take the different national set of laws into account. This reduces the available room for manoeuvre for the companies.

There are no specific criteria neither for the cross-border interoperability routes nor for the high-speed ones.

b. Competent Services

Different possibilities exist for the organisation of medical services.

- the service is internal and solely works for the RC to which it belongs (this model formerly available among the companies is less and less present);
- the service is internal within a RC and works for other companies (this model grows and grows);
- the service is external and works with any kind of companies.

This evolution brings up the issue of the competence of the doctors and of medical services in the railway field. A Swedish person in charge mentioned the impossibility sometimes encountered in finding a doctor with the required abilities to operate within the SJ.

Each country has rules protecting the health of some workers in the industrial branch. Generally speaking , since these do not foresee some railway aspects , the Companies need to uphold specific criteria with regards to traffic security.

c. Drivers

Generally speaking, they go through a medical survey before they actually start working. Then they are later on subjected to periodical examinations in order to go on practising their activity. The frequency of these examinations varies from one country to another and sometimes from the driver's age category .

Surveys also take place after incidents or absences related to a disease which might be a danger for the traffic security.

d. Train Attendants

A medical survey is operated before they actually start working. The periodical examinations are not required for this workforce category.

5.9. PSYCHOLOGICAL ABILITIES

Generally speaking , psychological abilities are checked during the recruitment procedure. In most cases, they are integrated within the medical survey process. Yet we found no case of periodical psychological examination during the career.

6. PROPOSALS OF THE STUDY GROUP

PRELIMINARY REMARK

1. The results of the survey of the former study group in 1996 are confirmed by these proposals. The following workforce categories are concerned: drivers, train

attendants and functions close to these notably standing in for the dispatching of trains (for customers as well as for goods)- mostly the equipment examiners and the people standing in for the dispatching of trains-

2. The CER has written a document describing the vocational medical and psychological abilities required from the workforce. This text will later on be available to the reader.

6.1. REQUIRED ABILITIES TO HAVE ACCESS TO INFRASTRUCTURE

6.1.1. THE NOTION OF COMPETENCE

- a. The notion of **competence** was taken into account for our survey. It is therefore extremely important to define it precisely , to grasp its characteristics and their consequences.

The competence is ‘ a vocational qualification constituted of the whole of the things to know ,to know how and to know how to be. All these characterise an individual when he/she fulfils his/her functions . It is hence an ‘ ability to act in a given vocational surrounding ‘ (1)

The definitions come from ALECIAN and FOUCHER,” guide du management dans le secteur public – guide to management in the public branch- Paris, 1994.

At this stadium , it is important to define three types of knowledge integrated within the notion of competence:

- I. To Know (knowledge): “ vocational knowledge and techniques required in order to implement the activities”:
 - II. The Know How (acting abilities): as a matter of fact, it is not sufficient to own the knowledge in order to guarantee security, one has to be able to implement it. It is thus the “ ability to ensure that the knowledge gets operational in the vocational surrounding”.
 - III. To Know how to be (attitudes and behaviour).This deals with the individualistic abilities and qualities: the individual’s behaviour in a work context where he/she might commit a mistake when confronted to complex procedures.
- b. This notion thus includes various characteristics which will have a certain influence on the contents of our proposals, for the notion of competence is furthermore:
 - **complex**: it combines many different types of knowledge;
 - **changeable**: for the same function, the competence can vary according to the immediate working surrounding of the workforce. An identical function may yield different types of competence according to the types of infrastructure and of used material.
 - **Subject to evolutions**: with regards to the former point ,it is obvious that in an ever changing world full of technological changes, the types of competence required from a staff member evolve and will evolve constantly and often very deeply.
 - c. This notion implies some **basic requisites** about our proposals related to the vocational abilities required to gain access to infrastructure . These are to be delivered by the IM.

- The multiple composition of this notion implies the use of **mission working plans** required for a function. This leads in a second stage to the **definition of the types of competence related to these tasks**;
- These working plans must be **constantly updated**;
- **The training sessions** by which the knowledge can be learned will include **different types** (theoretical , practical) and will necessitate the use of various **teaching methods and tools** (ex cathedra methods, interactive methods , etc...).**The training process will have to evolve constantly.**
- Bearing in mind the previous points **the methods and tools used to certify the staff members can be diversified** . The management of the abilities implies a search for constant adequacy of the staff members to what is expected in the field of traffic security. **The certification of the workforce must therefore be a permanent process** which can use various means (audit of the undergone evaluation procedures, exams,...)
- It arises from the previous points that beside the initial training, extra training as well as **permanent training sessions** (cyclical) will have to be organised for the workforce gaining access to interoperability .

