

**EFW Guideline
EUROPEAN ARC WELDER FOR RAILWAY
TRACKS: European Arc Welder for Rail Joining
and European Arc Welder for rail Restoration**



**Minimum Requirements for the Education, Training,
Examination, Qualification and Certification**



EFW-653-10/SV-01

RAILSAFE

Education, Qualification and Certification

www.ewf.be/railsafe2

MINIMUM REQUIREMENTS FOR THE EDUCATION, TRAINING, EXAMINATION, QUALIFICATION AND CERTIFICATION OF A EUROPEAN ARC WELDER FOR RAILWAY TRACKS:

- **EUROPEAN ARC WELDER FOR RAIL JOINING
(EAWRJ)**
- **EUROPEAN ARC WELDER FOR RAIL
RESTORATION (EAWRR)**

Interim Guideline of the European Welding Federation
Prepared under the RAILS SAFE 2 Project



RAILSAFE is a LEONARDO DA VINCI
Community Vocational Training Action Programme Project

MINIMUM REQUIREMENTS FOR THE EDUCATION, TRAINING,
EXAMINATION, AND QUALIFICATION AND CERTIFICATION OF
A EUROPEAN ARC WELDER FOR RAILWAY TRACKS:

EUROPEAN ARC WELDER FOR RAIL JOINING (EAWRJ)

EUROPEAN ARC WELDER FOR RAIL RESTORATION (EAWRR)

This is a reduced version; it is not the full Guideline

**For more information regarding the EWF Qualification System,
the EWF-IAB/IIW Combined Secretariat or the National ANB
should be contacted**

(see in the EWF and/or IIW sites for the ANB contacts)

**GUIDELINE OF THE EUROPEAN FEDERATION FOR WELDING,
CUTTING AND JOINING - EWF**

Issued December 2010

Published by: EWF– Secretariat
C/o: ISQ
Av. Prof. Dr. Cavaco Silva, 33
Taguspark – Apartado 012
P-2780-994 Oeiras
PORTUGAL

Tel: +351 21 4211351
Fax: +351 21 4228122
E-Mail: ewf@isq.pt

Table of contents

Preface	5
Scope	5
References	6
Terms and Definitions	6
1. Introduction	8
2. Overall structure	8
3. Access to the course	9
4. Instruction programme	9
5. Arc Welder Instructor (Railway Tracks)	13
6. Examinations and Tests	13
6.1 Authorised Examiner	14
6.2 Examinations leading to the EAWRJ/EAWRR Diploma	14
6.3 Certification as an EAWRJ/EAWRR	15
6.4 Transition Arrangements	16
7. Entry on Database (optional)	17
8. EUROPASS	17
8.1 CV service	17
Appendices	18

Preface

This document has been prepared by the partners in the RAILS SAFE 2 project.

The aim of the RAILS SAFE project is the "Development of a Harmonised System for Education, Qualification and Certification of Railway Track Welders - Phase 2". Phase 2 is RAILS SAFE 2 and is dedicated arc welding processes.

The project is financially supported by the European Union *LEONARDO DA VINCI* Education and Culture Lifelong Learning Programme.

RAILSAFE 2 started on 1 October 2008 with a two year duration.

Partners in the RAILS SAFE 2 project are:

- Ir. J.B. van den Brug Raadgevend Ingenieur, the Netherlands, Project coordinator
- Instituto de Soldadura e Qualidade, Portugal
- European Federation for Welding, Joining and Cutting Secretariat, Portugal
- Swedish Welding Commission, Sweden
- TWI (TWI Ltd), UK, Project promoter
- National R&D Institute for Welding and Material Testing, Romania.

The document is based on the input of in total 39 railway welding experts from 4 different European countries by discussions in workshops in Sweden, UK, and Romania held during 2009.

