



EUROPÄISCHE FÖDERATION KORROSION
EUROPEAN FEDERATION OF CORROSION
FEDERATION EUROPEENNE DE LA CORROSION

Working Party « CATHODIC PROTECTION » (EFC WP 16)

Minutes of the 17th Meeting September 6th, 2011 Stockholmsmässan (Stockholm International Fairs) Stockholm, Sweden

1 Welcome, Apologies.

The meeting was opened at 10 am by the Chairman, Marcel Roche, who shortly presented the Working Party for the new attendants. After the usual apologies for the people who could not attend the meeting and the attendance list for those who could, the intended agenda as depicted in the invitation started the session (see [annex 1](#)). 22 people attended the meeting, representing 14 countries, which constituted a high level of attendance.

Marcel Roche introduced **Jérôme Crouzillac** (Bac, France) who has accepted to become the Vice-Chairman. He will be the new EFC WP 16 Chairman from 2012.

Sylvain FONTAINE (GRTgaz, France) accepted to be the secretary for this meeting.

Attendees:

Marcel Roche (Chairman EFC WP16, President of CEFRAFOR, France), Jérôme Crouzillac (Vice-Chairman, BAC, France), Maria Elena Afonso (PDVSA – Intevep, Venezuela), Pr. Dr. Erwin Baumgartner (Carinthian University, Austria), Simone Brasil (Executive Director ABRACO, Universidade Federal do Rio de Janeiro, Brazil), Pr. Dr. Ali Fuat Cakir (Istanbul Technical University, Turkey), Jorge Coelho (Petrobras, Brazil), Sylvain Fontaine (GRTgaz, France), Linda Goldberg (NACE International, USA), Anne-Marie Grolleau (DCNS, France), Dr. Fumio Kajiyama (Tokyo Gas Co, Japan), Krezimir Kekez (PA-EL, Croatia), Hans-Gerhard Köpf (FKKS Cert GmbH, Germany), Pr. Lazzari (Politecnico Milano, Italy), Ian Merchant (Technip, UK), Dr. Ayodele Okunola (Statoil, Norway), Harald Osvoll (Force Technology, Norway), Jean-Pierre Pautasso (DGA, France), Dr. Ing. Jerzy Sibila (Corrstop, Poland), Neil Summers (Abriox, UK), Michael Surkein (ExxonMobil Development, USA), Christian Thomsen (BAC, Denmark).

Apologies:

Markus Büchler (SGK, Switzerland), Peter Frenz (DVGW, Germany), Adrian Gomila (Guldager Electrosis, Spain), David Kroon (Corrpro, USA), Jose Saviano (Comgas, Brazil), Simone Tremolada (Industrie De Nora, Italy).

The present minutes of meeting are sent to the attendants and to those who were not able to attend this time. They are also sent to those who attended the recent previous meetings and to other potentially interested colleagues.

2 EFC WP16 business: Work programme for 2011 – 2014, Website (including use of “restricted area”)

The updated detailed action plan for 2011-2014 of EFC WP16 as registered by EFC STAC has been presented.

One of the main objectives of the WP 16 is to organize sessions during the Eurocorr's. This year a general session on “Cathodic protection” presenting 8 papers was organised on Tuesday 6 afternoon and a joint session on “Marine and Offshore Cathodic Protection” presenting 5 papers was co-organised with WP9 (Marine Corrosion) and WP13 (Corrosion in Oil & Gas) on Wednesday 7 morning. In addition, a paper on CP in concrete was presented during the “Corrosion in concrete” session, but there was not enough papers this year to organise a joint session with WP11.

It was reminded that the other major objectives of EFC WP16 are:

1. **Follow-up of progress and support in Certification** of CP personnel, services or companies in Europe, especially consecutive to the publication of EN 15257 (CP – Competence levels and certification of CP personnel).
2. **Publication of a “Best of”** collecting selected papers presented at previous Eurocorr's.
3. Exchange of information and recommendations for **CP measurements and coating surveys techniques for buried pipelines**.

M. Roche reminded that, like for all other EFC Working Parties, EFC WP16 update a Web page (<http://www.efcweb.org/Working+Parties/WP+16.html>) on the EFC website (<http://www.efcweb.org/>).

