

## **RnV-Standard M-005**

***Procedure for the admission  
of rolling stock on the Dutch  
national railway network***

### **COPY**

This is a copy of the original standard,  
provided by Railned Spoorwegveiligheid.  
The distribution of copies is not recorded by the standard manager.  
This means that new versions of the standards paper will not be  
forwarded to holders of copies.

### **Colophon**

Standards manager ir. R. Koningen (tel. + 31 30-2358711)  
Reference RnV/98/K40.007.015  
Version 0.3  
Date of issue 31 March 1998

© Railned Spoorwegveiligheid, 1998

## Contents

<b>0</b>	<b>GENERAL</b>	<b>3</b>
0.1	Authorisation	3
0.2	Purpose and function	3
0.3	Application area/working area	3
0.4	Higher regulations	4
0.5	Validity	4
0.6	Definitions	4
0.7	Exemptions and further decisions	4
0.8	Objection/Appeal	4
0.9	Charges and invoicing	5
0.10	Distribution	5
<b>1</b>	<b>ADMISSION REQUIREMENTS</b>	<b>6</b>
<b>2</b>	<b>WORKING METHOD</b>	<b>6</b>
<b>3</b>	<b>TYPE ADMISSION</b>	<b>7</b>
3.1	Standard procedure	8
3.2	Simplified procedure	9
<b>4</b>	<b>SERIES ADMISSION</b>	<b>10</b>
<b>5</b>	<b>MAINTENANCE REQUIREMENTS</b>	<b>10</b>
5.1	Standard procedure	10
5.2	Simplified procedure	11
<b>6</b>	<b>COMMISSIONING</b>	<b>12</b>
	<b>Appendix A Rates 1998</b>	<b>13</b>

© Railned Spoorwegveiligheid, 1998

All rights reserved. This standard may not be reproduced, stored in an electronic filing system, or published, in any form or in any way, whether electronically, mechanically, by photocopying, recording, or in any other way, without the prior permission from Railned Spoorwegveiligheid. The organisations listed in the distribution list of this standard (section 0.10) are excepted for internal use.

Inclusion of a part or parts of this standard in anthologies, readers and other compilations is permitted, as long as the source (Railned Spoorwegveiligheid, title, reference number and date) is stated.

## 0 GENERAL

This standards paper is issued by Hoofd Spoorwegveiligheid (the Head of the Railned department Railway Safety), in accordance with the government's commission. An RnV-standard is an implementation regulation of the RRV and is of a compulsory nature, i.e. it may not be deviated from.

The Minister of Transport is responsible for the frameworks within which traffic is conducted on the national network and imposes obligations in this respect on railway companies operating in The Netherlands.

The regulations developed by the EC provide for changes to the structure of organisational relationships in the railway transport system.

This means that the responsibility for transport by rail is divided between the manager of the network on the one hand and the carrier companies on the other.

For the Dutch national railway network, the following three neutral government-commissioned agencies provide an interpretation of the concept of 'infrastructure manager':

- *Railned* for providing capacity on the network, admitting rolling stock and providing safety certificates
- *NS Verkeersleiding* for controlling traffic on the network
- *NS Railinfrabeheer* for providing and maintaining the infrastructure

Admitting rolling stock on the national railway network has thus become a responsibility delegated to Railned, which has thereby become the only formal agency in The Netherlands that can give a valid and final opinion about the admission of a vehicle.

Railned has established a (temporary) office for the admission of rolling stock: BMT (Bureau Materieeltoelating = rolling stock admission office).

### 0.1 Authorisation

The **standards manager** indicates by means of his initials that this RnV-standard has come about in accordance with the requirements of Railned Spoorwegveiligheid's quality system. **Hoofd Spoorwegveiligheid** indicates by means of his initials that this standards paper has been finalised and that he agrees to its release.

