The program of the December 2009 ISCARSAH meeting was meshed with site visit of World Heritage Sites in Lower Silesia and the REMO Conference. In summary the meeting program was as follows:

**Meeting 1:** December 1 20:00-22:30  Art Hotel, Wroclaw
**Meeting 2:** December 2 18:45-20:00  Oak Manor (Debowy Palace-Silesia)
**Meeting 3:** December 3 15:00-18:00  Oak Manor (Debowy Palace-Silesia)
**Meeting 4:** December 4 9:00-2:30  Oak Manor (Debowy Palace-Silesia)

**Regrets**
Juan Carlos Araiza (USA)
Kari Avellan (Finland)
Susan Balderstone (Australia)
Nicolas Charkiolekis (Greece)
Vitor Coias (Portugal)
S. Dritsos (Greece)
Wilfred Ferweda (Canada)
Predrag Gavrilovic (Macedonia)
Donald Friedman (USA)
Eli Goldberg (Israel)
Toshikazu Hanazato (Japan)
Pedro Hurtedo Valdez (Mexico)
Randolph Langenbach (USA)
David Look (USA)
Giovanni Manieri Elia (Italy)

**Meeting 1: Administrative Issues**
In attendance:
Gorun Arun, Turkey
Luigia Binda, Italy
Peter Elliott, UK
Lyne Fontaine, Canada
Steve Kelley, USA
Claudio Modena, Italy
Heinrich Schroeter, Germany
David Yeomans, UK

**Intro notes:**
The Poland ISCARSAH meeting and dates were discussed in Mostar on July 11, and confirmed 3 months in advance, as required by the Statutes. Modena and Binda stressed the importance of providing information on specific meeting dates and providing an agenda well ahead of the meeting so that the members can schedule their travel. The REMO conference final programme was issued on October 9. The invitation to ISCARSAH members outlining dates of arrival and departures, site visit program, and ISCARSAH meeting dates were emailed on October 15. Meetings on December 1 and 2 were added to the program to accommodate the pressing schedule of the Bureau.
ISCARSAH final agenda was sent on November 23. It was agreed that meeting agendas should be sent earlier in the future.

**ISCARSAH meeting minutes**
The minutes of the meeting were approved with the following revisions:

1) Add Miltiadou to the investigation working group and Pittas to the intervention working group.
2) Add Miltiadou to list of regrets.

Note is taken, as pointed out by e-mail by Humo, that consistency is required between Statutes art. 4.8 and Criteria for Membership, art. B15 on the rights and responsibilities of the non-ICOMOS member. The Criteria for Membership will be revised to reflect the Statutes, i.e. experts will be added to art.B15.

**Inactive membership**
The Committee held a discussion on the issue of inactive ISCARSAH members. Several members have been inactive for many years. Adequate participation in the work of the Committee is described in the Criteria for Membership art. C6 as follows:

“Adequate participation in the work of the committee is defined as either:

a) satisfactory attendance at meetings of the Committee(Absence from three meetings in succession shall be deemed unsatisfactory attendance);
b) regular correspondence with the Committee or any of its working groups in the furtherance of their aims; or
c) promotion of the work of the Committee in their own countries – such as active dissemination of the Recommendations or working papers”

Kelley assembled a table to compile participation of the members on point a and b (listed above) since 2001. The Committee acknowledges that it is typically not possible to know if a member is active in the promotion of the work of the Committee in his or her own country. It is therefore deemed that members not participating in point a and b, must demonstrate to the Bureau that they are active in their own country.

Kelley has agreed to write a letter to the inactive members requesting a reason for their perceived inactivity and ask for a report on their Committee related activities in their own countries. Failure to respond in a timely manner to this letter will result in membership dismissal.

Expert members who have been actively involved in the work of the Committee in the past years and who are no longer attending the meeting but are still active in correspondence with the Committee will be offered the category of Corresponding member.