6.1.2. WHAT ARE THE COMPETENCIES REQUIRED FROM THE WORKFORCE IN ORDER TO GAIN ACCESS TO INFRASTRUCTURE ?

- a.** The conclusion of the group is that the co-operation agreements notably relying on mutual reciprocity remain the more frequent way of managing interoperability traffic.

Yet, a needful competence harmonisation is felt by many players. The necessity to prevent any discrimination is often put forward. Furthermore, these agreements are practically speaking in relation to a classical railway context, based on the presence of national operators traditionally unique and whose practices are well-known. The arrival of new operators of a lesser size will definitely be a new dimension. We will also note the changes of operator within the framework of groupings or the lack of it (we can quote the example of EUROSTAR).

Such a harmonisation would allow a greater transparency on what is to be known and would contribute to a better understanding of the parameters when competition is on but the involved dynamics would also bring about a better knowledge of the functions according to the countries and the search for a common set of methods for the description of functions and competencies. The group mentions that the Official Journal of the European Communities published a description of the practical and altogether defined vocational requirements for the drivers (21/12/1992).

We induce from our visit in the Scandinavian countries that these are currently harmonising their training policies and are hence working on the types of competence.

Some evoke fears because a harmonisation might engender an increase in number of criteria and would be too constraining and too difficult to set up, bearing in mind the diverse situations . Bearing in mind the importance of the task, a harmonisation could turn out to be a rigidity factor.

REMARK: the visited networks do not primarily distinguish between a “ national” and a cross-border interoperability.

- b.** The group is definitely for the following proposal:

- ***the interoperability harmonisation on the European scale should be translated into:***
 - a **common definition of the notion of competence and of its parts.**;
 - the **implementation of a common set of methods as a basis for the definition of the competencies of the interoperability workforce.** This set of methods would first make an inventory of the fulfilled tasks per function and would set forth the common platform of activities. In such a way we would have at our disposal a set of description of activities per function which would periodically evolve;
 - following the previous point would then come **the making of a set of descriptions of the competencies per function which would then be the reference minimal common platform for the whole of the infrastructures.** Bearing in mind the conclusions and the current reciprocity agreements, this platform could only be indicative at least in a first stadium.
- ***The freedom to go on concluding co-operation agreements case by case .***
 - These agreements are a tradition within the railway branch. They realise the proximity principle. The obligation to stick to **a common method to define the competencies** would allow to prevent any possible discrimination in the future. The group suggests the set of methods briefly described earlier on. This way of working would allow to manage in full transparency the access to infrastructure for the firms of the European Union (EU) as well as for those from outside the EU.
A common competence platform will find its way on the European level; but this type of agreement will yet still be used for the competencies related to the specificity of the used infrastructure. These agreements will precise the specific competence for each infrastructure section.
 - The competencies include notably the knowledge the staff members have to learn in order to be able to fulfil their vocational activity. The group saw as far as THALYS and EUROSTAR are concerned, that new methods had been applied to realise the co-operation agreements. Yet the group would like to point out a possible undesired side-effect : the increase in number of things the staff members ought to know, notably because of the spreading of the routes to serve. This might act as a brake upon the development of interoperability. It is therefore necessary to find solutions which would brush aside this situation. The group suggests the following possibilities:
 - When the co-operation agreement is concluded, a list of common points and one with the specific points for each country should be made in order to target properly the importance of the training of the workforce;
 - A greater integration of the used techniques should be favoured in order to come to a more simplified enforcement of the rules. It will be the same when a “national” interoperability exists.
 - The translation of the regulations in the mother tongue of the workforce should be imposed ;
 - When a co-operation between operators seems obvious, it would be better if the same could happen between the IF (notably in the field of signalling and of high-speed traffic regulations).

