

**Report of the Ninth Meeting of
the Sub-Committee on Technology of
the International Advisory Committee for
the UNESCO Memory of the World-Programme**

Mexico City, Thursday 7th and Friday 8th September 2006



Hall 2, Secretaria de Relaciones Exteriores
Plaza Juarez No. 20, Mexico City

Participating Members of the Sub-Committee: George Boston, Kevin Bradley, Adolf Knoll, Fernando Osorio, Jonas Palm and Dietrich Schüller.

UNESCO Programme Officer: Abdelaziz Abid

Apologies for their absence were received from Julian Bécscos and Yola de Lusenet

An address list for the members of the Sub-Committee is contained in Annex B.

1. Welcome

Dietrich Schüller welcomed the members of the Sub-Committee and their guests to the ninth meeting of the Sub-Committee on Technology. He thanked the Foreign Affairs Ministry of the Republic of Mexico for offering their premises for the meeting.

2. Administrative Items

The Report of the previous meeting held in Amsterdam in May 2005 was approved and the draft Agenda for the meeting (see Annex A) was agreed with the addition of a report from the UNESCO officer for the SCoT to be taken as Item 3.

A visit to view the Mexican Codices at the Museo de Antropología, one of the first nominations to be placed on the International Register, had been arranged by Fernando Osorio for 11.00 on Friday morning.

3. Report of the UNESCO Officer

Abdelaziz Abid, on behalf of the Director-General of UNESCO, thanked the members of the SCoT for their continuing work to assist the Memory of the World Programme to achieve its aims. He reported that a training workshop – the third in what was hoped to be a continuing series – was taking place in Cheongju City in the Republic of Korea. UNESCO was represented there by his colleague Joie Springer. The first workshop had been about the preservation of documents; the second about digitisation; and the current workshop was dealing with disaster preparedness. Two thirds of the cost of the workshop was being paid by Cheongju City and the rest by UNESCO. There were thirty participants at the workshop and it was hoped that there would be a workshop covering a topic associated with the Memory of the World Programme every second year. It was hoped that a similar biennial series of workshops could also be established in Latin America. Fernando Osorio said that support from UNESCO to help fund such workshops would be very beneficial for the continent.

M. Abid continued by reporting recent staff changes in the Information Society Division in Paris. Elizabeth Longworth had moved from the post of Director of the Division to become the Head of Office for the Director-General. Pending the appointment of a new Director, Abdul Waheed Khan, Assistant Director-General for Communication and Information, is taking responsibility for the operation of the Division. M. Abid said that he would be retiring from his post in about a year and that he was slowly handing over the work of the Programme to Joie Springer.

Dietrich Schüller said that it was often asked why the Memory of the World Programme was part of the Information Society Division and not part of the Culture Sector together with the World Heritage Sites and Intangible Heritage Programmes. In his opinion, because the underlying message of Memory of the World is preservation of information, such a move would not be good. This message, particularly in the digital age, is in need of increased support, both logistically and financially, if we want to keep the information gathered over the centuries alive and available. A move to the Culture Sector of UNESCO would reduce the programme to aesthetic issues.

Abdelaziz Abid confirmed that the rise of the digital age is creating a different dimension of need to that of the analogue age. There is a different set of parameters and problems to manage that require a close contact with the world of computers. This, to some extent, is changing the aesthetic considerations of libraries and archives. The changes do not, however, mean that the Memory of the World Programme will be severed from the Culture Sector. Co-operation between the Programmes will still occur when appropriate.

George Boston asked if it was correct that, unlike the Memory of the World Programme, every nomination received for inclusion on the Registers of the World Heritage and Intangible Heritage Programme Registers was visited by experts to assess its suitability. Abdelaziz Abid replied that this was correct in that the NGOs for the appropriate areas have continuing contracts to visit and examine the nominations received. The MofW Programme seeks expert opinions about nominations but cannot afford to fund visits to examine the documents. It had been estimated that to fund such visits by experts would cost about \$300,000 per round of nominations.

4. Membership of SCoT

George Boston reported that, at the last meeting of the Bureau International Advisory Committee, held in Paris in 2005, it had been decided that the various Sub-Committees of the IAC should have Rules of Procedure setting out the role of each Sub-Committee, its membership and its mode of operation. The draft Rules for the Sub-Committee on Technology had been discussed by the SCoT at the meeting in Amsterdam in 2005 and amendments suggested. The amendments to the draft Rules had been submitted to the IAC at its meeting in Lijiang in China and agreed (see Annex C) and the SCoT now needed to discuss how the Rules should be put into operation.