**Honorary members**
The following members have been appointed Honorary Members:
Giorgio Croci (first president)
Giorgio Macchi (foundling member)
Wolf Schmidt (founding member and initiator of the Safety Working Group Committee)
David Yeomans (second Secretary General)
Pali Wijeratne (founding member and long time only representative from Asia in the early years of the Committee)
Koen Van Balen (first Secretary General)

**New candidates:**
New Membership submissions were reviewed. In-Souk Cho from Korea was extended Expert Membership status. The following persons were extended the Associate Membership: Ian Constantine (St Lucia, Carabbean); Mustapha Humo (Bosnia Herzegovina); Tiziano Destino (Italy); and Marek Skodowski (Poland). Following the meeting the ES has also extended Associate Membership to Meltem Vatan (Turkey), a speaker at the REMO conference, in attendance to the ISCARS AH meeting on December 4.

Fazli Sattar whose fine arts and history CV was quite impressive unfortunately does not correspond to the essence of ISCARS AH expertise and membership.

Each new Committee member will receive a congratulatory letter which spells out the responsibility of membership and a copy of the newly adopted Membership Criteria.

Listserv
Steve Kelley will create a listserv so that everyone on the Committee can write to the listserv and reach all other members. The inclusion of email addresses on the listserv will be administered by a listserv master, thus insuring a consistency. In future communications Kelley will act as the listserv master.

Engaging Associate Members
Engaging Associate Members in the work of the Committee was discussed. Kelley pointed out that Associate Members rarely attend meetings (possibly due to economic constraints) and do not take part in Committee work. Since most of the Associate Members are younger professionals they can bring energy and vibrance to the Committee and will also assure succession within the Committee. It was agreed that we will strive to engage Associate Members into ISCARS AH activities. It is especially important to seek ways to involve them without the need to travel, which is more expensive. Mentoring younger members will also be discussed at the next meeting.

Emergency preparedness & post disaster tool kit
The Chengdu Resolution (attached as Exhibit A) was drafted in July 2009 following an ICOMOS mission in China which included site visit of the earthquake devastated WHS Dujiangyian and town of Beichuan. The delegation was positively impressed by the effectiveness of the recovery work and asked ICOMOS China and the State of the Administration for Cultural Heritage to share with others in ICOMOS their successful experience.

As an Officer of the Scientific Committee of which all of the ISCs are a part, Steve Kelley has been tasked with developing a steering committee with members from several ISCs and National Committees to aid in development of a tool kit for earthquake preparedness and response.

ICOMOS has also issued a call in its 51th electronic-news to all ICOMOS members for the development of Best practice models for seismic preparedness and response plans.
An ISCARS AH task group was created to be a part of this task group that includes the following members: Gorun Arun, Luigia Binda, Yoshi Iwasaki, Claudio Modena, and Patrick Sparks.

Steve Kelley will be establishing an internet-based discussion forum for this steering group in the next few months.

Request for assistance related to Earthquake in Bhutan
A request for professional assistance in response to a recent earthquake has come from Associate member Dechen Tshering of Bhutan. A preliminary assessment report including some photographs was sent to Kelley. The Committee discussed the evidence of damage observed on the photographs
and it is acknowledged that more information is required to offer advice. An offer was made by Kelley to send some ISCARSAH experts to assist provided in-country travel expenses would be covered. In the interim a request for more detailed report will be made.

Further discussion on assistance to Bhutan took place on Friday December 4.

One country, one vote
The one-country-one-vote principle is included in the statutes as required by the Eger-Xi’an Principles. Several members (including Roca, Modena and Binda) are opposed to this principle and would prefer to have the expert-member-voting principle, i.e. that all experts members can vote. It is deemed that it is most important to have active members and there is concern that voting member designated by their national committee may not be as engaged and active.

It is acknowledged that the one-country-one-vote rules applies to officer election and changes to statutes only, and not the numerous other decisions taken by the Committee on various other actions. Committee meeting votes are typically open to all who are present.

The difficulty to identify the national voting members will require considerable administration effort.

The Committee recognizes that the specific consequences of trespassing the Eger-Xi’an Principles are not known to the Bureau.

The Committee also acknowledges the benefit of the one-country-one-vote rule to ensure proper geographical representation on the Bureau.

The Committee decided to leave this issue as it presently stands, i.e., all Expert Members have a vote. We will only revisit this issue if it is deemed necessary.

Post meeting note: Ahmet Turer, whom had received no reply for a long time from his National Committee on his request to become an ICOMOS member, has just received confirmation of his ICOMOS membership from the Turkish National Committee. This news is welcome and encouraging. All members of ISCARSAH should indeed be granted ICOMOS membership from their national committee.