	Function and name	Date	Initials
Verification	Standard manager Paper Manager: ir. R. Koningen	01-04-1998	w.g.
Authorisation	Hoofd Spoorwegveiligheid: drs. W.A Vriesendorp	07-04-1999	w.g.

### 0.2 Purpose and function

This procedure is intended for carriers who wish to run their rolling stock on the Dutch national railway network. From the point of view of safety and compatibility with the infrastructure, conditions are imposed on the construction and maintenance of that rolling stock.

This procedure describes backgrounds, arrangements, and the method of working in order to have rolling stock admitted to the network.

### 0.3 Application area/working area

Each vehicle that appears on the Dutch national railway network comes under the responsibility of a Dutch carrier authorised by Railned. It does not matter in this respect who the owner of that vehicle is.

The relevant carrier is responsible for showing that the rolling stock meets the requirements set forth by Railned.

The carrier's liability towards Railned for the rolling stock on the network involves the construction, assembly, modification, maintenance, commissioning, inspection and operation of:

- vehicles over which he has control as economic owner;
- vehicles belonging to third parties, who are not carriers, for which he accepts liability towards others by means of agreement;
- vehicles belonging to other (domestic and foreign) carriers, with whom he has made arrangements to guarantee that exchanged vehicles meet the same agreed requirements as his own vehicles.

N.B.: Vehicles belonging to foreign railway companies that are members of the RIV or RIC, which meet the technical requirements of the RIC or RIV, will still be admitted temporarily without the Dutch carrier having to show that they meet Dutch requirements.

The obligations for member carriers arising from the RIV and RIC agreements will still be considered temporarily as sufficient guarantee for the safe condition of the rolling stock.

In the event of incidents occurring with RIV/RIC rolling stock, the carrier must still show, however, that all requirements have been met.

## **0.4 Higher regulations**

This is an RnV-standard as referred to in RRV, Chapter I (general conditions).

This standard gives a more detailed elaboration of Chapter IV (Rolling Stock) of the RRV: *Rolling stock will only be commissioned after it has been established that the requirements for use on the national railway network have been met. These conditions are set forth by Hoofd Spoorwegveiligheid. A vehicle that does not meet the requirements set forth may only be commissioned with the written permission of Hoofd Spoorwegveiligheid.*

## **0.5 Validity**

This is the first version of this RnV-standard.

It should be checked when applying this standard whether it is the most recent valid version. The version number is shown on the first page and in the footer of this standard.

The number of the most recent valid version is shown in the standards register that is available from Railned Spoorwegveiligheid.

This standards paper comes into effect on 15 April 1998.

## **0.6 Definitions**

See Chapter IV (Rolling Stock) of the RRV

## **0.7 Exemptions and further decisions**

Exemptions from this standards paper can only be granted by Hoofd Spoorwegveiligheid. Hoofd Spoorwegveiligheid will decide on matters for which this standards paper gives no definite answers.

## **0.8 Objection/Appeal**

If the applicant for admission or recognition does not agree with the results of the assessment by BMT, an objection may be submitted to the Director of Railned. The latter

shall decide, depending on the circumstances and, if necessary, on the basis of the opinions of experts or authorities, whether there is reason to change the results.

Objections to decisions by the Director of Railned may be lodged with the Minister of Transport.

The civil courts may be approached as a last resort.

## **0.9 Charges and invoicing**

The charges involved in the admission of rolling stock and workshop recognition are published annually in a separate rate sheet.

Invoicing and conditions of payment are set forth separately for each instance.

The rates for 1998 are set forth in Appendix A.

## **0.10 Distribution**

This standards paper is supplied as standard to the managements of:

- Railned
- NS Railinfrabeheer
- NS Verkeersleiding
- NS Materieel
- Carriers
- Maintenance companies
- NS Materieel

Distribution within these organisations takes place under the responsibility of the relevant management.

Distribution to contractors to these organisations takes place by and under the responsibility of the relevant commissioning party.

Distribution to managements of organisations/contractors not listed above is by application to the standards manager (see front page).