Dietrich Schüller announced that he intended to step down as Chairman of SCoT. He had held the position since the creation of the sub-committee at the inaugural meeting of the IAC in Pultusk, Poland in 1993. On behalf of the SCoT, Abdelaziz Abid thanked Dr Schüller for all the work that he had done for SCoT and the Programme as Chairman. He had previously chaired eight meetings of the committee and had played a large part in making the SCoT the most active committee within the Memory of the World Programme. It was necessary, however, that changes took place to ensure that committees remained fresh and did not become moribund.

The debate turned to the appointment of a new Chairperson. The new Rules of Procedure stated, however, that the Chairperson of the SCoT was to be appointed by the IAC. This meant that a new Chairperson could not be formally appointed before the next meeting of the IAC scheduled for Pretoria in June 2007. After a brief discussion it was decided that Jonas Palm be recommended to the IAC for the position of Chairman to replace Dietrich Schüller when his term of office ended in June 2007.

The Rules of Procedure also laid down that the SCoT should consist of eight members and that the term of office of members of the SCoT should be four years. At the end of their term of office, members are immediately eligible for re-appointment. In order to ensure continuity of the working methods of the SCoT, no more than five members may be replaced every four years. For the first period of operation of these Rules of Procedure only, four members will be appointed for four years and four for two years. Those appointed for two years will be eligible for re-appointment for a full four year term. Abdelaziz Abid reminded the Committee that it should avoid becoming Euro-centric but draw qualified people from all parts of the world. He also said that the membership should be periodically changed to ensure a freshness of approach to the problems facing archives and libraries. He welcomed the appointment of Kevin Bradley from Australia as the replacement for Michael Alexander,

After discussion, it was agreed that the new Rules should apply to the members of the SCoT from the date of the next IAC meeting to keep the SCoT in step with changes of membership within the IAC. Starting in June 2007, George Boston, Adolf Knoll, Fernando Osorio and Dietrich Schüller will serve for a two year period and Kevin Bradley and Jonas Palm for a four year period. New members will be sought to fill the two vacancies and be appointed for a four year term. It was suggested that Mrs Saroja Wettasinge, Director of the National Archives of Sri Lanka in Colombo and Ms Noha Adly from the Library of Alexandria in Egypt be approached to fill the vacancies.

The members of SCoT placed on record their thanks to Julian Bésocos and to David de Roure for their past work on the committee.

5. Memory of the World Projects

Abdelaziz Abid reminded the SCoT that it was at the request of the IAC that projects be examined. The intention was to ensure that the technical standards of projects were soundly based and that the project would have enduring results. The awarding of the use of the Memory of the World logo did not guarantee financial support. UNESCO had limited funds for this purpose but efforts would be made to find supporters for projects in particular need.

The SCoT recommended that questions be added to the nomination form asking about the technical standards to be applied in the project and asking about plans for the future preservation and maintenance of the documents after the project is completed. The IAC should be asked to consider granting the use of the Memory of the World logo for non-technical projects such as investigations and surveys into the condition of collections. This would indicate that the work is considered important and would aid any subsequent project to preserve the documents to gain financial assistance.

The SCoT then discussed the nominations received to date. The two nominations received from France were for the same material and were treated as one. The conclusions of the SCoT are given in Annex D.

Abdelaziz Abid reported on a joint Turkish/UNESCO project. The project has a budget of €380,000 to equip and staff a centre for the preservation of books. The centre is to be housed at the Suleimaniya Library in Istanbul. The need for such a large sum of money to establish a book conservation centre without any mention of ongoing support was questioned. Is the Turkish Government supporting the project? Will the staff be in secure jobs with on-going work and support? While applauding the initiative, the members of SCoT were concerned that the project might train people and not be able to offer jobs at the end of the course.

