

Minutes of the ISCARSAH meeting, Cyprus, 22nd and 23rd February 2006

Present: Pere Roca (Chairman), David Yeomans (Secretary) Androniki Militadou, Michael Pittas, Heinrich Schroeter, Kari Avellan, Milos Drdacky, Lyne Fontaine, Predrag Gavrilovic, Mehrdad Hejazi, Ramiro Sofronie, Toshikazu Hanazato, Claudio Modena, Luigia Binda, Nikolas Charkiolakis, Giorgio Croci, Wilfred Ferwerda, Eli Goldberg, Yoshori Iwasaki. Wolfram Jaeger, Wolf, Avi Musseri, Avi, Yaacov Schaffer, Vitor Silva, Christos Tsatsanifos, Anna Virsta,

Apologies were received from:

Paulo Lourenco, Steve Kelly, Peter Eliot, Christiane Schmuckle, Gorun Arun, Gennaro Tampone, David Look, Giovanni Maniere Elia, Kenichiro Hidaka., Maria Segarra Lagunes.

Agenda

The agenda for the meeting was tabled as follows:

1. Chairman's report
2. Approval of new members
3. Working group reports
4. Proposals for future activities
5. Report on membership activities
6. The Xi'an Eger Principles for the ICOMOS ISCs
7. Edited Barcelona version of the Recommendations
7. Technical discussions:
 - 7.1 The Recommendations and in international standards on safety of existing structures
 - 7.2 Criticisms / commentaries provided by external experts and possible improvements. Compilation and discussion.
 - 7.3 Geotechnical issues
- 8 Next meeting places. New possible meetings in India and USA.

Chairman's report

- 1 The chairman attended the General assembly in Xian during which there was a meeting of the few members of ISCARSAH who were there. The meeting was valuable because other members of ICOMOS became aware of the work of our committee. The chairman's notes on this meeting have already been circulated. He noted that the ICOMOS declaration on the setting of historic monuments was approved.
Also the new rules for international scientific committees were approved.
There was a technical visit to the Great Wall organized by ICOMOS China, Lyne Fontaine in particular saw 5 sections of the wall in different states of repair.
A joint meeting was celebrated with the 20th century heritage committee, which several members of ISCARSAH attended. Future cooperation possibilities were envisaged.
- 2 Our annual report has been sent to ICOMOS. (It was noted that in future this will be circulated to all members of the committee.) We will be asked to define our intentions for future activities – see below.

- 3 The chairman noted the meetings of the Twentieth Century Committee and said that he hoped that we might be able to have some joint meetings with them. They are concerned with both the definition of a twentieth century monument and with structural and durability issues. Co-operation will be important because there is some overlap in our interests. If we formed a working group to consider issues of reinforced concrete it would be able to work in collaboration with them
There is also a new Fortification Committee in which Lyne Fontaine proposes to be active.

- 4 The chairman visited New Delhi together with Claudio and Paulo to take part in a seminar. This was an occasion to introduce our Recommendations to the Archaeological Survey of India. The chairman felt that it would be valuable to have a member of the committee from India but it seems to be difficult to get anyone as ICOMOS there is a very small organisation. Suggestions were asked for.
He noted two other seminars this year that he is involved with: one in Athens just before this meeting and one to take place in Poland in December in which the Recommendations will be introduced to Polish authorities and professionals.

Membership of the committee

There were a number of new members nominated by their national committees to replace previous voting members were welcomed to the committee. These were Kari Avellan of Finland, Eli Goldberg of Israel and, Mehrdad Hejazi of Iran. The committee also agreed to accept a number of members who had expressed an interest in joining the committee or who had been recommended by other members of the committee. These were: Christos Tsatsanifos, Yoshori Iwasaki (both of whom have a special interest in geotechnics), Anna Virsta (introduced by Ramiro Safroni) and Avi Musseri (introduced by Yaacov Schaffer). The chairman noted that we have a number of members on the committee who have been totally inactive. Some have not responded to the secretary's emails. The secretary noted those that he had discussed with the chairman and the course of action to be taken with each. For some from whom we have not heard they are to be immediately removed from the list of members. In other cases emails will be sent either initially to their national committees or to the members themselves. National committees will be notified of their representatives who have been removed from the list of members.