Scope

Arc welding processes are used for joining rail track sections and for restoring worn or defective rail heads. Successful joining or restoration requires competent welders who possess an appropriate level of technical knowledge and practical skill. This Guideline describes in detail a regime for the education, training, examination, qualification and certification of such welders. The Guideline covers:

- Access conditions for people wishing to attend the course of education and training
- Details of the instruction programme - theoretical and practical - divided into different combinations of welding processes and skill modules
- Examinations and tests leading to the award of a diploma which is valid for the life of the holder
- Track welding experience requirements leading to the award of a certificate of competence which has a limited validity
- Ongoing requirements for the renewal of certificates of competence for increasing/changing their scope
- Transition arrangements under which existing competent welders can achieve appropriate qualification and certification.

European Federation for Welding, Joining and Cutting

Enquiries about RAILS SAFE may be addressed to:

Secretariat of the European Federation for Welding, Joining and Cutting
C/o: ISQ
Av. Prof. Cavaco Silva, 33
Tagus Park - Apartado 012
P-2741-901 PORTO SALVO
PORTUGAL

Telephone: +351 21 421 1351
Email: ewf@isq.pt
Web site: www.ewf.be/railsafe2

This is not the full version of this document, this version has only the aim to supply general information

© **Copyright 2003**

European Arc Welder for Rail Joining/Restoration

Approved: December 2010

References

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- EN 15594:2009 Railway applications – Track – Restoration of rails by electric arc welding
- EN 14811:2006 Railway applications. Track. Special purpose rail. Grooved and associated construction
- EN 13674-1:2003+A1:2007 Railway applications. Track. Rail. Vignole railway rails 46 kg/m and above
- EN 13674 Part 2:2006 Railway applications. Track. Rail. Switch and crossing rails used in conjunction with Vignole railway rails 46 kg/m and above
- EN 13674 Part 3:2006 Railway applications. Track. Rail. Check rails
- EN 13674 Part 4:2006 Railway applications. Track. Rail. Vignole railway rails from 27 kg/m to, but excluding 46 kg/m
- prEN 13231-3:2009 - Railway applications - Track - Acceptance of works - Part 3: Acceptance of reprofiling rails in track
- EN 287-1:2004 Qualification test for welders - Fusion welding - Part 1: Steels
- EN 15689:2009 Railway applications - Track - Switches and crossings - Cast austenitic manganese steel for crossing components
- EN 10083-1:2006 Steels for quenching and tempering. General technical delivery conditions
- EN 15016 -1,-2,-3:2004 and -4:2006 Technical drawings - Railway applications
- Inspection and maintenance of cast manganese steel products.. Balfour Beatty Rail for Edgar Allen cast manganese crossings.
- Recommended operation and maintenance manual - for cast manganese fishplated monoblock crossings and cast manganese centre block crossings with weldable leg ends. Outreau Technologies, Edition 2.
- EWF-635 Minimum requirements for the Education, Training, Examination, Qualification and Certification of a European Aluminothermic Welder (EAW)
- Rules for the implementation of RAILS SAFE Guidelines for the education, examination, qualification and certification of European railway track welding and related personnel. Interim Rules of the European Federation for Welding, Joining and Cutting Prepared by RAILS SAFE. RAILS SAFE/RULES/PU/EWF/TR/090727/4.

Terms and definitions

European Federation for Welding, Joining and Cutting (European Welding Federation - EWF)

EWF is an association of welding institutes and societies throughout Europe, see www.ewf.be. In relation to the RAILS SAFE system for rail welder education, training, qualification and certification, EWF operates the system and applies special rules for RAILS SAFE Authorised National Bodies that wish to implement the system.

RAILSAFE Authorised National Body (RANB)

Organisation assessed and authorised by EWF, which operates the RAILS SAFE education, training, qualification and certification system in its country.

Approved Training Body (ATB)

Training organisation approved by the RAILS SAFE Authorised National Body (RANB) for training of arc welders for railway tracks; "training establishment" in the definition of EN 15594.

European Arc Welder Instructor (Railway Tracks)

Instructor teaching theoretical knowledge and practical skills for courses leading to EAWRJ/EAWRR qualifications.

Authorised Examiner (AE)

Person authorised by the RAILS SAFE Authorised National Body to examine knowledge and/or skills of a welder for a Diploma and/or a Certificate.