Abdelaziz Abid continued by reporting that the Library of Congress is setting up a Digital Library Project to make and collect digital copies of unique documents and collections. The factor impelling the project was the need to help spread knowledge of different cultures. Talks at the IFLA Conference demonstrated that there are a number of ways forward for the project. A number of companies are considering supporting the concept. Some basic difficulties need to be overcome, including the devising of a cross-referencing system for the spelling of names of people and places. The planning team for the project must include representatives from developing countries and the major NGOs such as IFLA in the drafting of the plans for a digital library. A few basic principles that can be easily understood by non-specialists in the field would be of great help in gaining support for the project. The ideas go far beyond the initial thoughts of the Library of Congress – this is wider than just a project for, and run by, the USA.

There is to be a meeting at UNESCO in Paris on December 1st 2006 to explore the project more. Four basic topics have been tabled for discussion:

1. The architecture of the project – the ownership of the contents in whole and in part needs to be decided.
2. The selection criteria – the original idea of the Library of Congress was to concentrate on the unique patrimony.
3. The governance of the library – who runs it? – a management committee?
4. Funding – does supplying the money equal control?

The Librarian of Congress, James H. Billington, has been actively seeking funding and has gained the support of Google for the project. He wants to see positive progress by the end of 2007 and the UNESCO General Conference.

Adolf Knoll said that there are many problems with such a scheme. Not least is the existence of a good co-operative system between digital libraries in Europe. The Library of Congress must hold an open debate about the project and not seek to impose their views.

6. Jijki Prize

Abdelaziz Abid said that the closing date for nominations for the Jijki Prize was December 31st 2006. No nominations had been received yet but it was expected that there would be about 50 nominations. It was planned that the Bureau of the IAC would shortlist the nominations at their meeting in March 2007 and the SCoT would be asked to comment on the shortlisted nominations by e-mail shortly afterwards, with the IAC making the final decision at their meeting in Pretoria in June 2007.

The questions and advice on the nomination form were reviewed in the light of the experience gained in 2005. It was recommended:

- That the order of the sections giving the details of organisational nominees and individual nominees be reversed.
- That information be sought about how the prize money would be used if the nomination was successful.
- That individuals should be nominated by a third party and not by themselves.

7. Publications

a. Proposed booklet - *Risks Associated with the Use of Recordable CDs and DVDs as Reliable Storage Media in Archival Collections - Strategies and Alternatives*

This was no longer a proposed booklet. The work had been completed and was available on the UNESCO website at:

http://portal.unesco.org/ci/en/ev.php-URL_ID=22734&URL_DO=DO_TOPIC&URL_SECTION=201.html

The committee congratulated Kevin Bradley for his patience and the excellent work. Mr Bradley replied that it been a lengthy but thorough examination of the problems and he had looked at the use of recordable optical discs as a systems problem i.e. the disc and the machine as a single entity.

Providing advice about disc testers had proved the most troublesome part of the work. The results from the low end products available – software to run with an internal or external computer drive – had proved to be completely unpredictable and unrepeatable. Of the mid-range products, only one was found to be satisfactory and only then if it could be periodically re-calibrated against a high-end tester. The high-end testers were acceptable but were also expensive – probably beyond the budgets of the small collections who were most likely to wish to use optical discs as the target media for digitisation.

This work led to an investigation to determine at what point the use of recordable optical discs became more expensive and troublesome than using a mass storage system or tapes. The figure for the number of discs was surprisingly low. In fact, in only one scenario did optical discs become advantageous – that where the electricity supplies were very unreliable.

Dietrich Schüller commented that the book sets standards for preservation projects. It also made it clear that all but the very smallest collections would find it better and cheaper to use a professional digital storage system in preference to optical discs. The probability of recordable optical discs surviving for many years was very low.

Abdelaziz Abid said that a summary – almost a tick list of “Do’s and Don’ts” – was required. This could be a separate document to provide an introduction to the subject. Kevin Bradley replied that the supporting arguments given in the book were necessary for people to fully understand the recommended actions. George Boston suggested that, for each item in the list, the summary could be cross-referenced to the appropriate section in the book. Adolf Knoll said that an Executive Summary was required as part of the book and this could also be produced as a separate publication. Dietrich Schüller agreed to draft an Executive Summary by the end of September in consultation with Kevin Bradley. Abdelaziz Abid agreed to organise the translation of the summary into French and Spanish. Fernando Osorio agreed to check the Spanish version and Jean-Marc Fontaine would be approached to check the French version.