Wilfred Ferwerda noted that following a recent discussion with their national chairman he is likely to become the official representative of the Netherlands replacing a member who was totally inactive.

It was noted with regret that Eduard Knoll who was introduced to the committee at our meeting in Athens has resigned from the committee because of pressure of other work. It was noted that there have been members who have not been able to regularly attend meetings of the committee but who, nevertheless, have promoted the work of the committee in their own countries. Therefore, attendance at meetings should not be the only criterion for continuing membership of the committee.

It was noted that there are some gaps in the membership France and Russia.

Working group reports

Safety Group

Lyne has made contact with the chairman of ISO 13822. At present this document excludes considerations of historic buildings, which it recognises as a special case. The chairman of the committee has agreed that it would be possible for ISCARSAH to submit an annex which would refer to our Recommendations. It was generally agreed that that would be a valuable thing for the working group to do. However in order to catch the next change to the ISO we would have to work to a fairly tight timetable getting out material to them next year. If we miss this opportunity it will be five years before the next possible change to the standard. Lyne proposed a timetable of action by the working group to achieve this. Further discussion was held over to the technical discussions (see below)

Construction techniques group

Yaacov was concerned about whether it was possible for this group to continue. It is very small and needs a larger number if it is to be effective. The chairman suggested that in future we might arrange for meetings of the group to be part of our general meeting.

Earthquake group

This group has not met.

Members' reports

- 1 Heinrich noted that there was a German translation of the report in hand and that this should soon be completed.
- 2 Niki noted continuing interest in Greece in the work of the committee.
- 3 Claudio noted the development of building codes in Italy that have been specifically written for application to historic buildings. His university has established a doctorate programme concerned with historic preservation.
- 4 Paulo and Pere are the joint editors of a new journal *The International Journal on Architectural Heritage* shortly to be published by Francis and Taylor.
- 5 Vitor noted a number of activities associated with Lisbon, in particular noting that the downtown is being nominated for World Heritage status. He had also participated in a conference on the great Lisbon earthquake. He is at present working on a book on minimum interventions.
- 6 Luigia has been involved in a three-year project on the better non-destructive testing of existing structures. This deals with concrete, timber and masonry. It will conclude with an international conference to be held in 2008.
- 7 Mehrdad reported on activities in Iran with courses on restoration being introduced into undergraduate programmes.

Future activities

Claudio wanted there to be some activity concerned with seismic resistance.

Yaacov wanted to see the committee offering advice as a group on sites associated with the places in which we have our meetings. This could be a part of our regular activities and we might write to the WHC to suggest this. The chairman felt that the committee had

a function is giving advice on the restoration of large structures especially in emergency situations. The issue here was to find means of making contact with the relevant authorities, which might well be national governments. He suggested that this was an issue on which members should correspond with each other. Bam is an example where a number of members of the committee are involved and could be collaborating. He would be interested to receive suggestions from members of the committee on what bodies might be contacted and how.

Mehrdad noted that while there were a number of initiatives in Bam there is a lack of financial support. He suggested that we form a group to make contact with the authorities in Bam with the intention of helping to find such support. Bam citadel has a committee whose chairman is interested in contacting international experts. He offered himself as a link between ISCARSAH and the authorities in his country. He could forward any proposals and/or answer any queries we might have. It is the technical contact that needs to come first and then financial support. This should be sought on the principle of matching funding from Iran. They need to start something on site as soon as possible. They have 3 projects at the preliminary stage. What they want is to ensure that what is done is reversible so that any mistakes made can be put right. They need people to come to start work. They need specific tests carried out for which they might not have the equipment in Iran, such as shaking tables.