Railway Authority (RA)

Either the railway regulator or the owner of a railway infrastructure or the custodian with a delegated responsibility for a railway infrastructure

Preliminary Welding Procedure Specification (pWPS)

This is not the full version of this document, this version has only the aim to supply general information

© **Copyright 2003**

European Arc Welder for Rail Joining/Restoration

Approved: December 2010

Provisional welding procedure specification, which is assumed to be adequate, but which has not been qualified according to the relevant standard or specification. Welding of test pieces which are needed for approval of a welding procedure specification has to be carried out on the basis of a preliminary welding procedure specification.

Welding Procedure Specification (WPS)

Procedure approved according to European standards and agreed by the RA for use on the railway infrastructure. An example is given in Annex B of EN 15594.

Employer

Company which employs welders.

Contractor or Sub-contractor

Company approved by the RA to carry out the restoration or joining of rails by electric arc welding. This may include staff from the RA.

Diploma

Lifelong valid document issued to a person having successfully passed an examination after his/her education and training for knowledge and skills.

Certificate

Document with limited validity and range of scope issued to a Diploma holder showing current knowledge and skills.

Restoration

A generic term used in EN 15594 which covers activities such as repairing of defects, 'building up' of worn areas, refurbishment, etc

Joining

This means joining two lengths of rail by welding the ends together. EN 15594 does not cover this activity.

Minimum requirements for the Education, Training, Examination, Qualification and Certification of a European Arc Welder for Railway Tracks (EAWRJ/EAWRR)

1. Introduction

The RAILS SAFE 2 harmonised system provides for theoretical education and practical training of European Arc Welders for Railway Tracks. The specific requirements for the theoretical education, practical training, examination, qualification and certification of arc welders for restoration and/or joining of railway tracks are described in this guideline. The guideline applies only to the welding of tracks and associated components like switches and crossings, and describes the know-how and skills which the welder requires to produce satisfactory welds independently on rails according to EN 13674-1, EN 14811 or other rails grades and profiles which are not covered by these standards.

Specific national or local requirements which are not covered by the training and examination requirements described in this Guideline must be dealt with separately. The requirements described in this Guideline are the minimum ones that must be followed in order to comply.

2. Overall structure

Qualification, resulting in the issue of the European Arc Welding Diploma for Railway Tracks, requires theoretical education, practical training and theoretical and practical examination.

Certification requires qualification as above plus track welding experience.

Figure 1 shows the overall structure.