## 1 ADMISSION REQUIREMENTS

The requirements to be applied to the rolling stock cover:

- the safety of traffic and the safety of passengers, staff and the environment;
- the requirements in connection with compatibility with the infrastructure;
- the requirements in connection with common use of the infrastructure;
- the requirements that the government-commissioned agencies have to set forth in order to be able to meet environmental permits themselves;
- a unique identification, so that recognition and control is possible.

In this respect, Railned relies on the requirements collected from (former) NS, UIC, national and European legislation, as well as on experiential data relevant to the aspects listed.

Checking against other legislation, including health and safety legislation, is in principle not carried out, unless there is a relationship with the above requirements.

The conditions for admission apply to the assembly, construction and modification as well as to the inspection, maintenance and operation of the rolling stock.

## 2 WORKING METHOD

The way in which Railned handles admission of the rolling stock is of a temporary nature. It is expected that, in time, "notified bodies" will come about, which will operate under the supervision of Railned and be authorised to assess and admit rolling stock in a scientific and neutral manner. As long as such notified bodies do not exist, the present procedure, which guarantees the requirements for neutral and expert admission, will apply for the admission of rolling stock.

Railned has established a temporary office for the admission of rolling stock, the Bureau Materieeltoelating, or BMT. The BMT limits itself explicitly to the assessment of information supplied by carriers/rolling stock owners and maintenance companies that must relate to all relevant aspects of rolling stock admission or the recognition of maintenance companies.

The applicant for admission or recognition is responsible for showing that the requirements set forth by Railned have been met.

The relevant assessment aspects are set forth in RnV-standards and should be submitted to the BMT in a verifiable format.

The BMT will advise carriers, if required, when compiling the admission dossier, about the examinations and tests to be carried out. Advice can also be given concerning other parties who could assist the carriers in this, and their estimates.

Railned distinguishes between the following three processes in connection with the admission of rolling stock:

- *Technical admission (type admission)*  
The design as well as a representative prototype of the rolling stock to be admitted will be checked against the design standards and design requirements given in the RnV-standards. Any structural modifications to rolling stock already admitted should undergo reassessment.
- *Series admission*  
It will be determined here whether the series examples of the rolling stock have been constructed in accordance with the characteristics set forth in the type admission.
- *Maintenance requirements*  
The condition of the rolling stock has to be ascertained by the application of maintenance carried out by maintenance companies recognised for this purpose by Railned.

The rolling stock will only actually be admitted if all three processes have been completed successfully. The chance that hazardous incidents should occur as a result of breakdown of the rolling stock is thereby acceptably small.

If the conditions for type admission, series admission and maintenance are met, the rolling stock can be commissioned by means of a commissioning instruction agreed by Railned and inclusion in the carrier's rolling stock register.

### 3 TYPE ADMISSION

All rolling stock that is in service on the Dutch national railway network has to have a Railned type admission. It makes no difference here whether this is old or existing rolling stock.

Type admission means that the rolling stock, including all its critical systems and components (in relation to both the design and the concrete assembly used), has had all its relevant constructional aspects checked and that BMT's findings were positive.

Much importance is given here to the satisfactory passing of a validation and test programme in which it is shown that the rolling stock meets the rolling stock characteristics and requirements set forth.

The following steps can be distinguished in the assessment process:

- *Design assessment*  
In this phase, the technical design is assessed for soundness in respect of design criteria, assembly techniques, construction methods and the intended operational use. Calculations are checked against the applicable regulations and documentation is checked for its completeness and quality.
- *Prototype testing*  
Verification of the critical characteristics of the design is by means of the testing of one or more prototypes or early examples from the production series. A test programme for this purpose must be agreed with BMT and set forth in advance.
- *Operational experience*  
Operational experience ultimately determines whether the rolling stock finally meets all the requirements for safety and compatibility.

In general, final admission is first obtained after sufficient operational experience has been gained. Running may be permitted in the preceding phases with provisional or temporary technical admission, to enable testing and operational experience.

