Present:

Chris Atkins (CA) (Mott MacDonald)
Richard Barton (RB) (Atkins)
John Broomfield (JPB) (Broomfield Consultants)
John Clarke (JLC) (Concrete Society) (Secretary)
Ross Fielding (RF) (CPC Ltd)
Tony Gerrard (TG) (BAC Corrosion Control)
Gareth Glass (GG) (Concrete Prevention Technologies)
Peter McCloskey (PMcC) (Fosroc)
Vitalis Ngala (VN) (Mouchel)
Homayoon Pouya (HP) (Atkins)
George Sergi (GS) (Vector Corrosion)
Ali Sharifi (AS) (Amey) (Chairman)
Chris Spence (CS) (Freyssinet)
Michael Thorne (MT) (Vinci Construction UK)
Chris Urbanowicz (CU) (Weber)

1 INTRODUCTION AND APOLOGIES FOR ABSENCE

AS welcomed members to the meeting; members introduced themselves. Apologies had been received from Neil Loudon, Brian Wyatt, Andy Came and Jim Preston.

2 MINUTES OF THE MEETING HELD ON 28th JANUARY 2010 AND MATTERS ARISING

The Minutes were accepted. All matters arising would be covered by the Agenda.

3 CPA TECHNICAL NOTES (Attachment 1)

AS pointed out that the Draft Technical Notes had been renumbered to avoid confusion with those already completed and on the web site.

14. CP Training & Certification – CA suggested that this should be left to Brian Wyatt, with a proposed completion date of the end of November.

ACTION: Brian Wyatt

15. CP of new structures – This was being prepared by Brian Wyatt; progress was unclear.

ACTION: Brian Wyatt
16. Inhibitors for reinforced concrete – CA agreed to complete by the end of November.  
**ACTION:** CA

17. Coatings for concrete – CA agreed to complete by the end of November.

18. CP for buried and submerged structures – RF agreed to take over the drafting of this Note.  
**ACTION:** RF

19. Operation and monitoring of CP – CA agreed to complete by the end of November.  
**ACTION:** CA

20. Continuity and isolation in CP systems – GG had prepared a first draft which he would pass to AS for circulation to the Committee  
**ACTION:** GG and AS

21. Stray currents – CA agreed to complete by the end of November.  
**ACTION:** CA

22. Corrosion monitoring – CA agreed to complete by the end of November.  
**ACTION:** CA

23. Resistivity of repair materials – New topic, see Any other business.

### 4 HIGHWAYS AGENCY SPECIFICATION FOR ICCP OF RC STRUCTURES

AS reported that he had heard from Neil Loudon that there had been no further progress with the document.

It was noted that the revision of TRs 36 and 37 had suggested areas in which it might be necessary to make some changes to the HA Specification, though most of these would probably be mainly be providing supplementary information. It was agreed that AS would contact Neil Loudon to keep him informed of the situation.  
**ACTION:** AS

### 5 STEEL-FRAMED BUILDINGS

JPB reported that the document had been approved and was currently with the Chairman of the NACE Editorial Board. He thought that it would be published by NACE within 2 months. He would pass then it to John Fairley so that he could put it into CPA house style and mount it on the web site.  
**ACTION:** JPB

### 6 ICorr TRAINING COURSES

CA reported that the Level 2 Notes were with Brian Wyatt for approval (which should be within about a week); once approved, the Level 2 course could be run. It would be run by CPA in the same way as the Level 1 courses.
It was suggested that it should be possible for experienced engineers to take the Level 2 exam without having been on the Level 2 course. Similarly it should be possible to take the Level exam without having passed the Level 1 exam.

It was noted that there was a reciprocal agreement on qualifications between NACE and ICorr.

7 REVISION OF CONCRETE SOCIETY TECHNICAL REPORTS 36 AND 37

JPB reported that a sub-group of the Working party had met at the West Midlands ICorr event at Ironbridge on 14th September, which had raised a number of points. Final comments were required by the end of October. Once these comments had been dealt with, a final version of TR 36 and TR 37 would be offered to all members of the Liaison Committee for review; comments would be required within 2 weeks.

There was continuing discussion on the required resistivity of repair materials. It was agreed that a general statement along the lines of:

“Products with resistivities greater that 100kΩ have been shown to work in practice.”

JLC noted that Cathodic Protection had been suggested as a suitable topic for the Concrete Bridge Development Conference on 7th July 2011. Brian Wyatt had spoken at the 2010 Conference on CP for new structures. CA agreed to give a presentation based on TRs 36 and 37 – JLC would pass CA’s details on to Alan Tovey, the Secretary of CBDG.

**ACTION: JLC and CA**

8 DISCUSSION ON BS EN ISO 12696 AND FprCEN/TS 14038-2

JPB reported that the draft of CEN/TS 14038-2 had been finalised. He noted that this did not require the same level of agreement as a European Standard. He anticipated that it would be published early in 2011.

JPB and Brian Wyatt had collated the comments on the BS EN 12696 document, which had been passed to the BSI Secretariat so that they could be put into the required format. They would then be placed on the CEN website for review. Members wishing to review the comments should contact Brian Wyatt for instructions as to how to access the relevant part of the web site; the document was currently known as PR EN ISO DIS 12696.

If necessary a meeting would be held to review the comments received and to prepare a final draft. JPB hoped that the process could be completed shortly and that 12696 could be issued as a CEN Standard in 2011.

9 ANY OTHER BUSINESS

**Future work of the Liaison Committee**

JLC noted that the work on the revision of TRs 36 and 37 would be completed shortly. Previously Members of the Committee had prepared TR 60, *Electrochemical tests for reinforcement corrosion* (which was largely a compilation of various Current Practice Sheets) and TR 69, *Repair of concrete structures with reference to BS EN 1504*. What should be done next? It was agreed that guidance on BS EN 12696 and CEN 14038 would be a suitable topic, along the lines of *Electrochemical treatment of reinforced concrete – a guide to European
Standards. This might be in the form of a number of Current Practice Sheets or a short Technical Report. CA offered to prepare a Proposal.

**ACTION:** CA

**Forthcoming Conferences**
CA tabled flyers for the 12th *International Conference on Structural Repairs and Maintenance of Heritage Architecture (STREMAH 2011)* to be held at Chianciano Terme, Tuscany on 5–7 September 2011.

In addition, *Concrete Solutions 2011, 4th International Conference on Concrete Repair* would be held at the Technical University of Dresden on 26–28 September 2011.

Also *CONCRETE - The UK Concrete Show 2011* would be held at the Ricoh Stadium, Coventry on 23–24 February 2011.

**Resistivity**
CU suggested that there was a need for a Guidance Note on the resistivity of repair materials and how resistivity should be measured on site. AS noted that there had been no major problems on the Midland Links due to resistivity; the only problems had been attributed to poor surface preparation or poor workmanship. JPB agreed to prepare an initial draft for comment before the next meeting of the Committee (Technical Note 23).

**ACTION:** JPB

**Silane coating**
It was noted that the ban on silane coating, which had been imposed by the Highways Agency in July 2008 for environmental reasons, had not yet been lifted.

**Retirement of Secretary**
JLC noted that he would, finally, be retiring from The Concrete Society at the end of 2010. It was not clear whether The Society would be able to continue to provide the Secretariat for the Committee; the decision would be taken by Richard Day in due course. Clearly a member of The Society’s technical staff would be involved with any future project organised by the Liaison Committee. JLC was thanked for his support since 2001.

**10 DATE AND VENUE OF NEXT MEETING**

No date was fixed for the next meeting of the Liaison Committee.