6.1.3. ABOUT THE MASTERING ,THE LEARNING AND THE VALIDATING OF THE COMPETENCE MANAGEMENT

a. Arises from the previous points the fact that procedures allowing the workforce to master the required competencies must be permanent. From this we infer that the companies will have to organise beside the initial training sessions a process of cyclical training. The aim is to guarantee a continuous adequacy between the level of the competencies expected by the companies (IM) and the competencies mastered by the workforce. As far as capacitation of competencies is concerned, the group is thus definitely in favour of a permanent process. An evaluation of the competencies of the staff workers will take place by each significant change of the set of description of the competencies (in the sense of the appearance of new requirements). These evaluations will come above the periodical evaluations when these are scheduled by the RC, following their rules for the workforce management. The training and evaluation methods are among the tasks of the railway companies and fall under their responsibility.

b. In order to guarantee traffic security , the various concerned players have to be sure that the operators (RC) constantly implement the required processes to grasp the evolution of the competencies and to organise the necessary training sessions. Each company must explicitly plan in its internal working a **system allowing to acquire and uphold the competencies** related to the organisation of security. The chosen methods will vary according to the material, the infrastructure , the workforce policy and the company's culture.

In this context , the group favours the development of

- **Quality insurance systems which need and allow:**

- to grasp the function requirements (competencies, physical and psychological abilities);
- to keep track of the implemented processes in order to realise these requirements;
- a feedback on the experience and hence an improvement of the processes.

The group advocates the **use of certifications similar to ISO certifications which will have to be specifically adjusted to the concerned activity fields.** This process will also have to be integrated to the request of a licence attribution . Possible discriminations could in this way be prevented. Moreover , the companies will be able to go on with the conclusion of co-operation agreements.

- ***Permanent audit systems which would at any time evaluate the implementation of the developed methods presented in the previous point .***

The firms would be invited to create an internal audit plan of action which would allow a feedback.

These tools will contribute to offer a permanent control guarantee of the necessary experience required to respect traffic security.

- Besides these plans related to the processes, **random samples controls should be applied on individuals as well.**

c. The Operating RC will have to set up an elaborating and managing system of the documentation required by the system.

The word '**documentation**' covers the following items:

- Description of the functions fulfilled by the security workforce;

- Description set of the competencies;
- Files on training (training plans, describing card sheets for each training session and description of the training process.

Furthermore, the RC will have to describe the individual certification process and keep a personal file for each agent and for each training person. But more about this later.

d. The group stresses **the importance of educational and didactic choices**. The notion of competence implies various types of knowledge and , hence , the implemented educational devices must be adjusted to it case by case. In such a way the learning of a way to know how to be will not happen the same way as it would be with the knowledge of a regulation for instance.

The persons responsible for the training can be helped by the implementation of new didactic tools such as the driving simulator available on different networks which helps being trained to the different types of knowledge. The audit systems will help assessing the relevance of the didactic tools used in relation to the educational choices.

These elements force the group to emphasise **the importance of the choice and of the (initial as well as permanent) training of the trainers**. The management of these persons must be part of a policy which might give way to an audit and to a certification by a process of quality insurance. The RC are invited in such a framework to keep a file for each training person.

6.1.4. INDIVIDUAL CERTIFICATION OF THE WORKFORCE

In addition to the validation of the processes implemented by the company, methods for individual certification should also be defined, at least for those involved with cross-border interoperability. This attestation process can be seen in two ways:

In order to allow the responsible authorities (IM) of the concerned country or countries to certify the staff member, the company to which the latter belongs must keep a trace of the various stages for the managing of his/her competencies.

The group stresses the fact that the responsibilities of the various involved players concerned by the security issue must be clearly defined.

It thinks that the whole of the **certification** process must be – just as the training process – under the responsibility of the **Railway Company**.

If the training and quality insurance processes must be guaranteed by the railway company, it is nevertheless essential that control procedures of these should be foreseen. The audits and controls will be extended to the whole of the attestation process and will aim at guaranteeing that the railway companies definitely assume their responsibilities and that the interoperability workforces constantly master the required competencies for their job.

These audits and controls must be fulfilled by the IM or by an organ appointed by each Member State in such a way that the developed procedures by the companies will guarantee a high security level.

The individual certification is subjected to a permanent process. The railway companies must see to it that they uphold the level of the competencies of their workforces . **The persons responsible for the attestation process** constantly keep track of the certified person's course , thus , of the permanent adequacy of the competencies to the needs of the function. Furthermore, when the operator uses periodical exams, these can be taken into account for the extension of the attestation.