A type admission procedure is started up when new or existing, as yet unknown, rolling stock crops up is to be newly admitted.

All necessary data concerning design assessment, prototype testing and operational experience will usually already be available for existing rolling stock. As no European or bilateral agreements about mutual recognition between admitting bodies exist yet, Railned will carry out full assessment on existing rolling stock as well.

Railned will promote the establishment of such mutual recognition agreements.

A simplified procedure can be used in some cases, for example for:

- modification to existing rolling stock already in the possession of type admission;
- types of rolling stock that appear very occasionally on the national railway network;
- temporary admission for certain conditional test runs.

See what is set forth in section 3.2 .

### **3.1 Standard procedure**

#### **Phase 1: Initial information for carriers/rolling stock owners/manufacturers, etc.**

The interested party in rolling stock admission is generally a carrier, a rolling stock owner who is not a carrier, or a manufacturer or importer of railway rolling stock.

Requests for information concerning the admission process can be submitted to the BMT. The BMT can clarify the procedure and the way in which admission can be accomplished in the case in question.

This basically means that the applicant has to show that the rolling stock in question meets the requirements set forth in RnV-standard M-001.

The BMT advises carriers, if required, about drawing up the admission dossier, about examinations and tests to be carried out or yet to be carried out, as well as about parties who can carry these out thoroughly.

BMT will emphatically not act as intermediary or principal for examinations, rolling stock modifications to be designed, or development advice concerning the burden of proof on the part of the party concerned in the rolling stock admission.

The initial information about the procedures and costs connected with rolling stock admission is by way of familiarisation, without obligation, and short, and is therefore free of charge for the applicant.

#### **Phase 2: Application for admission of rolling stock**

The carrier or rolling stock owner has to submit to BMT a written request to admit the rolling stock in question onto the national railway network.

This request should be accompanied by sufficient information about the specific construction characteristics, calculations, drawings, test reports, etc., to show that the rolling stock meets the requirements of RnV-standard M-001.

An initial assessment will be made on the basis of this initial information and an estimate will be made for full admission assessment by BMT.

Stringent quality requirements are therefore laid down for the information supplied. The application can be rejected in the event of the information supplied being of insufficient or poor quality.

A fixed charge will be made for dealing with the application.

#### **Phase 3: Offer phase**

BMT will produce an offer listing the costs involved in the admission test on the basis of the application data, and will lay down conditions if necessary. It will be assumed in the offer that full documentation that can be assessed properly will be supplied during testing (preferably in the Dutch language). Furthermore, an ultimately positive assessment is envisaged.

It will be indicated, if necessary, what additional information is required in order to make a sound assessment possible.

Depending on the complexity and the innovations of the rolling stock in question, offers can vary widely. In general, admission of already existing rolling stock will be considerably simpler than that of new rolling stock.

The offer will be produced or a final decision will be provided no later than 1 month after the application has been received.



#### **Phase 4: Order/order acceptance**

The applicant will give BMT a written order based on BMT's offer and any further negotiation.

The definitive conditions and arrangements with respect to the ultimate scope of the recognition, the schedule and the charges will be set forth in the order.

BMT will confirm in writing admission of the order and the conditions under which testing will be carried out.

#### **Phase 5: Admission test**

The admission test will be carried out in accordance with the order/order acceptance.

Circumstances could occur during the admission test which make amendment of the order necessary. These could include rolling stock that is shown by further testing not to comply with the standards and would require a separate "fitness for use" assessment.

The turnaround time for testing depends to a large degree on the extent and nature of the project. Understandings in this respect will be made in the order.

#### **Phase 6: Type admission**

A certificate of (provisional, temporary or final) type admission will be granted after positive assessment of all relative factors on the basis of the information supplied. Conditions and limitations can be indicated here if all requirements are not met completely but there is no reason for a total refusal.

