Minutes Tuesday 8 April 2003, 11.45am - 1.00pm

Objective 2: Produce "best practise" guideline

P. Lourenco:

- At each meeting bridge/arch owners and industrial representatives should also be present from the hosting country to find out their views, needs, etc., not just researchers, otherwise there is only limited use for network. UK expertise/initiative should be clearly stated.

A. Sinopoli

- Use website as platform for discussion, identify contribution from individual members and INDUSTRY.

B. Bell

- Need to involve the 'experts' of arch/bridge owners who know what their problems/situation is.
- European bridge owners do not represent masonry arches as real problem in general, as only some countries such as UK, Spain have masonry arches as a large percentage of their bridge stock.

Objective 3: Case studies need to be documented

J. Leon

- will contact Spanish Railways/Ministry for case studies

P. Lourenco

- There are some case studies from the Spanish Railways that Paulo will be able to refer us to.

A. Saisi

- Will send contact names and websites of Italian railways and local authorities on testing and monitoring.

A. Sinopoli

- Italian Transport Ministry has carried out some tests on the dynamic effects in concrete but there is no interest in masonry railways bridges yet. Perhaps it can be organised. (send us info /contact)

C. Melbourne

- Case studies should be filtered and controlled that are put into the database. Also please let us know if you know about companies/techniques of interest.

P. Lourenco

- Put together template for case studies with sample. - It has already been done by Paul Mullett just needs to be put on website.

Objective 5: Promote a better understanding of industrial needs

B. Bell

- Identifying owners of buildings are more difficult that of bridges. Need more prospective on main issues.

C. Melbourne

- Please send us links for buildings owners if you know of any.

A. Saisi

- Will send us contact/web address for Italian Masonry Association and for journal: Building of Masonry Buildings

A. Sinopoli

Will send us links for associations and Cultural associations.

J. Leon

- Will send us contact/link for Working Group on Arch Aridges in Spain and Spanish Ministry

C. Melbourne

- We need to find out the nature of problems of bride owners. They need to be contacted personally.

Objective 4: Ensure that research results are disseminated to industry through centralised database

C. Melbourne

- Web-site will include a list of key words.
- Publications can include abstracts but generally not full papers for copyright reasons.
- Large-scale field tests from industry would be important to include. Where can we get hold of them??? Please let us know if you can help with this.

J. Leon

- A Glossary of terms has been put together and translated into English, Spanish, German, and French.

A. Sinopoli

- Will be in charge to collect and send us historical publications.
- A historical survey has been carried out in Italy (by Nashier?)

B. Bell

- There has been a proposal for the Sustainable Bridges project from Jean Bein (?) from Poland to create a technical dictionary in related area.
- Industrial people don't read papers/publications and research/new technologies do not necessarily get through to them. Maybe a few lines summary on "what does it do?" sent directly to industry would be a better approach.

Tuesday 8 April 2003, 2.15 – 4.00pm

Objective 1: Identifying research requirement

A. Sinopoli

- There is not communication between researchers/universities in Italy - everyone is working separately. Organising collaborations and identifying some common big research project/Network in Italy could help to start working together.

The following people will be in charge for the following topic areas:

1.1) Arch behaviour – understand hidden strength - P. Lourenco

1.10) Advanced numerical modelling - T. Hughes

1.10) Rigid block approach - kinematic modelling +

1.6) Parapets - M. Gilbert

1.2) Deterioration of bricks

- J. Leon knows someone
There is an organisation in Italy for masonry - A. Saisi will send contact, web-page,
book.

1.3+5) Speed of repair + New repair techniques/materials - B. Bell

A. Saisi will send info on German code of practice and Prof. Jaeger who has been working on the reconstruction of the Frauenkirche in Dresden, Germany.

1.7) New arch construction

- Ron Ko (Clive contact him)

- 1.8) Non-destructive testing/inspection/monitoring
 - B. Bell will write about the need of monitoring.
 - J. Leon will write about it as well.
 - L. Binda (Milan) and C. Modena (Padova) could contribute from the Italian side
- 1.10) Methods of analysis (Serviceability Limit State/ Ultimate Limit Sate)

- T. Hughes - Salford

- Mike Ford (?)

Canora

- J. Leon

B. Bell: How to define SLS/DLS if it is not visible?

1.11) Holistic approach

- ?

Need a soil-mechanics expert.

Prof. Powire in Southampton and Prof. Bicinic in Glasgow – Clive to contact.

Prof. Viggani in Italy – Anna to contact

Gerd Gudehus - Javier to contact

B. Bell

Scouring is large problem in the UK. There are no techniques identifying it and when it is happening. There is a CIRIA publication on it (send to J. Leon) and Brian has some document on it.

Need to contact hydromechanics person.

Any other problems?

T. Hughes

- Loading: loading patterns are different in other countries, e.g. Prague. What sort of loads should be used (footbridge, distribution, etc.) What is it in other countries?