Kevin Bradley said that a possible solution for small or domestic users was a web-based store. There were still problems of cost and the security would need to be checked.

He continued by reporting that research into the effect of light on recordable discs had stopped because new safety requirements for high power UV light sources in Australia had made it impossible to continue the work.

b. Update of *A Guide to the Standards, Recommended Practices and Reference Literature Related to the Preservation of Documents of All Kinds*

The SCoT had considered writing an update of *A Guide to the Standards, Recommended Practices and Reference Literature Related to the Preservation of Documents of All Kinds* that was published in 1998. It was decided not to do this but to merely update the list of members of the SCoT. It will remain on the UNESCO website in the six languages and printed copies are also available. The website address is:

http://portal.unesco.org/ci/en/ev.php-URL_ID=2168&URL_DO=DO_TOPIC&URL_SECTION=201.html

To replace the Guide to Standards, it was agreed that the SCoT prepare a new publication that incorporated some of the earlier material as well as material that was on the CD version of the work. The new work will be a treatise on long term storage and will look much more at the physical requirements of stores – choosing a site, method of construction, climate control equipment, fire extinguishing etc. A skeleton for the work last year had been drafted by George Boston prior to this meeting (see Annex E) and this had been accepted as a framework for the new book.

Jonas Palm agreed to begin to put flesh on the outline. He said that much material was available in the Swedish Protection Requirements for Archives which was now a National Standard and approved by the legal community. He will seek other authors as required. Again, translations of the finished work are planned.

c. Preserving the Documentary Heritage

Since being written in 2005 and placed on the UNESCO website, it has proved to be very popular and has been translated into several languages. The SCoT agreed that, apart from the list of members of the committee and some of the citations in the bibliography, the work did not need updating. The address of the publication is:

http://portal.unesco.org/ci/en/ev.php-URL_ID=19440&URL_DO=DO_TOPIC&URL_SECTION=201.html

d. Other Publications of Interest

Dietrich Schüller reported that the IASA Technical Committee had recently issued a new edition of *The Safeguarding of the Audio Heritage: Ethics, principles and Preservation Strategy*. This is the third work in a series with the general title of *Standards, Recommended practices and Strategies*. Translations into Chinese, French, German and Spanish were in various stages of production.

Dr Schüller continued by reporting that the Spanish edition of TC-04 – *Guidelines on the Production and Preservation of Digital Audio Objects* – was to be presented at an evening reception on Tuesday September 12th. Editions in other languages were also in progress.

8. Digital Preservation Costs

Dietrich Schüller reminded the members of the committee that the Intergovernmental Council of the Information for All Programme had requested the SCoT to investigate the costs of preservation in the digital era. Hardware and media costs were continuing to fall steadily but the cost of software remained high. In the past, UNESCO had taken the lead by providing free, high-quality software suitable for use by libraries and archives. New software packages were no longer being written and the support for the existing packages was probably to be withdrawn. Abdelaziz Abid added that there were three software packages currently available from UNESCO including CD-ISIS. Because of opposition from commercial software producers, UNESCO was reviewing its involvement. One proposal that was being investigated was that UNESCO negotiate special prices with companies for the supply of standard software packages for distribution to poorly resourced countries and institutions.

Kevin Bradley said that we should start by defining what was needed. Work on one part was already in progress – the depositary control. Several companies were working in this area and two packages – D-Space and Fedora – were available and offering a good product. Both sets of software were worth supporting but they approach the problem from different directions.

D-Space offered downloadable repository software that was better for large institutions such as National Archives with good support staff. It manages using an enhanced Dublin Core data set. Fedora was more practical for smaller institutions with minimal support who want to buy in a product that is easy to install and use. Its architecture was based around METZ.

There were a number of groups of people developing many types of software to be made available as Open Source Software. We should make contact with this community. Interchange software was probably most in need of development. Some development of hardware to meet the needs of the archival storage community was also required.

Abdelaziz Abid commented that the next meeting of the Bureau of the Intergovernmental Council for the Information for All Programme in early April 2007 (IFAP Bureau) had allocated one day of its three day agenda to the topic of preservation and digital storage.