Final admission does not have unlimited validity. Should doubts arise during operation concerning safety or compatibility with the infrastructure, type admission can be suspended or withdrawn.

Suspension/withdrawal can also occur if old or existing rolling stock no longer meets the present or amended requirements.

A new admission process can take place after suspension/withdrawal if further testing has been carried out or if modifications have been made that resolve the problems.

If modifications that have or could have an effect on aspects of admission are made to rolling stock that has already been admitted, new admission is obligatory.

The carrier responsible is obliged to report such modifications.

### **3.2 Simplified procedure**

Circumstances can occur under which the standard procedure is too rigorous for the type admission in question. These circumstances could include occasional but necessary rides with, for example, foreign rolling stock, road maintenance machines, test runs with new or modified rolling stock, etc., and also minor modifications to rolling stock.

BMT will determine in each separate case whether it is wise to waive full type admission. Replacement inspections tailored to the particular case to determine the present condition, special conditions of carriage, and the monitoring thereof have to be taken into account in any event.

The same limitations as referred to under Phase 6 in Section 3.1 apply in the case of long-term validity of admission.

A fee to cover the cost of the assessment and admission work by the BMT will be always charged when a simplified procedure is employed.

## **4 SERIES ADMISSION**

It will be determined, in consultation with the applicant, which assessment work is required in order to be certain that all rolling stock units have been constructed in conformity with the type. The extent of the assessment work by the BMT for series admission depends to a great degree on the quality of the manufacturer and the testing bodies engaged by the applicant.

Under normal circumstances, the BMT will not engage any testing agencies itself, except when, in cases of doubt about quality, the BMT itself has to engage a testing agency to carry out random tests to get an idea of the quality of the construction testing and the dossiers produced with construction and purchase protocols.

For existing rolling stock, at least an intake test will have to be carried out by a (professional) testing agency acceptable to all parties. This could be done by a Railned-recognised workshop that is going to perform preventive maintenance, for example.

## **5 MAINTENANCE REQUIREMENTS**

As well as meeting the requirements for technical admission, the rolling stock must also remain in a proper and safe condition during the period of operation. The preventive maintenance required for this must be managed and performed in a professional manner.

A system for recognising railway rolling stock maintenance companies has been developed for this and is set forth in RnV-standard M-004. This means that carriers on the national railway network are obliged to have the rolling stock that is entered in their register maintained by a maintenance company recognised by Railned.

This has created a framework for controlling the condition of rolling stock, so that the chance of hazardous incidents caused by the condition of the rolling stock is acceptably small.

### **5.1 Standard procedure**

#### **Phase 1: Initial information for carriers and maintenance companies**

The interested parties here are, in general, carriers and maintenance companies. They can be provided by the BMT with an explication of the procedure for the recognition process for maintenance companies and the underlying principles.

RnV-standard M-004 describes which requirements a maintenance company should meet in order to obtain recognition by Railned.

This initial information about the procedure and the charges involving recognition is purely by way of familiarisation, without obligation, short, and free of charge.

#### **Phase 2: Application for recognition by Railned**

The carrier or maintenance company has to submit to the BMT a written request to be recognised by Railned for maintenance of a particular type of rolling stock.

This request should be accompanied by relevant information about the company and the maintenance system employed, so that a clear idea can be gained about all the conditions referred to in RnV-standard M-004.

The extent and content (types of rolling stock, types of maintenance, specific technologies, any sub-supplies) of the required recognition must be clearly indicated.

A fixed fee will be charged for dealing with the application.

If the initial information supplied gives insufficient insight or is of poor quality, the application can be rejected.

### **Phase 3: Offer phase**

Within 1 month after receipt of the application, the BMT will produce an offer of the charges and conditions involving the evaluation in relation to the desired recognition. It will be stated what additions to the initial information will have to be supplied to make the dossier evaluation possible, and in what way the eventual practical assessment of the company will take place.

The extent of the recognition and the complexity of the company structure will have an effect on the scope of the evaluation and therefore on the size of the offer.

