

EUROPEAN FEDERATION OF CORROSION EFC WP16 on CATHODIC PROTECTION

Minutes of the 4th Meeting Politecnico di Milano Milan, Italy, 15 March 2000

1. WELCOME, APOLOGIZIES

M.Roche, Chairman of EFC WP16, thanked Pr. Pedeferrri for offering the facilities for this 4th meeting, welcomed the attendants (14) and gave the apologies (9). The list of members (i.e. persons having participating at least once or who apologised for absence) was circulated for corrections and additions. The updated version, giving the attendants and apologies, is put in Appendix 1. Thomas Bürger from TÜV Austria represented Austria for the first time. Attendants made a short presentation of themselves. E.Stella, Chairman of APCE, participated to the meeting. M.Roche reminded the aims of EFC WP16, which gathers CP specialists acting for themselves without official representation of their countries.

I.Ragault-Rolland accepted to be the secretary for this meeting. The agenda of the meeting is given in Appendix 2.

2. PRESENTATION OF ACTIVITIES OF PR. PEDEFERRI

Corrosion prevention in concrete is the main topic of Pr Pedeferrri's laboratory in Politecnico di Milano, covering:

⇒ CP in concrete.

⇒ Behaviour (in soil and relation to CP) of a kind a cementitious material used to backfill excavations or filling casings, the CLSM (Controlled Low Strength Material), corresponding to ACI 229 R standard.

⇒ Inhibitors in concrete.

⇒ New reference electrodes for concrete applications.

A short visit of the laboratory was organised and the edition 2000 of the book "Protezione Catodica" written by Prs Lazzari and Pedeferrri offered to participants together with a book presenting the laboratory.

3. APPROVAL OF THE MINUTES OF THE 3rd MEETING

The minutes of the 3rd meeting hold in the frame of Eurocorr'99 in Aachen, were approved without comment. M.Roche informed that the CEFRACOR secretary sends the paper version of minutes of meetings and invitations to meetings with provisional agendas; it follows electronic versions sent before by e-mail. Modifications can be done at this level before paper diffusion. Some difficulties subsist with some e-mail and fax addresses.


4. INFORMATION ABOUT EUROCORR's

• Eurocorr'2000 in London (10 – 14 September 2000)

M.Roche explained that WP 16 will organise its first technical sessions in Eurocorr'2000, alone or in collaboration with other Working Parties, in addition to the 5th WP16 meeting.

- EFC WP16 organises alone a technical session on "CP: General and buried structures applications", containing 11 oral papers and 5 posters (Monday 11th);
- EFC WP16 and WP9 (Marine Corrosion) co-organise a common session on "CP: Marine applications", containing 8 oral papers (Wednesday 13th);
- EFC WP11 (Concrete) did not accept to hold a common session with WP16 on "CP: Concrete applications" but agreed to gather the 8 papers concerning this subject in a period of time with no other CP related topic (Tuesday 12th).

This provisional program is given in Appendix 3, with the details of papers, which were briefly presented during the meeting.

 **5th Meeting of WP16 will be the 14th a.m. September 2000**

- **Eurocorr'2001 in Riva del Garda, Italy (30 September – 4 October 2001)**

The Call for Papers has been already sent and is reproduced in Appendix 4. Papers from the members of WP16 are kindly invited in order to organise new technical sessions.

5. CERTIFICATION IN CP

M.Roche made a brief summary on the State of the Art study carried out with a help of a Work Group (through e-mails) on certification in the field of CP in the different countries of Europe and in USA (NACE International). Following a kind invitation of F.Stalder, Chairman of CEOCOR Sector A (CP), made during the 3rd meeting in Aachen, a first version will be presented at the CEOCOR Congress of Brussels on May 9th 2000. This paper was the main basis of discussion during the 4th meeting. Some corrections were requested, especially from Italy; the revised version, sent to CEOCOR for the publications book, is given in Appendix 5. It will be the basis for the final EFC document, to be written by the end of 2000. A new draft will be presented at the London 5th meeting, possibly for final acceptance. I.Ragault-Rolland expressed the will to participate to the Work Group preparing this document.

During its 4th meeting in Paris in November 1999, the CEN TC219 (Cathodic Protection) decided to distribute Italian and French standards (in English versions) for a first enquiry about the wishes of the member standardisation national organisms to open a work item on Certification of CP personnel. The Italian document was already sent and the English versions of the French standards were almost ready to be sent. M.Roche was to send by e-mail a copy of these standards to EFC WP16 members to make sure that their national standardisation organisms will be able to give an answer to CEN TC 219 in time (before the 5th meeting to be held on 10 May 2000 in Brussels).

