



Administrative Committee
on Coordination

ACC/1997/19
15 December 1997

ENGLISH ONLY

REPORT OF THE INFORMATION SYSTEMS COORDINATION COMMITTEE
ON ITS FIFTH SESSION *

(New York, 1-3 December 1997)

* This report has been reproduced as received.

Introduction

1. The Information Systems Coordination Committee (ISCC) held its fifth session from 1 to 3 December 1997 at the United Nations Population Fund (UNFPA) in New York.
2. Opening the session, the Chairperson, Ms. Kerstin LEITNER (UNDP), introduced a number of new participants and invited UNFPA to give the welcoming statement.
3. The agenda adopted by the Committee with the relevant document references is at Annex I. The list of participants is at Annex II.

Part I - Matters for Endorsement or Approval by the OC

ISCC RECOMMENDS:

Information Infrastructure

4. That with respect to Document Management Technology, the Executive Statement on Migration to Contemporary Document Management, at Annex III with incorporated editorial revisions done post-session, be forwarded to the ACC for endorsement of its system-wide applicability.

Enhanced Dissemination of Information

5. That it should be noted that the ISCC is making effective use of video conferencing, having completed to its advantage 21 video conferences in 1997 (many involving multiple sites) which enabled the various Task Forces to conclude their work, a substantial portion of it ahead of schedule and at no cost in travel to the agencies concerned.
6. That those agencies which have not arranged for access to video conference facilities proceed now to consider doing so in appropriate cases. ISCC focal points have specific documentation available about potential uses for the technology within the context of international organizations.

Matters Considered during the Closed Session and Other Business

7. That Mr. Giuseppe PACE (FAO) be endorsed as the next Chairperson, ISCC.
8. That the sixth session be held 27-30 October 1998 at Geneva, with the possibility of an interim meeting in the Spring 1998 by video conference.

Part II - Summary of Actions Taken and Decisions Adopted by the ISCC

Information Infrastructure

9. That with respect to Document Management it:
 - (a) considers the Executive Statement to be an encouragement to top management to give priority focus to document management and its associated technology; and that the Statement, once adopted, will foster a professional approach to implementation;

- (b) commends "Strategies for Implementing Document Management" contained in an Annex to ACC/1997/ISCC/4 to its member agencies themselves to distribute to their middle managers responsible for document management; and
- (c) endorses the Core Set of Metadata which forms part of the high-level requirements which are also endorsed.

Improved Access to Information

10. That with respect to the Expansion of Internet-based Services:

- (a) for the moment, in lieu of ExtraNet (inter-agency Intranet), organizations continue to rely on password protected Web Sites until i) the content issues have been analyzed; ii) the most appropriate technological infrastructure for the ExtraNet is determined; and iii) a recommendation is made by TF/NET and endorsed by the ISCC;
- (b) all UN organizations are encouraged to use the ".int" top-level domain in order to identify sites as belonging to the international system (fully recognizing that agencies can also use other domains and that use of ".int" would not imply additional costs for the organizations);
- (c) with respect to the United Nations International Organizations Network Search (UNIONS) scheme under continuing development by TF/NET, all agencies should implement facilities allowing easier location of information by Web users via the UNIONS search engine;
- (d) access to the Optical Disk System (ODS) by member agencies, free of charge, but fully respecting the United Nations user agreement, is encouraged by requesting the UN to proceed with the Memorandum of Understanding (MOU) which each individual agency will need to sign; and
- (e) at this time, only phase I of the Participating Agencies Mobility System (PAMS) will be implemented as a pilot (ExtraNet) project among those agencies willing to participate and further implementation decisions will be scheduled for the next session of the ISCC based on the experience obtained during the pilot.

11. That with respect to the Official Web Site Locator for the United Nations System of Organizations, all member agencies of the UN System be required to include a hyperlink to the Locator on their own home page, *i.e.*, the hyperlink becomes an ISCC Standard respected by all agencies, by mid-1998.