Pedrag thinks that we should approach the UNDP about offering help in Pakistan. Although he recognises that there has not been damage to WHSs there might be other cultural heritage sites that have been affected. While there is a UNDP already involved there he doubts that they may have the expertise in the assessment of cultural heritage.

Although we need to limit our activities to what is possible within the time that members can devote the chairman thought that we should bear in mind possible research developments. Within this context he mentioned COST projects which would be valuable to us because it might provide funds for our meetings. He would be willing to make a specific proposal and felt that this would provide funds without increasing our activities generally.

Education is an area that we have not considered but should do so. It was felt by some that there was a lack of undergraduate courses in historic preservation. While these exist for architects there is little for engineers. Pere's idea is to create a network offering exchange of students. The cost should be supported by the universities with intra-university agreements allowing limited fees to be paid by the students. The intention would be to obtain funds to cover mobility costs and accommodation for the students.

Luigia noted that there were ERSAMUS and SOCRATES programmes in place. She has students from Edinburgh preparing theses and thinks that it would be difficult to do this outside Europe although she generally supports the idea. Pere noted that there are co-operative links between Spain and South American countries.

Lyne wanted to see an inventory of conservation engineering training. It was agreed that she would coordinate the elaboration of such an inventory. The Getty might be interested in funding ISCARSAH in developing such an inventory. Yaacov noted that Aylyn Orbasli, chair of the Education Committee of ICOMOS UK has an inventory of courses in the UK but there was nothing specifically for engineers on this list.

Based on all these proposals the chairman is to write a programme for the next triennium and circulate it to members.

Eiger principles

The chairman noted two main changes to the method of running the international scientific committees.

- 1 There is to be a Scientific Council responsible for the ISCs on which each would be represented. The chairman would represent us on this.
- 2 Both the membership categories and the method of nominating and accepting members are to be changed. The Legal Committee is looking at the rules for this and when they have reported the chairman and secretary will work together to see how we would need to change our statutes to deal with their recommendations.

ISACARSAH Recommendations

The secretary had edited the text agreed at the Barcelona meeting and incorporated the changes to the introduction to the Annex. These had been circulated to members before the meeting and were approved. The chairman hoped that it would be possible to submit the complete recommendations for approval to the General Assembly in Quebec but for this to be possible we would need to have the full text in French.

Technical discussions

1 Hanazato presented a short paper on the assessment of earthquake resistance of traditional timber buildings. This is in the form of a flowchart; essentially a proposal for the management of the process.

2 Ramiro reported on a programme for risk reduction in university buildings. Following the recent earthquakes in California and Kobe it was noticed that many universities have old buildings with high occupancy. The assessment of risk to these buildings was to include that possible from terrorist activities. A similar proposal has been made for European countries and is already underway in Romania.

The chairman opined that our own recommendations are a little weak in this respect in not dealing with the issue of earthquake risk assessment. He would like us to address this issue especially to help our Greek colleagues in advising their authorities to ensure that are in accordance with our Recommendations.

Giorgio is working on an evaluation of risk strategies for the Roman forum. He notes that we speak of preventative measures whereas in fact nothing is prevented. The intention is to determine the most cost-effective means of using the funds available.

Luigia felt that there is some experience in this area that could usefully be assembled and that this would be an opportune time to reactivate a group on Heritage Structures and Earthquakes. It was agreed that the group would comprise Luigia, Niki, Claudio and Hanazato.

Pedrag is concerned about excessive countermeasures.

Lyne expressed some interest in this because Canada is an earthquake zone and while it has recently changed its target risk for new buildings there is a problem of how to deal with existing buildings. Vitor advised members to look at the LESSLOSS project and consider making some contribution to it.

3 Lyne Fontaine presented her proposals for collaboration with ISO 13822 committee. She had picked out the clauses in the code that allow some relaxation of normal requirements that would of course include historic monuments.