Kevin Bradley gave a resume of the functional model being developed by the OAIS (*Reference Model for an Open Archival Information System*). Further information about OAIS can be found at: <http://public.ccsds.org/publications/archive/650x0b1.pdf>

A debate followed as to how useful this approach would be for small collections. Individual modules may be good but a small institution needed a packaged product that was scaleable to meet their requirements. It was agreed that there was an urgent need for such a package to be developed.

Kevin Bradley said that each community of archives and libraries needed to define what they required of a software package to administer their digitised collections. Solutions could be made scaleable so that the software was suitable for a range of collection sizes and could grow with the collection. An outline of requirements was essential, however, before serious work could begin.

Dietrich Schüller said that we need to work towards a presentation of the current costs for the various parts within an archival digital storage system and an investigation into how costs could be reduced without impairing performance.

Abdelaziz Abid said that UNESCO may be able to fund a consultant to define the requirements. Kevin Bradley said that it would be possible to take the work further by hiring a graduate student to put together a package of open source software as part of the investigation into the areas that needed more development work. An approach to open software writing groups may then be successful in creating a workable, scaleable management system for a digital store.

It was agreed that a graduate student be contracted to work at the Australian National Library to investigate what open source and low cost software modules existed, to put them together into a package and to report on the shortcomings in preparation for work to develop better modules where required. The work to be finished in time for a report to be submitted to the IFAP Bureau at their next meeting in April 2007.

To achieve this target, the following timetable was agreed:

- a. Dietrich Schüller to draft an outline requirement by the end of September.
- b. Kevin Bradley and the other members of SCoT to add detail to this outline by the end of November.
- c. Kevin Bradley to establish a position for a graduate student to carry out the investigations. The contract to run from November 2006 to February 2007.
- d. Abdelaziz Abid to agree terms of a contract with Kevin Bradley. The contract to be in place by the end of October
- e. Based upon the requirements produced by items a. and b., Kevin Bradley and the OAIS to define categories where software is required, e.g. ingest, management etc.
- f. Researcher assembles available open source solutions and reports on gaps. The staff of the Phonogrammarchiv in Vienna will also input advice from their existing investigations into open source software and their work on the LTO error checker. The researcher also provides advice on the complexity of support for open source materials. The work to done under the supervision of Kevin Bradley and the Australian Partnership for Sustainable Repositories.
- g. Kevin Bradley prepares report for the Bureau meeting in early April 2007 and circulates it to the members of SCoT.

9. Future Activities

There were no other future activities tabled for discussion.

10. Any Other Business

- a. Adolf Knoll informed the SCoT of a EU project to raise awareness of the documentary heritage. It was to collate the existing research information to improve its accessibility both as a training tool and by dissemination to practitioners in the field. A meeting was to be held in Vienna on September 12th and a report would be circulated to the members of the SCoT.
- b. Abdelaziz Abid informed the members of SCoT of the World Day for the Audiovisual Heritage. The day chosen was the 27th of October - the anniversary of the Convention of the Moving Image.
- c. Fernando Osorio reported that a project to survey audiovisual documents in Latin America was proposed. It would look particularly at analogue photographic images. A fuller report would be given to the next meeting of SCoT with a view to seeking advice about actions to take to preserve the material.

11. Close of Meeting

On behalf of the SCoT, Dietrich Schüller thanked Fernando Osorio and his aide, Rita Sumano, for the work that they had put into making the meeting such a success. In particular, for arranging a visit to see the magnificent Mexican Codices. The storage facility for these rare documents was an example to be followed by many other collections.

Dr. Schüller continued by thanking the organisations that had provided hospitality for the committee during its stay in Mexico City - Data Stock and Fundación Televisa, Imaging Arts Division.

The Secretaria de Relaciones Exteriores was also to be thanked for making the room and its facilities available for the meeting.

Finally he said that, above all, the people of Mexico City were to be thanked for the friendly reception given to the members of SCoT. It had all helped to make a most invigorating and informative few days.

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ANNEX A

Draft Agenda

1. Welcome
2. Administrative Items - Agreeing the Agenda; approving the Minutes/Report of the last meeting; agreeing the timetable etc of the meeting; other routine administrative items.
3. Membership of SCoT
4. Memory of the World Projects - A review of project proposals received since the last meeting of SCoT.