Modernization of Dissemination of Information

12. That with respect to the Inspection of Depository Libraries:

- (a) under the leadership of Dag Hammarskjöld Library, establish a joint programme of annual visits to depository libraries by participating agencies in order to benefit from a co-ordinated approach which increases inspection and training in organization of UN-system materials but avoids duplication of visits;
- (b) the Dag Hammarskjöld Library will prepare annually, in co-operation with the ISCC, a programme of proposed priority visits near the beginning of each year and will also maintain a set of standards for depository libraries, including an inspection questionnaire, technical manuals, *etc.*, in collaboration with other United Nations system libraries;
- (c) the ISCC will make arrangements for a consolidated up-to-date electronic list of depository libraries of the UN system to be placed on the Web;
- (d) the depository library inspection programme will be carried out by staff of participating agencies, such as librarians, information officers, document distribution officers, country representatives, *etc.* – either at the duty station or in conjunction with home leave, other official missions and/or annual leave, their reports being collected and disseminated by the Dag Hammarskjöld Library; and
- (e) a review and report of the programme will be done during the next biennium.

13. That with respect to the UN-system Standard Search Terms for Web Sites (UNIVOC):

- (a) endorsement will only be possible after experience is gained in the use of UNIVOC for subject searching in the "UNIONS" system, and therefore, TF/LIB in co-operation with TF/NET is proceeding to test UNIVOC with the UNIONS product for Website description;
- (b) testing will also be undertaken of the utility of using UNIVOC to describe document-like objects (*i.e.*, documents and databases available as part of UN agency Websites);
- (c) any similar efforts to define subject descriptors and/or classifications for Web-site subject searching across the UN system are to be discussed with TF/LIB before proceeding with other schemes;
- (d) UNIVOC is to be "open ended" as to suggestions for modifications, enhancements and expansion; and
- (e) a report will be made during the next biennium evaluating the utility of UNIVOC and specifying resources required for its on-going maintenance..

14. That with respect to the United Nations Cataloguing and Public Access System (UNCAPS):

- (a) increased and widespread participation in the UNCAPS pilot project (which ACC/OC has already endorsed) is warranted in order to resolve outstanding issues;
 - (b) a major emphasis of the pilot project be on the aspect of shared cataloguing of library and information resources among UN agencies;
 - (c) the UNCAPS database be kept up-to-date in such a way as to minimize impact on agency resources; and
 - (d) for any unified UN-system libraries that might be established at the country level, it becomes a tool.
15. That the development of Standards and Recommended (best) Practices (SARPs) be accelerated for small and/or field libraries (in particular any new UN system unified libraries which might be established at the country level) and for small libraries at the Headquarters level.
16. That with respect to video conferencing:
- (a) All ISCC member agencies which have not arranged for access to video conference facilities proceed now to consider doing so in appropriate cases, with initial uses suggested to be among the following,
 - i) preliminary or first-round interview of candidates for vacant professional positions,
 - ii) management meetings with regional and/or field office heads, thus facilitating decentralization of responsibility to those offices,
 - (iii) small meetings of experts, particularly on short notice, with a maximum of 5 or 6 attendees at each site,
 - (iv) participation in inter-agency meetings such as those of the ISCC task forces;
 - (v) provision of cost-effective training for which travel and related costs are high or might preclude the training taking place,
 - (vi) staff broadcast presentations by senior management when announcing policy changes, *etc.*,
 - (vii) consultation with senior officials of partner organizations,
 - (viii) consultations with technical experts on specific issues,
 - (ix) team work with members of a team in multiple locations,
 - (x) procurement and contract-review committee meetings,
 - (xi) support of conference services activities.
 - (xii) facilitation of rapid response and crisis management in emergency situations, and
 - (xiii) support of meetings called on short notice;
 - (b) a database repository of all video conference sites within member agencies of the

ISCC should be kept up-to-date particularly to facilitate the sharing of facilities at field offices and be accessible from the ISCC Website;

- (c) a training seminar for video conference organizers and video conference technicians to improve skills at supporting conferences and to promote video conference usage for appropriate circumstances should be given in cities where there is a major UN-system presence, with such training including not only technical details but such matters as tailoring of agendas, chairing a video conference, *etc.* and this training video taped with copies provided to all concerned parties;
- (d) consideration could also be given to the use, only where appropriate, of audio conferencing, while desktop video conferencing at this stage should be approached with caution;
- (e) all implemented facilities should be compatible with ITU standards as are the facilities already implemented in most agencies and be capable of operating at 384kb per second; and
- (f) agencies should be prepared to report back to the sixth session of the ISCC the status of their implementations.