Meeting 2: Discussion on scientific mission and website
In attendance were:
Gorun Arun, Turkey
Luigia Binda, Italy
Nicolas Cheval, France
Drdacky Milos, Czech Republic
Peter Elliott, UK
Lyne Fontaine, Canada
Steve Kelley, USA
Mittnaccht Berndt, Germany
Megan Reese, USA
Patrick Sparks, USA
David Yeomans, UK
Update on scientific missions

Bhutan
Steve Kelley provided an update on the Bhutan request for assistance, as new members had joined the meeting. See Meeting 1 notes. The Committee discussed various options to assist Bhutan in reviewing the reports and photograph sent.

Sagrada Familia
A desk top report was completed earlier this year by Wolfram Jaeger and Steve Kelley. A request was made by ICOMOS for a site visit. Prof. Jeager will go to Barcelona. No specific updates on schedule have been provided by Jaeger.

Mozambique, San Sebastian Fortress
A desk top review was completed in February 2009 based on limited information. ICOMOS WHS Program has requested an expert for site visit. Sparks and Fontaine were proposed. Fontaine, also an IcoFort expert member, has been asked to carry out the site visit mission. After multiple rescheduling in the course of the summer, an official invitation of the Mozambique government was received in mid-November. The site visit is now planned for January 2010. Fontaine will consult with a small advisory core group of ISCARSAH members. The advisory group will have to adhere to the WH ethics code which require a high level of confidentiality.

Engaging Associate Members
The committee reiterates its intention to engage more actively the Associate Members into the various activities of the Committee and sub-committees. They are keen and very energetic. There is a need for working groups to work not only by face-to-face meeting but also by other means such as e-mails.

Exchange of information
The Committee discussed various means of enhancing exchange of information and interactive medium of communication.

Sparks cites initiatives with the US Historic Bridge Alliance and exchanging with the community of practice on this subject. A few years ago there was a $40,000 proposal to develop more extensively a website. There are also other means of co-editing a given document-information such as Wikipedia (Wiki). Technology offers many more possibilities that should be explored. Facebook is often used, typically by younger generation, as a medium to exchange technical information.

The ISCARSAH Website was established in early 2008, thanks to funds raised from the Chicago APT-ICOMOS ISCARSAH-20th Century conference in 2006. Maintaining the website is a task that requires a sustained effort. Hiring web management services is an option, but would require funding on an on-going-basis. The ISCARSAH website is now a window to the world and we have received numerous applications to join the committee through the website, in particular from other continents such as Asia and Africa. So it is important that we find a way to sustain the operation of the website. Kelley stated that he is presently looking into a retention of a webmaster based in Chicago. Elliott also stated that he also has access to a webmaster in Edinburgh.

Fontaine presented an opportunity to retain the services of Gregoire Onillon, historian by training, graduate of a master in Cultural Media, and now engaged in a master degree in Engineering of European and International Projects at the Université de Nantes in France He is looking for an international project to fulfill a 4 months internship between February 2010 and August 2010. The candidate was referred to Fontaine by Nicolas Faucherre, IcoFort expert, well known historian in
military heritage, in particular on the Vauban subject. The candidate would benefit from a French scholarship (no cost to ISCARSAH). Three conditions must be met: 1) the assignment project must be international; 2) the assignment project must have a specific mission and objective; and 3) the candidate must have a designated supervisor. This may be an excellent opportunity for ISCARSAH to benefit from the knowledge of a graduate scholar, trained to set up international cooperation projects, to explore the various possibilities to exchange information on the subject of structural conservation in an effective and sustainable way, including seeking opportunities for funding within existing European, international or other national program. The committee requests Fontaine to define this initiative for further discussion.

It was agreed that a computer person rather than a person with the specific expertise such as Onillon was required for website maintenance. Fontaine discussed using Onillion for enhanced website capabilities such as organized links to research information and symposia related to the field defined by ISCARSAH.

On December 3 Fontaine suggested that the initiative be called Structural Conservation Information Exchange Network (SCIEN). The first step of the SCIEN project would be its definition, and this would be the focus of Onillon’s internship. Elliott and Arun have confirmed during this Poland meeting their interest in hosting the internship. Several members expressed support to the project. Hesitation is also expressed about the sustainability of such an initiative as it could be requiring considerable effort. Fontaine has agreed to define the SCIEN project in terms of a proposal to the Committee with realistic and achievable objectives.