- 2007-01 - Algeria
 - The Adrar Manuscript Heritage
- 2007-02 - Bhutan
 - Digitalisation, Archiving and Publishing of Historical Documents
- 2007-03a - France
 - The Art of the French Voyages to the Pacific 1768-1846
- 2007-03b – France
 - Catalogue d'images provenant des voyages français d'exploration en Polynésie Française 1768-1846
- 2007-04 – Jamaica
 - a. Transfer of Audio Tapes to Digital Medium for Posterity
 - b. The Restoration of Queen's/Tivoli Theatre
- 2007-05 – Kuwait
 - Preservation of the TV Archives
- 2007-06 – Nicaragua
 - El Tren Cultural del 25 Aniversario de la Cruzada Nacional de Alfabetización
- 2007-07 - United States of America
 - a. Exhibition at the National Museum of Natural History of the Smithsonian Institution, Washington DC.
 - b. Research activity in the field of ancient medicine/ancient medical books and traditional knowledge of plants.
 - c. Some manuscripts may be eligible for the World Memory program.
 - d. Publications on World Scientific Heritage.
 - e. Traditional Knowledge.
- 2007-08 – Yemen Republic
 - Preservation of Yemen's Manuscript Heritage

5. Jijki Prize - To review procedures for examining nominations for the 2007 Jijki Prize.

6. Publications:

a. Proposed booklet - *Risks Associated with the Use of Recordable CDs and DVDs as Reliable Storage Media in Archival Collections - Strategies and Alternatives*

b. Update of *Safeguarding the Documentary Heritage: A Guide to Standards etc.*

7. Digital Preservation Costs – Additional thoughts to add to those of Amsterdam.

8. Future activities

9. Any Other Business

10. Close of Meeting

ANNEX B

Address Details for Members of SCoT

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ANNEX C

Rules of Procedure for the Sub-Committee on Technology

Rule 1 - Membership

1.1 The Sub-Committee on Technology (SCoT) shall be composed of eight members comprising a Chairperson appointed by the International Advisory Committee (IAC) and members chosen for their specialist expertise. A rapporteur shall be selected by the SCoT from among its members.

1.2 Additional temporary members may be invited to attend a specific meeting if the SCoT feels that special expertise is required for the discussion of a particular topic.

1.3 The term of office of members of the SCoT shall be four years. They are immediately eligible for re-appointment. In order to ensure continuity of the working methods of the SCoT, no more than five members may be replaced every four years.

1.4 For the first period of operation of these Rules of Procedure only, four members will be appointed for four years and four for two years. Those appointed for two years will be eligible for re-appointment for a full four year term.

1.5 The members of the SCoT shall recommend suitable replacements to the IAC when necessary.

Rule 2 - Functions

The SCoT shall discharge the functions assigned to it by the IAC.

Rule 3 - Sessions

The SCoT shall normally meet at least every two years. Periodic meetings and consultations shall, however, be conducted through electronic media to reach decisions. The SCoT shall also hold virtual meetings as the need arises.

Rule 4 - Agenda

The agenda shall be drawn up by the UNESCO Secretariat in consultation with the Chairperson of the SCoT. It shall be communicated to the members of SCoT six weeks before the opening of each session.

Rule 5 - Functions of the Chairperson

5.1 The Chairperson shall declare the opening and closing of meetings, direct the discussions, ensure observance of these Rules, accord the right to speak, put questions to the vote and announce decisions. He or she shall rule on points of order and, subject to these Rules, shall control the proceedings and maintenance of order.

5.2 If the Chairperson is no longer able to hold office, the IAC shall choose a member of the SCoT to become Chairperson for the unexpired portion of the term of office. The IAC shall nominate a replacement member for the unexpired portion of the term of office to fill the vacancy in the membership of the SCoT.

Rule 6 - Secretariat

A representative of the Director-General of UNESCO shall participate in the work of the SCoT without the right to vote. He or she may at any time submit either oral or written statements on any matter under discussion. The Secretariat of SCoT shall be provided by the Information Society Division of UNESCO.

Rule 7 - Working Language

The working language of the SCoT shall be English.

Rule 8 - Working Documents

The working documents shall be communicated to the members one month before the opening of each meeting of the SCoT.

Rule 9 - Points of Order

During the discussion on any matter, a member of the SCoT may at any time raise a point of order, which point of order shall forthwith be decided upon by the Chairperson. Any member can appeal against the ruling of the Chairperson which can only be overturned by a majority of the members present and voting.