Opportunities for Inter-agency Co-operation

- 17. That the ISCC would not undertake to propose a name change, at the present time, in order to eliminate the older, dated term "Information Systems", but that OC would be consulted concerning possible appropriate timing to consider this.
- 18. That with respect to ICC support activities for the ISCC, progress reports will provide cost breakdowns both of services and human resources by Task Force or other major activities not related to a specific Task Force.
- 19. That with respect to E-mail use, there would be a time-limited Task Force on Directory Services (TF/DIR) formed to make a specific proposal to implement a system-wide directory service with a proposal to be delivered by the second quarter of 1998.

Matters Considered during Closed Session and Other Business

- 20. That the membership of Task Forces be as follows for the next biennium:

- (a) Task Force on Inter-library Co-operation, Standards and Management (TF/LIB) - ILO is the lead agency;
- (b) Task Force on Document Management Technology (TF/DOM) - FAO is the lead agency;
- (c) Task Force on Expanded Internet Services (TF/NET) - IAEA is the lead agency;

- (d) Task Force on Directory Services (TF/DIR) - ITU is the lead agency;
 - (e) in the case of TF/LIB, TF/DOM and TF/NET, focal points will notify the Secretary, ISCC if their agency wishes to participate; and
 - (f) for TF/DIR, member agencies are UNCC, ILO, IBRD and IAEA.
21. That with respect to a protocol being elaborated for approval of projects which involve production, implementation and/or mandatory adherence to standards, this would be the responsibility of the Chairpersons of the various Task Forces.

Part III - Summary of Discussions

22. The discussions of the fifth session were organized around the approved elements of the ISCC work programme for the forthcoming biennium: information infrastructure, improved access to information, modernization of dissemination of information and opportunities for inter-agency co-operation.

Information Infrastructure

23. The Chairperson of the Task Force on Document Management Technology (TF/DOM), Mr. Giuseppe PACE (FAO), presented the final report of this biennium contained in ACC/1997/ISCC/4 and various Annexes. The presentation focused on the following:

- (a) the Executive Statement on Migration to Contemporary Document Management Technology;
- (b) Strategies for Implementing Document Management to serve as a "road map" for project managers at the middle management level; and
- (c) the Statement of High-level Requirements and the proposed Mandatory Set of Core Metadata.

24. In the ensuing discussion, points were raised about the background of the development of the core set of metadata as a co-operative effort between TF/DOM and TF/LIB to cover both internal and external documents. It was clarified that it was the "list" of metadata elements which was being proposed as a standard, but that testing needed to be conducted and further refinements made in the detailed descriptions. This was proposed as an initial list of systematic metadata which would be further revised based on experience.

25. The Committee recognized that cost elements in introducing new technology for document management were a major concern, but that UNOs face the challenge of going increasingly electronic in any event with reduced reliance on paper copies.

26. In its consideration of the report, the ISCC determined that the report of TF/DOM should go forward to ACC, with some editorial work. It would be preferable to use the core set of metadata for pilot implementation and evaluation by member agencies, with a view to

assessing its appropriateness for being mandated as a system-wide standard. The metadata aspect could be bundled with the other high-level requirements.

27. The recommendation to the ACC should highlight the urgency of treating electronic documents as the original and avoid the use of technical jargon to the maximum extent. While clarity was needed about the budgetary implications, the shorter the period of investment the greater the benefits to be obtained early on. It is fully recognized that if proposed implementations are too expensive, then management will shy away. Technology choices for UNOs can be either to adopt a proprietary system or adopt incremental solutions, tying implementation to the growing use of the Internet. Therefore, more attention to the Internet aspect could yield greater acceptability.

28. A verbal presentation followed by the World Bank and UNFPA on migration to WIN/NT technology. Highlights of the presentation were:

- (a) technical aspects, including pitfalls encountered and lessons learned in the UNFPA implementation -- but including advantages in increased performance over earlier Windows products, true multi-tasking and a better user interface; and
- (b) driving forces such as the external technology market, evolving business context, information management objectives and internal cost controls.

29. Highlights of the ensuing discussion focused on the benefits to be obtained in standardizing a platform across the organization including lower operating costs. However, management in each UNO has a choice among various solutions. Yielding the productivity enhancements being sought are integrated solutions (one of which is based on WIN/NT) which bundle hardware, software, training and prepackaged sets of applications. While more powerful hardware was required, it represents only 20% of costs. Organizations should consider models which set standards centrally but leave the user in control of budgetary purchase decisions. It is realized that initial efforts at standardization results in higher initial costs but in lower long-terms costs of support.