A web based working group will look further into development of better tools to enhance exchange of communication such as through a wiki. Patrick Sparks to take the lead. Kelley volunteered to provide an article he wrote on ISCARSAH that is being published in the Mostar symposium proceedings for editing by the Committee on a Wiki site. In this manner the article can become a Committee product rather than one from a single Committee member and can be submitted to future conferences for translation into other languages.

The suggestion was also made to start with a project like Mozambique where larger electronic files such as photographs and drawings are required on an international level.

**ISCARSAH-Wood Committee meeting  15:00-16:00**

A small delegation of ISCARSAH members (Fontaine, Kelley, Mittnaccht, Yeomans) met with Prof. Tampone and Jerzy Jasienko at Wojanow Palace to discuss subjects and initiatives of common interest. See attached minutes of this meeting. The group re-joined the ISCARSAH working group meeting at Oak Manor at 16:30
ISCARSAH – 3rd Meeting - Working Groups meeting 15:30-18:30

In attendance:
Gorun Arun, Turkey
Luigia Binda, Italy
Nicolas Cheval, France
Drdacky Milos, Czech Republic
Peter Elliott, UK
Lyne Fontaine, Canada
Yoshinori Iwasaki, Japan
Steve Kelley, USA
Mittnaccht Berndt, Germany
Megan Reese, USA
Patrick Sparks, USA
David Yeomans, UK

Fontaine, Kelley, Mittnaccht, and Yeomans joined the meeting around 17:00 after their meeting with the Wood Committee President. Cheval, Elliott, Fontaine, and Mittnaccht departed the working group meeting at 17:45 to attend the 3D Laser Scanning session on the subject of accuracy and reliability.

The committee revisited the origin of the working groups created in Mostar (investigation, modeling and intervention). These subjects were chosen to respond to the most significant shortfall in the guidelines. These subjects were addressed in the guidelines developed in the early 2000. Considerable research and progress has been made in these three areas over the recent years and there is a strong need to disseminate the outcome to a wider audience of practitioners.

The committee also feels that there is a need for an updated set of guidelines that would provide information not only on the conservation process, but also the essential knowledge base. These new guidelines could be offered as a book publication in several tomes. These would be co-authored by the committee members.

Fontaine underlined the importance of ensuring consistency in the new writings of the committee with the standard ISO 13822 (Basis for Design, Evaluation of existing structures). This is especially important for the process and the terminology. The process described in this standard for existing structure is very similar to the conservation process. ISCARSAH members (Roca, Modena, Yeomans, Fontaine, Iwasaki, Schroeter) have worked closely with the ISO TC 98 members to develop an approach that suits both the treatment of existing and heritage structure. Many in the committee expressed concerns about this need for consistency as they do not want the ISCARSAH work to be subservient to building codes prepared by others. The ISO 13822 Heritage Structure Annex was briefly reviewed on the projection screen with the committee, and it was found that ISO may align relatively well with the expected structure and terminology of the Investigation WG. Yeomans agreed to review the ISO13822 document more carefully and advise the committee. Fontaine agreed to share the ISO13822 document on an as-required basis with the investigation working group. There are stringent copyrights on ISO draft standards as well, so it is most important that the circulation of the document be restricted to the WG members.
ISCARSAH – 4th Meeting – Long-term Plan & Working Groups  9:00-13:30
Gorun Arun, Turkey
Luigia Binda, Italy
Peter Elliott, UK
Lyne Fontaine, Canada
Yoshinori Iwasaki, Japan
Jerzy Jasienko Poland (partial)
Steve Kelley, USA
Marek Sklodowski, Poland
Mittnaccht Berndt, Germany
Megan Reese, USA
Patrick Sparks, USA
Gennaro Tampone, Italy (partial)
Meltan Vatam, Turkey
David Yeomans, UK

Long-term Plan
Fontaine presented a proposed long-term plan based on the objectives of the committee listed in the statutes and on the discussion held during the three previous days with committee members. This long-term plan presents a list of achievements that the committee would strive for in the 2008-2014 period, which is two blocks of three years. The long-term plan essentially lists the expected accomplishments of the committee by year 2014. This long-term plan can then be used to determine more specific goals and activities for the triennial period.