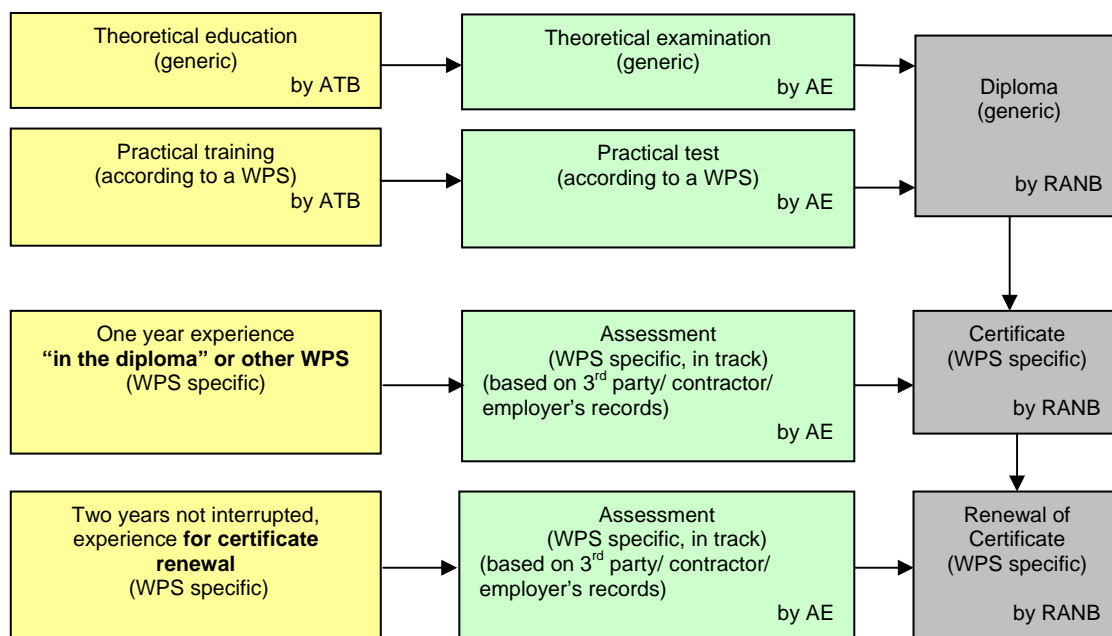


Figure 1 Overall structure of education, training, qualification and certification

Legend: RANB = RAILS SAFE Authorised National Body
 ATB = Approved Training Body
 AE = Authorised Examiner

This is not the full version of this document, this version has only the aim to supply general information

© Copyright 2003

European Arc Welder for Rail Joining/Restoration

Approved: December 2010

The theoretical education and examination for a Diploma is generic and the practical training for a Diploma is specific to a welding procedure specification (WPS) (for joining or restoration of rails). The practical examination for a Diploma is also WPS specific. After passing the examinations the welder will receive a generic Diploma valid his/her whole life.

Diploma holders are required to demonstrate a one year period of supervised, documented and satisfactory experience in order to receive a Certificate, which is WPS specific. This applies to the Certificate relating to the WPSs in which the welder has been trained for the Diploma. If the Diploma holder is successful in passing the experience assessment, the Certificate is awarded; if not, the Diploma holder must undergo an 'in-track' practical test. To get a Certificate relating to another WPS, the welder must also undergo additional practical training and an 'in-track' practical test in that WPS.

Certificates are valid for two years. In order to renew a Certificate for another two-year period, holders are required to demonstrate supervised, documented and satisfactory experience in the WPS for which the certificate was awarded during the period of validity of the Certificate. The holder must not have had interruptions to work lasting any longer than six months. If the certificate holder is successful in passing the experience assessment, the Certificate is renewed; if not, the Certificate holder must undergo an 'in-track' practical test.

3. Access to the course

For entry to the course, health, and physical and mental capability may be specified by the RANB according to any national or other requirements. The participants are required to have knowledge and skills on health and safety, track construction, cutting and grinding as specified by the RANB.

The minimum age is 18 years. Participants must have a spoken and written command of the language in which the course is offered.

Holders of the European Aluminothermic Welder diploma (see document EWF-635) are exempt from modules 1, 2, 3, 4.2 and 4.4 of the theoretical education.

Students entering the course are not required to have undergone any prior training or experience in welding, but persons with a welding background may be eligible to have the number of training hours reduced, see section 4.

4. Instruction programme

In the context of the current Guideline, two arc welding processes are used:

Manual metal arc welding (MMA)
Flux cored arc welding (FCAW)

By following this Guideline, a welder can achieve qualification and certification in any (one or more) welding processes and skill modules combinations:

Combination 1 - Joining rails by MMA welding

Combination 2 - MMA restoration of plain rail, all rail grade groups

Combination 3 - MMA restoration of crossings, all rail grade groups

Combination 4 - MMA restoration of switchblades, all permissible rail grade groups

Combination 5 - FCAW restoration of plain rail and crossings, all rail grade groups

Combination 6 - FCAW restoration switchblades, normal rail grade groups

Combination 7 - FCAW restoration of plain rail, and switch and crossing components, using fully automatic equipment

Combination 1 is 'stand-alone' but combinations 2 to 4 and 5 to 7 are progressive, which means that combination 2 has to be completed before moving on to combination 3 and then 4. Combination 5 has to be taken before moving on to combination 6 and then 7.