Then, he presented the “**restricted area**” to be **only devoted to “official members” of EFC WP 16**. The possibility of “restricted areas” is offered to the EFC Working Parties by DECHEMA, operating the Web site of EFC. The “restricted area” is accessible at the bottom of the public EFC WP16 Web page, using specific “*username*” and “*password*”. These will be sent to each “official member” in order they will be able to reach the corresponding “restricted area”. This “EFC WP16 restricted area” will be used in addition to the EFC WP16 public Web page to install information that WP16 will decide to supply only to “EFC WP16 members” and not to spread it too much.

Who will have access to the “EFC WP16 restricted area”?

1st condition: To be a **member of one of the organisms members of EFC**, which are?

- European member societies (presently 32, from 25 countries)
- International member societies (presently CAMPI from Israel, ACA from Australia, “NACE Europe”)
- Affiliate members, either Universities and Research organizations (presently 4) and Companies (presently 3).

The detailed list of these members and the way to become a Member are available on the EFC web site.

The possibility of accepting “Friends of EFC” is currently investigated.

2nd condition: To **request to be a member of EFC WP16**, for instance by filling-in the attached form the addressees of the invitation for the Stockholm EFC WP16 meeting have received and which was circulated during the meeting. This form, to be filled-in by any other applicant who fulfills the first condition and to be sent to the Chairman, is given in [annex 2](#).

The “*username*” and “*password*” necessary for reaching the “EFC WP16 restricted area” will be sent in parallel with the present minutes to the first members of the list of official members. This first list contains the following names, with their respective EFC membership and country: Marcel Roche (CEFRACOR,

France), Jérôme Crouzillac (CEFRACOR, France), Pr. Dr. Ali Fuat Cakir (The Corrosion Association in Turkey, Turkey), Sylvain Fontaine (CEFRACOR, France), Adrian Gomila (CEFRACOR, Spain), Anne-Marie Grolleau (CEFRACOR, France), Krezimir Kekez (Croatian Society for Materials Protection, Croatia), Hans-Gerhard Köpf (GfKorr, Germany), Pr. Lazzari (AIM, Italy), Dr. Ayodele Okunola (NACE International, Norway), Harald Osvoll (NACE Europe, Norway), Jean-Pierre Pautasso (CEFRACOR, France), Dr. Ing. Jerzy Sibila (Polish Corrosion Society, Poland).

What will be put on the “EFC WP16 restricted area”?

- Unapproved minutes of the latest EFC WP16 meeting;
- The annexes of the minutes of meetings;
- The list of members with their addresses;
- An updated table giving the comparison of the schemes of certification of personnel in cathodic protection in the various countries;
- An updated table giving the comparison of the number of certificates delivered to persons in cathodic protection in the various countries;
- Other documents and information, to be detailed in the future.

What will be kept on the EFC WP16 public web page?

- The existing information to be periodically updated (history, objectives, strategy plan, activities);
- As now, minutes of meetings after approval during the subsequent meeting. That means minutes for a meeting year “n” will be on the website in year “n+1”. Annexes will not be put on the public page from now;
- Other documents such as papers presented at Eurocorr’s which have arrived too late to be copied on the CD ROM. A first case is the paper from Harald Osvoll presented at Eurocorr’2011.

3 Approval of the minutes of the 16th meeting held in Moscow, Russia, on September 16th 2010.

The minutes were approved without any modification.

The minutes will be available on the public page of WP16 on the EFC website, without annexes (to be kept on the “restricted area”).

4 Status on implementation of EN 15257 on "Qualification and Certification of Cathodic Protection Personnel". Discussion on co-operations between European countries and between EFC WP16 and CEOCOR Commission 2

M. Roche reminded that CEN TC219 WG5 was disbanded after publication of EN 15257 in Dec. 2006. EN 15257 applies the requirements of EN ISO/CEI 17024 (General requirements for bodies operating certification of persons) and contains two different parts:

- It defines 3 competence levels for 4 application sectors;
- It specifies the common requirements for the certification scheme of CP personnel.