There was a discussion about section 11.1, which refers to a report, noting that this implies an engineer's report whereas our Explanatory Report would be a joint report.

Yaacov notes that there is a difference between level of human risk and level of risk for the building with apparently different safety levels.

Our annex needs to enlarge on the term socio-economic as contained in section 7.5.

We need to resolve the difference between diagnosis and verification.

There are some aspects of the Recommendations that are different from ISO 13822.

- i) We need to emphasise the cultural significance of the structure. ISO mentions the need to preserve the materials and architectural aspects but does not refer to the structure. When dealing with monuments, it should also emphasize the need to preserve the structure itself (or the structural features)
- ii) Because our structures will often have a history of earthquake performance our Recommendations suggest that experience of earthquakes can provide useful information. In ancient monuments, past-performance studies should include their earthquake response.
- iii) We have a different approach to safety evaluation, more general than the plausibility approach used in ISO13822. We suggest that it is possible to combine the various approaches to assess safety and accept a more qualitative approach.
- iv) ISO 13822 does not recognise the possibility of a step by step approach.
- v) A different approach to safety does not mean increasing the risk to people.

Heinrich noted that they don't see any reference to clause 8 in the ISO13822 in what has to be included in the report.

It was noted that in clause G.12.1 we need to take out the word 'briefly'.

It was noted that the Recommendations argue for a team report rather than just an engineer's report.

It was agreed that the intention is not to change our Recommendations at this stage.

It was agreed that we would aim to contribute an annex to ISO 13822 which would not be in conflict with the ISO.

The importance of this is that it is fully international and that this is an opportunity that we should not lose.

Luigia opined that in going through this exercise we might find some flaws in our document that will eventually need to be corrected.

Niki made reference to Eurocode 8 that recognises the difference between monuments and other structures.

Lyne noted that we need to focus on the peculiarities of heritage structures – the annex is not to be a stand-alone document.

4 Christos gave a presentation on foundations.

TC19 wants to link with ISCARSAH – www.geoforum.com/tc19

The effect of new structure on monuments is one of the main aspects of their work. One of the points made is that underpinning changes the behaviour of the whole monument which is of particular concern in earthquake areas.

Yaacov asked how one is to value an interesting foundation, particularly if the superstructure that it supported has been lost. Giorgio noted a case where there was an

interaction between the foundation and the structure in which an apparent foundation problem was solved by intervention in the structure.

Pere was keen to clarify that authenticity involves the entire soil/foundation system which would eliminate possible solutions that would change the characteristics of the soil, e.g. by grouting.

Christos emphasised that the scope of TC19 interest was the study of the geotechnical problems associated with the preservation of monuments and historic sites. This is not simply foundations but considers earthworks and natural geological formations where these are regarded as National monuments.

Vitor was concerned about a list, which seemed to decide *a priori* what might be a good or a bad solution. In spite of Christos's comments on the inclusiveness of all methods.

Michael was concerned that officials responsible for approvals would not look beyond such a list.

Pere suggested that we set up a working group that would consider these issues as an annex to the Recommendations.

Future meetings

It was agreed to hold a meeting of the committee in association with the conference in New Delhi. The conference is 6th and 7th November. It was proposed that we meet on 8th. However it was recognized that not all members of the committee would be going to the conference (and would clearly not go to India for a one-day meeting).

It was also agreed to hold the full annual meeting of the committee in Oak Park, Illinois from 27th-29th April 2007, according to Stephen Kelly's proposal

We would also meet as a committee in association with the General Assembly in Quebec City, which is to be in the last week of September 2008.

The meeting was followed by a one-day workshop, *Structural Restoration of Structures of Architectural heritage, Recommendations of ICOMOS-ISCARSAH*. This was an opportunity to meet and present the work of the committee to local professionals. This was very well attended.

The chairman and committee thanked Michael Pittas for his excellent organization of the meeting and its associated workshop.