In order to ease up an individual and permanent follow-up of the staff members the group recommends the use of a personal file for each staff member. This file would contain pieces of information on the collected elements when he/she was recruited, during his/her career, his/her railway evolution and with his/her evaluations.

6.2. MEDICAL ABILITIES

In our previous report we specified that “ some competencies are subordinated to health and psychological conditions requiring a uniform approach”. We confirm this conclusion and we go further.

A harmonisation of the medical criteria should take place. For example, the Scandinavian countries are busy with a study pursuing this objective.

It is important to precise that the relevant criteria for interoperability are those about the upholding of the activity. We therefore have to distinguish :

- the valid causes for exclusion for all the vocational categories from those specific for a precise function:
- and the definitive causes from the temporary ones.

The group stresses the fact that the **problems related to alcohol and drugs abuse** should also be taken into account by the companies. They indeed greatly endanger traffic security. With regards to the relatedness of this problem with various legal principles differing from one culture to another and hence from one country to another, the regulations in such a matter must come under the national level. It is therefore important to publish these for information.

If medical examinations are automatically organised everywhere before the new staff member starts working, **the upholding of the medical abilities** should also be checked during the career. Periodical medical examinations which differ from the general regulations for the legal protection of the workers must consequently be organised. Their frequency could vary :

- according to the fulfilled function;
- according to the age category of the concerned staff members.

The group thinks that the frequency can be amplified with regards to the age or to the difficulty linked to the function.

Moreover, the group has discovered the following trend among some operators: they recruit former retired staff members from the traditional RC. These staff members are sometimes old.

If certain networks pay generally more attention to the criteria for the drivers and in particular for those working on high-speed trains, they nevertheless have not brought new regulations in the matter.

The different representatives stressed the **specific elements of the jobs in the railway field**. The group also emphasises their thoughts and it is consequently essential to be sure that the doctors and the medical services working in the railway companies do have the required knowledge. Qualification criteria for the doctors must be set up mostly where integrated medical services within the railway companies tend to disappear.

For example, the proposals developed in that matter by the CER are hereby enclosed.

6.3. PSYCHOLOGICAL ABILITIES

The psychological criteria must give rise to a **permanent attention which does not necessarily have to be subjected to periodical examinations**.

Beside an analysis during the recruitment exam, these abilities must frequently arouse the interest of the hierarchy and of the doctors who periodically follow the staff members or when some events happen. When a problem is detected (altered behaviour, disease, accident or incident with consequences on traffic security), the possibility to subject the staff member to an examination by a psychologist close to the railway world must exist.

The methods used by the RC to evaluate or assess the psychological abilities required for the fulfilling of a function in order to guarantee traffic security should be based on an audit.

It is essential that we could keep track of the capacitation process of the staff members.

6.4. COMMUNICATION IN INTEROPERABILITY

The fifth principle of the previous report dealt with this issue. The group thinks that for the service communications, the used language must be that of the country where the train circulates. It nevertheless should be possible to use a more flexible process through agreements between RC and IM. A formalised language could be defined case by case. Furthermore, the written security communications should be conceived in a bilingual or multilingual way on predisposed forms and with a predefined method.

This issue refers to that of documentation. The RC must give to the IM all the documentation related to the starting of their own trains; this documentation will for instance be necessary for the training of the concerned workforces. It will have to be available in the language(s) of the country (route) crossed by the train.

An adjusted training mostly additional to the initial experience would greatly help the exchanges.

The specific exploitation regulations and norms of the IM the train will have to cross will also be left at the disposal of the train workforce.

Train traffic requires the use by the workforce of hand-written documents whose definition and standardisation would ease up interoperability. We evoke notably the train card set, the brake report, the composition report, the vehicle list, the logbook and the technical handbooks.

6.5. STRUCTURES

As the previous report evoked, the group is definitely for the **creation of a light structure** (including IM, RC and trade unions) at the level of the European Union . Its aims would be:

- to elaborate a common set of methods for the definition of tasks and competencies (valid for the determination of the possible common competencies platform and for the conclusion of co-operation agreements);
- to determine and adjust the description lists of the competencies and of the common physical abilities ;
- to gather and analyse the results of the structures (linked to each IM or member state). The aim is to certify the learning and upholding processes of the competencies;
- to determine the principles which might lead to the realisation of conformity audits;
- to be able to contribute to the guiding , the advising and the adjusting of the regulations according to the evolution of the railway techniques.