Rule 10 - Suspension, Adjournment and Closure

Any member of the SCoT may at any time propose the suspension or adjournment of a meeting or the adjournment or closure of a debate. Such a motion shall be put to the vote immediately and decided upon by a majority of the members present and voting.

Rule 11 - Voting Rights

Each member of the SCoT shall have one vote. Consensus will be sought as the normal basis for decision making on each topic. Otherwise decisions will be made on the basis of a simple majority vote of those present. In the case of a tie, the Chairperson shall have the casting vote.

Rule 12 - Suspension

Any provision of these Rules, except where it reproduces provisions of the Statutes of the Memory of the World Programme or decisions of the General Conference of UNESCO, may be suspended by a decision taken by a two-thirds majority of the members present and voting.

Rule 13 - Reports

The SCoT shall present reports on its work and recommendations to the IAC.

ANNEX D

Project Proposals

2007-01 - Algeria

The Adrar Manuscript Heritage

This is not a technical project. It is a project to examine the collection to assess its condition. A project to perform any necessary work may come later. There is, therefore, nothing for the SCoT to review at this time.

2007-02 - Bhutan

Digitisation, Archiving and Publishing of Historical Documents

The proposal document gives little information about the technical standards to be applied in this project. It was noted, however, that the target medium was to be recordable optical discs – CD-R and recordable DVD. These have been proved to be unreliable. A recent UNESCO publication - *Risks Associated with the Use of Recordable CDs and DVDs as Reliable Storage Media in Archival Collections - Strategies and Alternatives* – gives advice about what precautions to take if optical discs are used for long term storage and also about alternative target media that resolve some of the problems. The book is available on the UNESCO website at:

http://portal.unesco.org/ci/en/ev.phpURL_ID=22734&URL_DO=DO_TOPIC&URL_SECTION=201.html

The SCoT recommends that the proposers of this project reconsider the target media to be used and resubmit the nomination with more detail about the technical specifications of the project.

The SCoT notes that a safety or preservation copy of the digitised material is held in Denmark. This is to be applauded as a far sighted step to ensure the survival of the information. Concerns were expressed about the ownership of files kept by other institutions but there are precedents, notably in the arrangements made between the National Library of the Czech Republic and other libraries, both within the Czech Republic and elsewhere.

2007-03a - France

The Art of the French Voyages to the Pacific 1768-1846

2007-03b – France

Catalogue d'images provenant des voyages français d'exploration en Polynésie
Française 1768-1846

Although some paintings can be considered as pre-photographic documents, most are interpretations of reality. Even paintings of places and events sit in that grey area between reality and impressions. They belong more correctly in the world of museums and art galleries. The SCoT suggests, therefore, that this project be submitted to the Culture Sector of UNESCO for consideration.

2007-04 – Jamaica

- a. Transfer of Audio Tapes to Digital Medium for Posterity
- b. The Restoration of Queen's/Tivoli Theatre

a. The time quoted for the transfer of the 3,270 hours of audio is far too short. A factor of three should be the minimum allowed for the calculation of the time it will take to copy audio tapes. A minimum of 10,000 hours of copying time should be allowed for this project. In addition, the offer of a 50% discount on the price by one of the companies tendering for the work should be treated with great suspicion. Such a reduction in price can probably only be achieved by sub-standard staff and work practices.

Beyond the estimated time that the project will take, there is a lack of any technical details to allow the standard of the work to be assessed. The proposers are advised to obtain copies of the IASA publications TC-03: *The Safeguarding of the Audio Heritage: Ethics, Principles and Preservation Strategy* (available on the IASA website at www.iasa-web.org/index.htm) and TC-04: *Guidelines on the Production and Preservation of Digital Objects*, edited by Kevin Bradley, ISBN 8799030918.

b. The restoration of the Queen's/Tivoli Theatre is not an appropriate project for the Memory of the World Programme. The proposers are advised to approach the Culture Sector of UNESCO for assistance.

2007-05 – Kuwait

Preservation of the TV Archives

As submitted, the project proposal document is a specification for tenders for the work. The document is professionally presented and reflects the current approach to video transfers. The target media listed are, again, the major cause of concern.