The objectives of the ISCARSAH committee as listed in the Statutes can be summarized in the following points:

- Promote international cooperation
- Establish guidelines & recommendations
- Disseminate knowledge in different countries
- Develop standards & guidelines in cooperation with other organizations
- Define research, stimulate and support research activity
- Act as a catalyst to training and research program
- Foster links with specialized institutions, universities, private & public org
- Work with UNESCO in assessing, monitoring and advising
The following table summarizes the discussion of the proposed long-term plan. Lead and contributors are included as a preliminary list. ISCARSAH members not in attendance to this meeting are invited to express their interest. In some cases a lead was identified, and in other it is yet to be determined. The committee members endorsed the long-term plan. This plan will provide direction for the committee in future years. A copy of the Long-term plan is attached to the Minutes. More detailed action plan or triennial plan can be developed in next meeting.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Schedule</th>
<th>Lead(Bold) &amp; Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete the development and publication of the ISO 13822 Heritage Structure Annex in collaboration with ISO TC98 SC2 WG-6</td>
<td>98% complete</td>
<td>Fontaine, Iwasaki, Modena, Roca, Schroeter, Yeomans</td>
</tr>
<tr>
<td>2. Complete development and publication of technical modules.</td>
<td>Priority 1</td>
<td>Modena, Kelley Members of WG Investigation(Binda), Modeling (Roca), &amp; Intervention (Modena-Fontaine)</td>
</tr>
<tr>
<td>2.1 Investigation, Modeling, Intervention</td>
<td>1st triennial</td>
<td></td>
</tr>
<tr>
<td>2.2 New Guidelines (Book Publication in several tomes)</td>
<td>Priority 2</td>
<td>Kelley &amp; All</td>
</tr>
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<td></td>
<td>1st &amp; 2nd triennial</td>
<td></td>
</tr>
<tr>
<td>3. Hold one to 2 ISCARSAH meetings a year in different countries and continents</td>
<td>On going</td>
<td>Bureau &amp; All</td>
</tr>
<tr>
<td>4. Maintain ISCARSAH web page</td>
<td>On going</td>
<td>Kelley</td>
</tr>
<tr>
<td>5. Develop and implement a cost effective and sustainable structural conservation information exchange network (SCIEN)</td>
<td>Definition Stage: Feb-June 2010</td>
<td>Cheval, Elliott, Fontaine, Natem, Reese, Sparks, Yeomans</td>
</tr>
<tr>
<td>6. Use the website as the international reference point for structural conservation (link with 4 &amp; 5)</td>
<td>2nd triennial</td>
<td>Kelley and SCIEN members</td>
</tr>
<tr>
<td>7. Support a permanent SAHC graduate program (current program closing in 2012?)</td>
<td>1st &amp; 2nd triennial</td>
<td>Roca, Modena, Lourenco. Drdaky, Jasienko</td>
</tr>
<tr>
<td>8. Encourage the extension of the structural conservation of built heritage program to other locations in the world (yet to be established)</td>
<td>1st &amp; 2nd triennial</td>
<td>Arun, Binda, Jasienko</td>
</tr>
<tr>
<td>9. Actively participate in several UNESCO WHS and similar missions</td>
<td>On going</td>
<td>Kelley, All</td>
</tr>
<tr>
<td>10. Participate in the development of model of best practices for emergency preparedness and post-disaster response</td>
<td>1st triennial</td>
<td>Arun, Binda, Kelley, Iwasaki, Modena?, Sparks, Tampone</td>
</tr>
<tr>
<td>11. Develop and implement several inter-ISC initiative including Wood, IcoFort, Stone and ISC20C</td>
<td>On going</td>
<td>Kelley, All</td>
</tr>
<tr>
<td>12. Develop tools to identify, maintain and disseminate on a regular basis a list of research needs (yet to be established – Link to SCIEN)</td>
<td>1st and 2nd triennial</td>
<td>Tbd</td>
</tr>
</tbody>
</table>
Outline of New Guidelines
Before the breakout of the group into working group discussion, the committee examined possible content and outline of the New Guidelines. To this effect, Patrick Sparks presents an outline of a previous publication project. The committee looked at the table of contents of a Practice Guide for the Evaluation and Repair of Existing Iron and Steel Structures which would include the following sections: Introduction; Scope & intent; Common errors in evaluation; Classification of materials; History of Manufacture and use; Major historical and modern testing programs; Fracture critical structures; Characteristic and mechanical properties; Sampling and testing; Condition Assessment; Analysis; Fire performance; Repairs strategies; Protection; Resources & bibliography.