This structure should work in close co-operation with the European Commission (or within the frame of the latter, if this turned out to be necessary).

Furthermore, a structure linked to each infrastructure management or/and each Member State would have the legal responsibility:

- to adapt on the national level the norms related to the material and to the infrastructure;
- to certify the learning processes and to check the upholding of the competencies.

7. SYNTHESIS AND CONCLUSION: LINES OF FORCE OF THE ACTUAL REPORT

This part of the document briefly presents the lines of force found out by our joint study group. These lines are based on conclusions as well as on the evolutions taken into account in high-speed interoperability They can be applied to conventional cross-border interoperability as well as to access to infrastructure within the same State.

1. Interoperability involves a co-operation between four types of players:

- The Member States (MS)
- The Infrastructure Management (IM);
- The Railway Companies (RC) and
- The European Institutions.

In order to guarantee a high level of traffic security, **It is essential to define precisely the tasks and responsibilities of each of the players involved in the different stages of the management process of the abilities of the concerned workforce categories.** These stages mainly include:

- a definition for the chosen vocational categories of the vocational abilities, the knowledge of foreign languages and of the medical and psychological abilities;
- an implementation and a control of the appropriate learning and updating processes of the different abilities and qualifications.

For the Study Group, if the RC must remain the sole responsible player for the organisation of training sessions , for the attestation process and for the control of the medical abilities, the MS must indicate who is responsible for the control of

the general security level brought about by the implementation of the norms by each operator. The structure would either be linked to the IM and/or to the State. The aim is to certify the learning processes and to check the updating of the qualifications (implementation of audits).

At the level of the European Union , the group maintains the idea to create a light structure (including the IM, the RC and the Trade Unions). This structure would aim at assessing and adjusting the descriptions of the qualifications and of the common physical abilities, at working on the attestation of the learning and updating processes of the qualifications and abilities and at determining the principles leading to the realisation of the audits on conformity.

2. During its works , the group has taken into account the following workforce categories: the drivers, the train attendants, the equipment examiners and the people standing in for the dispatching of trains.

The directive 96/48 on high-speed interoperability evokes the qualification of the maintenance workforce of the security organs. Furthermore, **the co-ordination between the infrastructure managers** is essential for an efficient interoperability. They will have to make sure that the cross-border regulations can be compatible with each other and they will have to **normalise the required abilities for the staff members of the control centres**

3. The group insists on the necessity to norm for each concerned vocational category:

- **the vocational abilities** (to know, the know-how and to know how to be) to be used. A common method for the definition of abilities should be developed as a basis for the definition of the workforce abilities;
- **the required medical and psychological abilities** necessary to the vocational activity;
- **the required level of knowledge of foreign languages.**

Bearing in mind the various parameters and the context in full evolution, these norms should be permanently updated.

4. Traffic security implies a full command of the qualifications and abilities and their updating during the career.

In such matters, the group tends to think that only a **quality insurance process** adjusted to the concerned fields can offer the required guarantees as far as the organising of training sessions is concerned. Therefore, it advises **the use of certifications similar to the ISO certification type specially adjusted to the concerned fields.** This process must also be integrated to the licence allotment (95/18).

Permanent audits should take place in order to check the real implementation of the process of the organisation of the training sessions. Beside these steps with regards to the processes, **random sample controls will have to be organised for individuals .**

As far as medical abilities are concerned,, **the RC will have to use empowered medical services in the field of railways as soon as the staff member is**

recruited and during his/her career The Member State will have to define the criteria and the legitimisation procedure of these services in order to guarantee the quality of the offered services. They should also be subjected to a European official legitimisation.

5. The group is definitely for **a harmonisation of the various information systems used by the staff members**. Indeed, needless to say that train traffic requires from the workforce the use of many documents whose standardisation would greatly ease up interoperability (brake report, composition report, logbook, etc..).

Bruxelles, le 1 mars 2000

Note de frais

Olivier Starquit

Objet: traduction vers l'anglais de la synthèse du groupe d'étude

Cette traduction contenait 940 lignes .

Selon le tarif convenu de 25 BEF la ligne: $940 \times 25 = 23.500$ BEF