The DigiBeta video tape format is becoming obsolete. The "Data Tape" format proposed and its technical standards are not defined. There are a number of levels of quality available and it is suspected that a data reduced standard such as MPEG2 at 50Mbits/s may be used. The CD-R and DVD optical discs are, presumably, to be used as access copies but no mention is made of any verification process for the new recordings.

The SCoT recommends that the authors of this document review the target media and the transfer standards in the document before proceeding further with the tender process. For archival purposes, a transfer that is not data reduced is the ideal. The cost of storage is steadily dropping and a number of archives have begun to make uncompressed preservation transfers. The steady improvement in transfer standards should be reflected in this tender specification.

At present there is not a project to be considered for the use of the Memory of the World logo. When a firm project is in place, the receipt of a new nomination will be welcomed.

2007-06 – Nicaragua

El Tren Cultural del 25 Aniversario de la Cruzada Nacional de Alfabetización

This is partly a standard project for the preservation of documents and partly a project to record video histories. The preservation part does not appear to have any major problems. The video histories project falls more rightly within the ambit of the Intangible Heritage Programme. The SCoT is prepared to offer technical advice about the methods and standards for making the recordings if required.

2007-07 - United States of America

- a. Exhibition at the National Museum of Natural History of the Smithsonian Institution, Washington DC.
- b. Research activity in the field of ancient medicine/ancient medical books and traditional knowledge of plants.
- c. Some manuscripts may be eligible for the World Memory program.
- d. Publications on World Scientific Heritage.
- e. Traditional Knowledge.

In general, these five items are not preservation projects. They do, however, form a very rich seam of documentary heritage in the fields of pharmacology and medicine. The IAC may wish to grant the use of the Memory of the World logo to some of the items – but not on technical grounds.

More specific comments:

- a. To be submitted to the IAC for the use of the logo.
- b. As a research project, it is outside the remit of the Memory of the World Programme.
- c. This forms the basis for a possible nomination for inclusion on the International Register.
- d. This should be submitted to the Science Sector of UNESCO.
- e. This is more appropriately with the Intangible Heritage Programme.

2007-08 – Yemen Republic

Preservation of Yemen's Manuscript Heritage

This project is seeking moral rather than material support. The project is being financed by a wealthy organisation that can afford good equipment. There are, however, a few technical questions about the project to be answered. How many documents are to be digitised and stored? How much storage will be required? Will it be in a RAID array or some other media? What plans exist for the future of the digitised files? Members of the SCoT will frame a list of questions to be submitted to the nominators of this project by October. They will also question the quality of the camera to be used.

ANNEX E

Outline for Technical Guide to Long Term Storage

I offer the following suggested outline for your consideration. In addition to the basic headings, I have included some comments on the topics that might be covered within each section. These range from the blindingly obvious to some rather more subtle ideas that I have gathered over the years.

Preface - setting out importance of the design of the storage facility and its climate control system, how time spent on the planning can save large sums of cash in the long-term.

Building - position (not in a valley prone to flooding or on a hillside with a risk of avalanches etc), basic design (ring-doughnut shape with offices and work areas surrounding the store rooms to help improve insulation from exterior climate or a traditional block), use of local traditional methods, need for good sealing of structure from exterior, need for good heat insulation (both the last two points will greatly reduce the energy requirements for the store), control of entry of dust, control of entry of insects and rodents.

Climate Control System - dangers of having one, large air conditioning system, the use of an intermediate plenum to receive treated air from several smaller units and then to feed to the various storage areas, use of hygroscopic wheels to control humidity.

Fail-Safe Design - ways of ensuring that temperature and humidity do not change swiftly if the electricity supply fails, back-up generators, automatic fire-fighting systems, general disaster preparedness.

Acclimatisation Chambers - rooms to allow documents to slowly move from the storage conditions to the access conditions and vice-versa, air-locks for staff.

Recommended Storage Conditions

- a. Traditional Documents
 - i. Manuscripts
 - ii. Pre- acid paper printed materials
 - iii. Post-acid paper printed materials
 - iv. Exotica - palm leaves, wampum beads etc.
- b. Still Photographs (and microfilms?)
- c. Moving Films
- d. Mechanical Audio
- e. Magnetic Tapes
- f. Mass Produced (pressed) Optical Discs
- g. Recordable Optical Discs
- h. Electronic Storage (computer) Storage Systems

To also include information about official standards and recommended reading for each group of documents.

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