The committee discussed the types of medium that is preferred as we enter into the second decade of the 21st century. It is acknowledge that although there is a strong trend to get lots of technical information on-line, that everyone, including the new generation would invest into the acquisition of good quality reference material available on a bookshelf or in soft format. The question of whether a publisher would accept that some or all of the publication material would also be available on-line, on a web page for example, is raised. It is assumed that certain condition of dissemination on-line could be negotiated with the publisher. For example some key information could be on-line free of charge, while detailed information would have to be purchased.

The new guidelines could become the “compulsory reading material” for a structural conservation education program.

The group broke into two working group: Investigation and Intervention

Working Group on Investigation
Previous to this meeting, L. Binda had circulated the following articles to the group: “Application of NDT’s to the Diagnosis of Historic Structures,” and “Typological Classification and Investigation of Historic Stone Masonry Construction.”

Defining the Scope of the Working Group
Following Steve Kelley’s proposal, the possibility was discussed that all results from WG1 discussions and work could be published in a book or several books separately from the Guidelines which should remain in their present version.

The group discussed what types of materials and systems should be covered by the prospective publications.

It was agreed that the current guidelines are too general and that each material has separate needs when it comes to assessment. In addition to materials, systems (e.g. masonry with timber floors and roofs, steel structures with masonry facades, etc.) should be covered by separate publications.

The group discussed the difficulty of covering all materials and decided to focus on masonry, timber, and other materials or systems that group members were familiar with for now. Additional materials, such as concrete, will be visited later, perhaps after finding experts for that particular material/system. Masonry should be broken down into multiple categories and categorized by type of construction technique. Each material and system will be covered in individual books.

The group discussed development of the following:
A database for different masonry types
• Templates for assessment/evaluation, such as those created by the Italian Civil Protection Department and Ministry of C.H. and used after the L’Aquila earthquake
Categorization by failure mechanism, e.g. due to earthquakes, floods, soil settlements, heavy dead loads, etc.

Other issues raised during the meeting but not discussed at length:
- How we will include other historic materials, such as unreinforced adobe masonry
- Some systems are not true systems: while some cooperate (e.g. a masonry building with timber roof), others are just mixed
- Wells and drainage systems can be included with foundations

Content of Organization of Working Group Publications
The group discussed content of the publications and how to organize them. The following items were suggested for inclusion in the publications:
- General guidelines (philosophy) for assessment and repair are already outlined in the ISCARSAH principles
- Investigation methodology, including visual investigation, historic research, and in-depth investigation
- Recommendation that a first investigation consist of geometrical investigation and mapping of crack patterns
- Case studies that illustrate best practice
- Case studies that illustrate where problems were caused by bad interventions or that illustrate false or unsuccessful repairs

For organization of the investigation section, it was suggested that the approach go from macro (survey) to micro (testing that is based on material and system specific). It is important to first identify where the problem is (element in the system) before evaluating the whole structure.

A preliminary outline for masonry was suggested, which included:
- Research into historical documents
- Geometrical investigation
- Mapping of crack patterns
- Evaluating the quality of masonry

A preliminary outline for systems was discussed and includes the following:
- History of the system and evolution over time
- Description of materials
- Description of structure
- Action/role that each element plays in the structure
- Causes of damage

The following additional items were raised for discussion during the meeting:
- People often fall victim to new investigative techniques (e.g. thermography, radar) - we need developers of these technologies to consult with us
- Amount of money available for investigation and the goal of an investigation should be considered when recommending tools
- Sometimes less obvious problems more connected to maintenance (such as a blocked gutter) can be a risk
- Risk evaluation should be probability-based and vulnerability assessment is important
- If a building does not show obvious signs of distress, an investigator should not look for distress but instead look for conditions that will cause problems later
- Decay characteristics vary with time; this fact should be considered by engineers during an investigation
The importance of maintenance should be emphasized; Netherlands and Belgium (Momumentumwatch) have a good model for this - they look for small problems before they become big ones; we can emphasize that this is a good approach because only visual investigation is needed then (NOTE: this can only be the case if the investigator knows what to look for)