### **Phase 4: Offer acceptance/order**

The applicant will give a written order to the BMT based on the offer and any further consultation.

The order will explicitly establish the conditions, arrangements, restrictions, and scope of the required recognition, schedule, and charges.

The BMT will confirm the order and the conditions under which the evaluation will be carried out.

### **Phase 5: Assessment of company**

Assessment of the company can begin as soon as the necessary dossiers are complete. After positive assessment of the dossiers, one or more visits to the company will be made by independent Railned experts.

They will establish whether the company meets the Railned requirements and the quality standards generally employed in The Netherlands and whether the preliminary information has been implemented properly.

This phase will last approximately 2 months for an average company and will result in an opinion about recognition, possibly provisional, or in rejection.

### **Phase 6: Recognition**

Based on the results of the assessment, Railned can decide whether to proceed to temporary, provisional or definitive recognition; rejection is also possible.

Temporary recognition will be granted if there are no decisive doubts, but additional measures have to be taken or further evidence has to be provided.

In the case of provisional recognition by Railned, rolling stock registered in The Netherlands may be maintained conditionally, insofar as this rolling stock falls within the scope of the recognition.

Recognition will be in the form of a certificate, showing to which activities the recognition applies and/or for which activities conditions apply.

Railned recognition is valid for a period of not more than 3 years. A new evaluation by Railned is required for extension of the recognition. This new evaluation must be applied for in good time by the maintenance company in question.

The content of the recognition can be extended or amended later. A new evaluation is required in this case.

Railned recognition can be withdrawn, see RnV-standard M-004.

## **5.2 Simplified procedure**

The standard procedure can be too onerous a requirement for some very small existing maintenance companies.

Taking into account the nature and extent of the work to be carried out on the rolling stock, the BMT can, in exceptional cases, waive the requirement in RnV-standard M-004 for holding a quality certificate.

The BMT can limit itself instead to an assessment of that company's quality control.

Recognition of that company for performing maintenance will be characterised by stringent conditions under which work may be carried out on specific types of rolling stock for specific work. Such a company may not call itself a Railned-recognised workshop.

## **6 COMMISSIONING**

The carrier is obliged to publish admission of the rolling stock registered with him in a commissioning order. This will contain data concerning the vehicle, the conditions and limitations of use, maintenance, serial numbers, the manufacturer, the year of construction, etc., that are used as sources of information for those who encounter the rolling stock during operation and/or disasters.

The content and distribution of the commissioning order will be determined in consultation with the BMT after admission has been obtained by the applicant.

A commissioning order must be certified by Railned and will also serve as confirmation of admission of the rolling stock in question on the national railway network.

The carrier is obliged to maintain a register, accessible by Railned, of all rolling stock commissioned under his responsibility.

## Appendix A Rates 1998

The rates below apply for 1998:

- Assessment of an application for type admission, series admission, or recognition of a maintenance company (per location):  
*A fixed rate of Hfl 4500 applies per application.*
- Standard assessment of rolling stock data (type testing), the construction data (series testing), or of a workshop to be recognised:  
*An offer tailored to the extent of the work will be made. In each instance a fixed price can be agreed or assessment can take place under direction at an hourly rate of Hfl 221.*
- Simplified admission or recognition:  
*An offer tailored to the extent of the work will be made. It can be agreed in each instance to carry out the work for a fixed price under direction at an hourly rate of Hfl 221.*
- Administrative completion of type admission, series admission or workshop recognition:  
*A fixed rate of Hfl 2250 applies per instance.*
- Verification and certification of the commissioning order (or amendment thereof):  
*Depending on the extent of the work, hours worked will be charged at a rate of Hfl 221.*
- Modifications to the rolling stock, parts or components, updating obsolete or expired admissions, extension of recognitions:  
*Work will be charged per instance at an agreed fixed price or on the basis of hours worked under direction (hourly rate Hfl 221).*