The theoretical part of the course is generic in that it covers both welding processes and all the rail components mentioned above. However, the student must choose whether the theoretical part is to cover joining, restoration or both. Supplementary theoretical training can be taken later as required.

The practical parts are specific to each of the combinations given in the list above. There is only one practical part for joining see Combination 1 above. For students aiming to achieve a qualification in rail restoration, the first practical part to be taken must be Combination 2 or Combination 5. Additional restoration combinations require additional practical parts of 63 hours duration each (including examination). However, it is possible to limit the practical restoration training to Combination 2 (or 5) and add other competencies via the certification route, see section 6.3.

Joining of rails requires additional knowledge and skill in the area of rail cutting (oxy-fuel and mechanical) as well as grinding of the completed welds.

The restoration combinations will require additional skill in grinding (for preparation and completion) and in NDT (for preparation and completion).

The durations of the theoretical education part(s) and the practical training part(s) are shown in Table 1. The parts are divided into modules, each with has a number of teaching hours allocated to it. The course can be configured to suit the combination(s), see above, for which qualification is sought.

Part/ Module	Recommended teaching hours		
	Joining only	Restoration only	Joining and restoration
Theoretical education part			
1. Health, safety and environment	7		
2. Track fabrication	2		
3. Materials and their behaviour during welding	11		
4. Application of arc welding to rails	24 ^A	18 ^B	34
Theoretical examination	1 ^C	1 ^D	1
Total Part 1	45^E	39^F	55^G
Practical training part (per combination)			
1. Joining only (1 combination)/ Restoration only (1 combination)/ Joining and Restoration (2 combinations)	43	59	102
Practical test	4	4	8
Total Part 2	47^H	63^I	110^J
Total Parts 1 and 2	92	102	165

Table 1 - Parts comprising the training course including examinations

This is not the full version of this document, this version has only the aim to supply general information

The examples below show the training and examination modules required to achieve some of the specific combinations.

New students:

Combination 1: E plus H

Combination 2: F plus I

Combinations 1 and 7: G plus J (includes practical for Combination 5) plus I (for Combination 6) plus I (for Combination 7).

Students with existing qualifications:

Holding Combination 1, seeking Combination 2: B plus D plus I

Holding Combination 2 seeking Combination 5: I only

Holding Combination 2, seeking Combinations 1 and 4: A plus C plus H (all for Combination 1) plus I (for Combination 3) plus I (for Combination 4)

The recommended periods of time in the theoretical part are the minimum times required for the student to attain the expected level of knowledge. However, students entering the course from a welding background as a welder from another industrial sector may be eligible for a reduction in the number of theoretical teaching hours as appropriate.

With regard to the practical part, it is recognised that students' ability to acquire practical skills vary. Therefore the hours shown are considered to be the time that an average student would require. The time needed may vary individually according to the capability of the student and is at the discretion of the Arc Welder Instructor (Railway Tracks), see section 5.

A teaching hour will contain at least 50 minutes of direct teaching time. It is not obligatory to follow exactly the order of the topics given in this guideline.

The theoretical education given to the students aims at a basic understanding of the processes and the materials behaviour including standards and safety regulations. The themes and keywords are given as "scope" in the module descriptions, together with the "objective" and the "expected result".

If a person successfully completes the 'Joining Only' theoretical course and then wishes to take the 'Restoration Only' course sometime later, he/she is exempt those theoretical modules which are common (1, 2, 3, 4.1, 4.4, 4.5 and 4.6).

The practical training advised in this guideline will bring the students to the skill, required for practical work in industry. Practical training shall be done in accordance with welding procedures that are agreed by the applicable Railway Authority.

The order of theoretical education and practical training is at the discretion of the training establishment. It is advisable for each day of the course to contain a blend of theoretical training, demonstrations and practical training.

It is permitted to run the course in separate sessions with gaps in between, but the full course, examination and testing must be completed in an overall time period of nine months for each combination.

Training courses are conducted by Authorised Training Bodies (ATBs). The courses are normally conducted in the training school, but parts of the course may be conducted at the track site, at the discretion of the ATB.