Note: This meeting has decided to initiate the procedure for a new item on Qualification and Certification of CP personnel. If accepted by CEN, CEN TC219 WG5 would be launched, the actual work starting in 2001, after completion of EFC WP16 document.

- **Round table concerning the interest of countries to work on a certification standard for CP personnel:**

- ⇒ France, Italy: in favour. A first comparative study of the standards has been done in a meeting the day before. No major difference could prevent a common document;
- ⇒ Netherlands: initially in favour of guidelines instead of a standard. This will be discussed within the Netherlands standardisation Society (NEN). A final positive answer is possible;
- ⇒ Belgium: in favour of a unified system because Belgium will not organise exams in three languages but will send people in neighbour countries. About 100 persons are concerned by level 1 in Belgium. M.Pourbaix wishes that this point of view of Belgium appear in the paper of M. Roche presented to CEOCOR;
- ⇒ U.K., Germany: no representative at the meeting;

- ⇒ Spain: will support the creation of a CEN WG;
- ⇒ Poland: J.Jankowski verifies that Poland is member of CEN and would push in favour of the new work item;
- ⇒ Austria: first participation to the EFC WP16 meetings. No existing CP certification nowadays. The question will be discussed during the next meeting of the Austrian standardisation organism.

- Discussion about § 4 of M. Roche's paper for CEOCOR Congress
 - Levels: general agreement for 3 levels, but the corresponding skills, knowledge and tasks should be more precisely defined. Level 2 personnel would be able to perform simple designs (to be detailed), but a level 3 would endorse the work when the national regulations request it.
 - Application sectors: Italy's experience shows that it is difficult to have a sufficient number of people dealing with the other sectors than buried structures. After discussion it is envisaged no sector differentiation for level 1 and possibly level 2 but that the 4 Application sectors (buried/sea/concrete/internals) should be maintained for level 3 because of their high level of specialisation.
 - Formation: should be mandatory, with agreement of the training centres.
 - Examination: theoretical questions + practical tests, with agreement of the Examination Centres.
 - Questions: if not published, the definition of the levels shall be exactly precise. The ideal would be to have a published unique book of questions. This discussion will be continued in the next meeting before starting eventual standardisation work in CEN.
 - Certification based on experience: OK for level 3 on a temporary basis.
- Future work
 - Presentation by M.Roche of the revised paper in CEOCOR Brussels Congress on May 9th.
 - Publication of the final comparative document as a EFC reference document.
 - Depending on the CEN TC 219 decision, certification of CP personnel could be prepared in CEN; EFC WP 16 would then work on other topics.
 - **For the next meeting, each participant is kindly requested to prepare a list of tasks and knowledge for people supposed to be certified in the 3 various levels (in buried, sea, concrete, internals). Please send your contributions to M.Roche.**

6. MISCELLANEOUS - OPEN DISCUSSION

- Organisation of a symposium on CP in Poland (Gdansk).

This event has been proposed earlier. The idea is accepted by the WP on the basis of:

- ◆ A 1st day for presentation of papers,
 - ◆ A 2nd day for a EFC WP16 meeting,
 - ◆ 2002 instead of 2001 as initially suggested
 - ◆ Poland should contact Paul McIntyre, the Scientific Secretary of EFC, to have a number of event from EFC for this symposium.
- Technical matters: CP measurement effectiveness on buried pipelines

Methods of CP measurements and detection of coating defects are not well presented in the present standards, professional documents like the NACE ones and books:

- A document was published in 1988 by a joint Association between NACE and Institute of Corrosion (Corrosion ... Association) concerning these techniques of measurement;
- Publication in 1992 of a CEOCOR document on CP measurement, but without coating defect detection;
- Request to CEN TC 219 WG1 to put these methods in informal annexes in CP measurement techniques standard.
- Several interesting publications exist on this subject (MM. Gomila, Soldevilla, Leeds,...)
- A GERG internal document exists; I.Ragault-Rolland will ask for an eventual use.

EFC WP16 will propose to CEOCOR Sector A to organise a common working group on CP measurement effectiveness on buried pipelines and coating survey techniques in the purpose of writing a detailed, updated and recognised reference publication which could be published in English as one of the "green books" EFC Publications through the Institute of Materials of London.

A proposal was also made for updating and translating into English the CEOCOR Booklet on CP.

I.RAGAULT-ROLAND, Secretary

M.ROCHE, Chairman

NOTE : Please note the **new address of Marcel Roche:**

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4 appendices