During 2011, CEN organised the “5-year Systematic Review” inquiry about EN 15257, asking if it should be conserved, cancelled or revised. The results (9 countries for conservation as it is, 3 countries for revision, 0 for cancellation, the other abstaining) concluded that EN 15257 will be kept as it is for the time being.

Some countries which were against revision prefer to keep EN 15257 as it is because they don't want to change too quickly the referential on which their Accredited Certification body is working. On the opposite, many of them are open for producing a EN ISO standard as explained in 5.

EFC WP 16, which was at the origin of the preparation of EN 15257, has decided to follow up the progress in certification in the various European countries (especially to report on the situation regarding the implementation of EN 15257) and in the other countries of the world.

As usually, M. Roche presented a new update of the situation based on the most recent information received, especially summarizing the known cumulated number of certificates which have been attributed for each level and application sector by the various European countries in full accordance with EN 15257 or not ([annex 3](#)).

In France, certification of CP personnel is now directly delivered by “CEFRACOR Certification” (Department CFPC) instead of AFNOR Certification. Accreditation by COFRAC is currently prepared.

FKKS Cert in Germany and S Cert in Switzerland are accredited, respectively by DAR and SAS.

Pr. Lazzari completed the data for Italy, explaining that the first training and examination session organised for level 2 in Concrete application sector has been held at the beginning of 2011. CICIPND, the certification body acting for CP as well as NDT, is now accredited by its national accreditation body (Accredia) for CP personnel according to EN ISO/CEI 17024 and EN 15257.

Since the meeting, information was received from Slovakia which operates certification of CP personnel for Land application sector. Comparative tables containing this new information together with updated data from Italy and France are given in [annex 4](#). This document “**CERTIFICATION IN THE FIELD OF CATHODIC PROTECTION - MOST RECENT UPDATING**” will be put on the “EFC WP16 restricted area” and updated when new information will be obtained from the corresponding colleagues in the various countries. These colleagues will receive directly this updated document, whether they have access to the “EFC WP16 restricted area” or not.

All addressees are kindly requested to send to the Chairman the most updated information concerning their countries. More especially, recent data are lacking for Germany, UK and The Netherlands.

M. Roche reminded that there is no official equivalence between the various European certification bodies applying EN 15257 schemes as long as this equivalence is not demonstrated through formal Accreditation. The MLA (Mutual Lateral Agreement) system, implemented by the EA (European co-operation for Accreditation) which gathers the national accreditation bodies, allows this equivalence. Details on UA, the MLA, the countries members of UA and the names of Accreditation Bodies in the various European countries may be found on <http://www.european-accreditation.org/>.

M. Roche explained that France has proposed to complete this approach (EN ISO/CEI 17024, EN 15257, accreditation, MLA) by creating a common referential for the training program and the examination detailed program. This referential could be prepared by a **Joint working group** created by **EFC WP16** (for all application sectors) and **CEOCOR Commission 2** (for Land application sector, especially onshore pipelines), and published as an “EFC Publication”, which constitutes now a well known and visible series of “green books” at the international level (sold with NACE books at NACE annual Conferences for instance). This book would propose a useful and widely disseminated complement to EN 15257, to be used on a voluntary basis for training and preparation of examinations. It would ensure a better actual equivalence of the competence levels in the various countries. This would be profitable to harmonise all the certification schemes as well as to establish close co-operations between European countries accepting this idea in order to optimise the training courses, the testing and training facilities and examination processes. The aim

of this approach is to clearly display CP certification at the European dimension, which could provide a strong and visible scheme at the international level, with a common logo and a common name such as "CP European Certification". The logo could for example be in two languages, English and the language of the country (if different).

This discussion will be continued during the CEOCOR Fall meeting in Brussels on Nov. 16, 2012.