**Duties of Working Group Members**
The following action items were assigned to the members of the group:
Tampone and Mittnacht: create general outline for timber structures
Arun: send information on Turkish timber walls to GT
Vatan and Binda: create list of masonry typologies
Elliott: create overview from practitioners perspective
Arun, Vatan and Binda: identify crack patterns
Arun and Iwasaki: create general outline on foundations

**Working Group on Intervention**
In attendance: Kelley, Sparks, Yeomans, Fontaine

The group compared outlines of existing ISCARSAH guidelines and the outline presented by Sparks. A cross-check was also done with the outline of ISO 13822 Heritage Structure Annex.

A tool box (outline of guidelines) was developed including: introduction and scope, nomenclature, principles, Codes and standards, common errors, classifications of materials & assemblies, description of behavior and performance, appraisal and assessment, diagnosis, repair strategies, long term performance.

A more focus discussion on intervention was held.

**Regrouping and final discussion on Working Group outlines**
The “tool box” outline was presented. As the group discussed the outline of the tool box and clarified the meaning of nomenclature, principles, common errors, etc., it became clear that while previous ISCARSAH documents had focused on the process of conservation of heritage structures, the new document as outlined would include a good portion of knowledge base. So the Tool Box outline is as follows:

**Introduction and Scope**

**KNOWLEDGE**
* Nomenclature (definitions, descriptions, glossary)
* Principles (Philosophy)
* Practice Codes and Standards
* Common Errors (learning from past mistakes)
* Classification of Materials and Assemblies
  - History of Manufacture (may be too broad)
  - Historical Knowledge
  - Material Properties
* Description of behavior and performance
* Modes of Failure

**PROCESS**
* Appraisal and Assessment
* Diagnosis
*Repair Strategies
*Long term performance
  Compatibility
  Maintenance

This outline was developed for use in development of the guidelines and a possible publication. It is expected that the Working Groups will continue the discussion and development through e-mails or other means of communication.

Next meetings
A meeting is planned in Shanghai, China in October 2010 in conjunction with the SAHC conference. Given the importance of keeping the momentum and the activities of the working groups it would be appropriate to meet in May of June.

Elliot proposed Edinburgh, Scotland and Sparks proposed San Antonio, Texas. Both will be looking at options for venues and possibility of funding. More specific proposal is expected in the coming weeks. It is noted that a conference on Structure Faults and Repair will be held in Edinburgh June 15-17, and is organized by Michael Forde, renowned specialist in non-destructive testing. It is proposed that the committee will meet either in Edinburgh or Texas in the spring of 2010.

Miscellaneous
Professor Tampone suggested holding a few hours session in universities to introduce ICOMOS Structural conservation activities. This could be done within an Architectural Conservation course. He underlines the importance of training the younger generation and the need for encouraging them to join the committee.

Kelley pointed out that it would be a good idea to have a paper about ISCARSAH in each proceeding published in the respective language of the host country in order to share and disseminate ISCARSAH Principles and Recommendations. The proceedings of the Mostar meeting include an ISCARSAH paper by Kelley, however there are none in the REMO conference which was translated into Polish. Kelley proposed to provide a previously written paper that can be posted on a WIKI site for collaborative development by members of the committee.

Sparks proposed to have a one page template to post case studies on the ISCARSAH website. Sparks to develop a template. The intention is to capture the essence of the project and key contact point.

Sparks reiterated the need to investigate interactive more of communication to encourage technical discussion.

Jasienko provided logistic information on return to Wroclaw airport/city. The committee fully acknowledged the outstanding quality and organization of the REMO Conference and the ISCARSAH meeting.

Discussion late afternoon on December 4, Debowy Palace
In attendance: Arun, Elliott, Fontaine, Reese

A training program on traditional masonry assessment and repairs, including seismic assessment, is offered in numerous countries (more than 20?) to architects and engineers by TIKA, TAMIR research center. The Turkish government supports this program.
This course could be offered in Bhutan. Bhutan would have to cover travel expenses for the instructors. Arun could provide a course outline which would be tailored course to suit their specific needs, and a cost estimate. ISCARSAH members from various countries could be involved. The course would be offered in English, so there would also be a need for translation.