Participants will only be admitted to the examination if they have participated in all aspects of the training course.

ATBs must include in the training programme any applicable national requirements defined by the Railway Authority that approved the applicable welding procedures.

In the following paragraphs the minimum requirements for education and training courses are given, with the indication of teaching hours, making particular reference to the 'expected results' (welder performance objectives).

	<u>teaching hours</u> <u>recommended</u>
Theoretical education	55
1. Health, safety and environment	7
2. Track fabrication	2
3. Materials and their behaviour during welding	11
3.1 Basics of metallurgy	2
3.2 Welding metallurgy and structure of welded joints	4
3.3 Rails and rail components	5
4. Application of arc welding to rails	34
4.1 Principles of arc welding (applies to both joining and restoration)	2
4.2 Cutting processes for rails (applies only to joining)	7
4.3 Arc welding application	19
4.3.1 Joining of rails by arc welding (applies only to joining)	9
4.3.2 Restoration of rails by arc welding (applies only to restoration)	10
4.4 Grinding of completed welds (applies to both joining and restoration)	2
4.5 Welding imperfections and defects (applies to both joining and restoration)	4
4.6 Other joining processes (applies to both joining and restoration)	0
<i>This subject is not part of the teaching, but should be included in the handout material</i>	
Theoretical examination	1

	<u>training hours recommended</u>
2 Practical training	110
2.1 Joining of rail by arc welding	43
2.1.1 <u>Pre-welding activities</u>	
2.1.2 <u>Arc welding</u>	
2.1.3 <u>Post-welding activities</u>	
Practical test (in accordance with a WPS)	4
	<u>training hours recommended</u>
2.2 Restoration of rail	59
2.2.1 <u>Pre-welding activities</u>	
2.2.2 <u>Arc welding</u>	
2.2.3 <u>Post-welding activities</u>	
Practical test (in accordance with a WPS)	4

5. Arc Welder Instructor (Railway Tracks)

Instructors teaching theoretical knowledge and practical skills for courses leading to EAWRJ/EAWRR qualifications must possess specific knowledge and skills (on the complete guideline the requirements are defined).

The Approved Training Body (ATB) must install a system for ensuring that instructors keep up to date and maintain their competence.

6. Examinations and Tests

There are common RAILS SAFE rules for the conduct of examinations and tests. These are provided in a separate document, reference RAILS SAFE/RULES/PU/EFW/TR/090727/1, and they must be applied to all RAILS SAFE examination and tests, including those related to the European Arc Welder for Railway Tracks.

The paragraphs below deal with special additional requirements for examinations and tests which are required for the European Arc Welder for Railway Tracks.

6.1 Authorised Examiner (AE)

The RANB shall administer examinations and tests for the European Arc Welder for Railway Tracks through the appointment of competent persons, to be known as RANB Authorised Examiners, who shall be responsible for the functions listed below and for complying with the rules concerning re-examination.

RANB Authorised Examiners shall be competent to perform the duties they are requested to undertake and may be specific appointees of the RANB or an RANB approved appointee of another organisation, for example the Approved Training Body (ATB) or of a rail welding contractor. The Examination Board of the RANB is responsible for the appointment of the Authorised Examiners and for supervising their work.

Authorised Examiners must be able to demonstrate impartiality in reaching decisions about the results of the examinations they are supervising.

All examinations shall be conducted under the general supervision of an Authorised Examiner. It is the responsibility of the RANB Authorised Examiner to verify compliance with applicable welder qualification requirements, in particular with respect to (detailed information is given on the complete guideline).

6.2 Examinations leading to the EAWRJ/EAWRR Diploma

The examination/test centre for the final theoretical examinations and qualification tests may be a part of the training body or a separate organisation. In either case, the operations of examinations and tests shall be independent of the training activities and subject to RANB approval. The theoretical examination and the practical test must conform to the applicable welder qualification requirements.

6.2.1 Theoretical examination

After the theoretical training part, there is a final theoretical examination of the multi-choice type covering the whole syllabus: examination papers shall comprise questions selected by the Authorised Examiner from a bank of questions approved by the RAILS SAFE Authorised National Body.