5 Exchange of information on the progress of Certification for CP outside Europe. Possible project on ISO standard (ISO TC156 WG10)

Updated information was given by Jorge Coelho on the implementation of a training and certification scheme in Brazil. Some Brazilian representatives visited previously the existing centres to take suggestions and feedback, in France, the USA and Argentina. His presentation is given in [annex 5](#). To be highlighted:

- The certification is operated by the Brazilian Corrosion Association, ABRACO,
- Jorge Coelho is the Chairman of the Qualification & Certification Committee,
- The accreditation is on the responsibility of INMETRO,
- The standard is ABNT NBR 15653 (Revision scheduled in Nov. 2011),
- Level 1 (equivalent to NACE level 1) and 2,
- On land sector first, seawater in the future,
- Two training centres: one in Sao Paulo (in construction) and one in Rio (in preparation),
- Training is not given by the certification body. A minimum of training hours and a minimum of experience and prequalification are required. First training sessions will start in Nov. 2011.

Dr. Fumio Kajiyama described the situation for Japan:

- 2 corrosion companies,
- 250 gas companies, but only 3 major ones having their training centres for their own technicians and engineers.
- No certification scheme presently.
- Japan is revising their CP standard, mainly for a.c. influence and risks of HISC.

On a longer term, the question is raised on the establishment of an ISO standard which could harmonise the NACE, European and eventually other schemes. M. Roche informed that ISO TC 156 WG 10 has recently decided to launch a work item on Certification of Cathodic Protection Personnel according to Vienna Agreement with CEN TC219 lead. Many European countries are interested to participate in this WG. Japan is interested also. NACE should be involved for USA through ANSI. At the date of the meeting, clarification was necessary on whether ISO TC156 wish to adopt directly EN 15257 using UAP procedure or if they consider that a revision should be performed by CEN TC219 and this new standard voted in parallel using Vienna agreement.

Since the meeting, Göran Engström, the Chairman of ISO TC156, informed that *"The intention of ISO/TC 156/WG 10 was that EN 15257 ought to be implemented as ISO standard. If CEN/TC 219 start a revision of EN 15257 and have a plan to make the revision in about 3 years, I think the best is that we have a parallel voting and Vienna Agreement. In other case ISO 156 will propose a "Fast-track procedure" to implement the EN 15257 how it is today."*

6 Project of an EFC Publication on the “State of the Art Report for the assessment of CP of buried pipelines”.

M.Roche made a short update on this topic, reminding that the objective of writing a publication in the EFC Series of Books (“Green books”) on it is very difficult to reach due to its technical difficulty and to the too weak involvement of EFC WP16 members and, up to now, the absence of co-operation with CEOCOR Commission 2.

It has been previously agreed to stop on this project for the time being as nobody was really willing to participate any further. It could be re-started if various countries such as France and UK produce national recommendations on this topics, currently in preparation.

The EFC WP13 (Oil & Gas) has worked on a more general document on the industry’s best practice for “corrosion management of pipelines” from the design stage to the end of life. The publication will be kept simple for cathodic protection with references to existing standards only.

7 Project of an EFC Publication on the “Best of” of the papers published at the Eurocorr’s on CP.

This project consists in preparing a publication for the EFC Series of Books (“Green books”) constituted of the best papers presented at the previous Eurocorr’s. The major problem is that papers at Eurocorr’s are not lectured and approved by EFC before their presentation at the conferences. A selection is therefore necessary, together with some modifications of the papers with the approval of authors if needed.

A.M. Grolleau has prepared a CD gathering all the papers relevant to CP (except CP in concrete) since Eurocorr 2000. It has been circulated among the French WP 16 delegates willing to be involved in this project. The final papers selection has still to be made. Other volunteers from EFC WP 16 are kindly welcome to help for reading and checking the other papers and contacting their authors to update them.

8 Other topics

No other topics have been discussed because of lack of time.

9 Next meeting and events.

The next business meeting of EFC WP16 will be organised during **Eurocorr 2012 in Istanbul, Turkey (Sept. 9 – 13, 2012).**

Abstracts for the CP session to be organised in Eurocorr 2012 are welcomed on the dedicated website by Feb. 10.

During the “Cathodic protection” session of Eurocorr 2011 in which several interesting papers dealing with CP modelling were presented, it has been decided to organise a specific Workshop on: **“Using Computer Modelling for improving Cathodic Protection design”**. Abstracts on this theme are kindly welcome.

S. FONTAINE
Secretary

M. ROCHE
EFC WP 16 Chairman