The time to be allocated to the theoretical examination should be a minimum of 1 hour's duration and contain at least 40 multiple choice questions. The examination should take place at the ATB.

The theoretical examination pass mark is 60% minimum. Failure requires re-examination. A second failure requires re-entry into the training part leading to the examination.

Appendix 2 contains sample questions of the theoretical examination.

6.2.2 Practical test

After the practical training part, there is a final practical test in a specific arc welding process and skill combination selected by the candidate and/or his/her employer according a WPS. The test shall follow EN 287-1 as much as is reasonably practicable. It shall be administered by the Authorised Examiner and shall take place at a location approved by the AE.

The time to be allocated to the practical test should be a maximum of 4 hours, excluding cooling time.

A suggested checklist for an assessment regime that could be used by the AE to carry out practical tests is attached as Appendix 3.

There are no special rules concerning re-examination in the event of failure in the practical test. However, more than one failure is an indication that further training is required.

6.2.3 Award of EAWRJ/EAWRR Diploma

After successfully completing the theoretical examination and the practical test, the candidate is awarded the EAWRJ and/or EAWRR Diploma as applicable. The combination of arc welding process and skill module used for the practical test is indicated on the Diploma as well as any additional skill tests passed, like cutting, grinding and NDT. An example of a diploma is shown in Appendix 4.

Diplomas are the property of the holder and are valid for the life of the holder.

6.3 Certification as an EAWRJ/EAWRR

Certificates as described in the current document are not 'Permits to Weld' as described in EN 15594, but railway authorities may use such certificates as a basis for issuing 'Permits to Weld'. The ownership of the Certificate rests with the RANB.

6.3.1 Initial certification

To receive a Certificate in any combination of arc welding process and skill module the Diploma holder is required to demonstrate a minimum period of one year of supervised, documented and satisfactory experience in that combination with a minimum of 10 welds being completed by the applicant every six months. RANBs are permitted to accept a lower number of welds as dictated by the circumstances. Justification for doing so must be documented.

If the combination to be used for certification is not the same as the combination indicated on the Diploma, the candidate must also provide evidence of at least 8 hours of training in the combination to be used for certification.

Evaluation of the supervised, documented and satisfactory experience and training, if applicable, is carried out by the RANB Authorised Examiner, based on a 3rd party/contractor/employer's records of welder training and competences, weld records, number of welds produced in a given period, number of welds rejected and notified number of welds failed in service. Evidence of experience may be presented in the form of a log book with appropriate signatures.

If the welder is not successful in passing the experience assessment, the Authorised Examiner conducts an 'in-track' practical test of the welder in the combination indicated on the Diploma. In case of a combination which is different from the one indicated on the Diploma the "in-track" practical test is obligatory.

After successful assessment a Certificate is awarded to the candidate by the RAILS SAFE Authorised National Body. The Certificate shall be issued in at least one of the official CEN languages (English, French or German). The certificate is specific to the applicable combination of arc welding process and skill module. Extra skills may also be shown, for example, cutting, grinding and NDT.

An example of a Certificate and Identity Card (optional) are shown in Appendix 5.

There are no special rules regarding re-examination in the event of failure in the practical test for certification (or re-certification). However, more than one failure is an indication that further training is required.

The validity of the certificate begins from the date when all necessary tests have been passed. A certificate shall remain valid for a period of two years. This is providing that the welding coordinator or the responsible personnel of the employer can confirm that the welder has been working satisfactorily within the initial range of qualification. This shall be confirmed every six months. Evidence of unsatisfactory work must be reported to the certificate issuing authority and may result in the certificate being rendered invalid.

6.3.2 Renewal of certification

For prolongation of their Certificate after it has been expired, Certificate holders are required to demonstrate a 2 year period of supervised, documented and satisfactory experience with a minimum of 10 welds being completed per six month period in the combination indicated on the certificate and with no interruption of work longer than a period of 6 months. All records and evidence used to support prolongation must be traceable to the welder, must indentify the WPS(s) that have been used by the welder, and must demonstrate that the welder has consistently achieved the quality levels required in the original test. As indicated above, log book evidence is acceptable. RANBs are permitted to accept a lower number of welds per year and a longer period of un-interruption of work as dictated by the circumstances. Justification for doing so must be documented.

If the welder is not successful in passing the experience assessment, the renewal candidate is then required to repeat the 'in-track' practical test in the applicable combination of welding process and skill module.

Success in the practical assessment leads to the issue of a new Certificate, in accordance with section 6.3.1 above.

In order to ensure continuity of certification it is recommended that the RANB is advised well before the expiry date of the certificate. A successful renewal test taken within three months before the expiry date of the existing certificate shall result in a new certificate being issued from the date of expiry of the existing certificate.

6.4 Transition Arrangements

An RANB can offer Transitional Arrangements for a period of up to three years from the implementation of this guideline by the RANB.

Practising arc welders for railway tracks may be eligible for the award of the RAILS SAFE Diploma if they can prove that they have successfully undergone a programme of training and examination that is equivalent to the minimum requirements described in this guideline. The programme may have been conducted under the control of the RANB or under another recognised qualification body.

Practising arc welders for railway racks may be eligible for the award of the RAILS SAFE Certificate if, firstly, they have satisfied the conditions for the award of the Diploma under transition arrangements and, secondly, if they can prove that they have gained the required experience and passed the practical tests in accordance with this guideline or under equivalent technical conditions.

This is not the full version of this document, this version has only the aim to supply general information

© **Copyright 2003**

European Arc Welder for Rail Joining/Restoration

Approved: December 2010

Diplomas and Certificates may only be awarded under Transitional Arrangements in the following cases:

- a) by the RANB in the country in which the applicant received his/her welding diploma/certificate, or
- b) by the RANB in the country in which the applicant is currently practising, in contact with the RANB of the country that issued the original diploma/certificate.

7. Entry in database (optional)

There is an option to upload the all the details of the welder's Diplomas and Certificates to the arc welder for railway tracks database on the RAILS SAFE website. Details are to be found in Document RAILS SAFE/Guide/PR/EWF/IF/070109.

Installing any data on the database requires the permission of both the welder and the employer concerned.

8. EUROPASS

People who are looking for a job – whether in their own country or abroad – need to be able to present their qualifications and skills so that employers can correctly understand and appreciate them.

The Europass service, provided through a network of national centres and an internet portal, provides a number of instruments to make this process easier.

8.1 CV service

The portal - available in 26 languages – provides useful information and an interactive tool to complete the Europass CV and the Europass Language Passport with the help of online tutorials and guidelines.

The Europass CV highlights what users can do, including skills acquired outside formal education and training. Language skills are described in both documents through the widespread reference framework established by the Council of Europe. The CVs can be downloaded in several formats which can be uploaded directly onto online employment databases.

Every day on average more than 7,000 CVs are created on line throughout Europe.

A number of other Europass documents have been defined. A key one in the current context is the Europass Certificate Supplement which explains in terms of competences a vocational training certificate, so that employers can better appreciate what its holders can do.

Each Member State is responsible for the implementation of the Europass instrument at national level. For this purpose, each Member State shall designate a National Europass Centre (NEC), which shall be responsible for the coordination at national level of all activities and which shall replace or develop, where appropriate, existing bodies currently carrying out similar activities.

More information can be found at http://ec.europa.eu/education/lifelong-learning-policy/doc46_en.htm

On the complete Guideline is given the full information regarding the appendixes

Appendix 1: Examples of Welding Procedure Specifications

- 1A: MMA centre of railhead repair
- 1B: FCAW centre of railhead repair
- 1C: MMA joining of rail

Appendix 2: Specimen theoretical examination questions for the European Arc Welder for Railway Tracks

Appendix 3: Example of a Practical Assessment - MMA restoration of plain rail, all rail grade groups

Appendix 4: Diplomas

Appendix 5: Certificates