30. Investments in WIN/NT or any other newer technology should be seen as needed for a certain period of time after which obsolescence and newer technology warrants newer technology yet again. There is a continuous process of evaluating newer technology as part of the budget planning process.

31. The Secretary, ISCC presented the draft working paper on the Establishment of the Function of Chief Information Officer (CIO) within the UN system. The paper had purposely been left in a draft version in order to benefit from further discussion. While the paper had started out as a draft based on creating a post, it had evolved to focus on the function to be performed.

32. In the ensuing discussion, it was determined that there is a greater need to recast the working paper so that the need is seen from a business driven approach. The credibility of a

CIO did not depend on where in the hierarchy of UN agencies any potential post fell.

33. In conclusion, it was emphasized that the paper should be revised to send a clear message that it is the function (not the post *per se*) which is needed to support the mission of each UNO. In the electronic information age, each UNO has to give more emphasis to information management.

34. In the revision, there is a need to emphasize the business case for its establishment, the matter being revisited at a future session of the ISCC. The establishment of any post should be de-emphasized while emphasizing the functions to be performed and the needs. Various models were available for agencies to choose from.

35. Meanwhile, ISCC focal points will wish to make their agencies aware of the fact that ongoing drafting of material in this area is proceeding.

Improved Access to Information

36. The Chairperson of the Task Force on Expanded Internet-based Services (TF/NET), Mr. Jerry BARTON (IAEA), presented its initial report contained in ACC/1997/ISCC/6 and associated Annexes. As part of the presentation, it was pointed out that:

- (a) the Task Force has managed an early start to its work programme; and
- (b) its work programme includes an examination of content issues, standards for the establishment of an UN system (inter-agency) ExtraNet, specific projects to jump start enhanced use of the Internet and Internet-based aspects of products from other task forces of the ISCC;

The ISCC, in considering the report, was briefed about the status of a survey which is being conducted among all agencies on what content should be carried on the ExtraNet.

37. In the ensuing discussion, the use of the ".int" top level domain was brought up. Some agencies felt that the use of the new domain was fine so long as there were no cost implications. Others felt that, while the use of ".int" brought value added to Internet users in being able to search for information about the UN system within a single top level domain, the added value would be marginal compared with the sophisticated level of searching to which users are increasingly becoming accustomed.

38. Continuing on to consider the TF/NET recommendations, the first three recommendations were endorsed with the proviso that Recommendation III of the report be revised to emphasize the aspect of finding information: with respect to the United Nations International Organizations Network Search (UNIONS) scheme under continuing development by TF/NET, all agencies should implement facilities allowing easier location of information by Web users via the UNIONS search engine.

39. Recommendation IV is to be modified to encourage the UN to proceed with its Memorandum of Understanding (MOU) on the use of the Optical Disk System (ODS): access to

the Optical Disk System (ODS) by member agencies, free of charge, but fully respecting the United Nations user agreement, is encouraged by requesting the UN to proceed with the Memorandum of Understanding (MOU) which each individual agency will need to sign.

40. Recommendation V, regarding the Participating Agencies Mobility System (PAMS), was endorsed only for the agencies willing to participate in Phase I of the pilot (at present UNDP, UNFPA, UNICEF, UNHCR, UNIDO, WHO, IFAD, WMO and IAEA). It is understood that at a certain stage, the pilot will be declared closed; and arrangements for a production phase will be concluded for the ExtraNet, including arrangements for funding of the production system by participating agencies.

41. The content model was considered by ISCC in the context of content issues including information management and electronic publishing. It was suggested that a need exists for a register of how agencies are handling content issues and for guidelines for Web publishing. In addition, all agencies need to be reminded to establish a link, on their various home pages, to the Official Web Site Locator for the UN System of Organizations (<http://www.unsystem.org>), by mid-1998 at the latest.

42. There followed a verbal, theme-based presentation by UNESCO and UNDCP on the establishment of individual agency Intranets. The presentations included the types of information being published to a within-house audience, guidelines for organizing this effort and the infrastructure needed. The primary focus of the Intranet experiences to date were on information management issues, not information technology issues. For example, an editor-in-chief of Intranet publishing was called for. Also, for it to be a success, it was pointed out that critical business applications needed to be identified and implemented using Intranet solutions. Only by doing so could a high degree of success be assured.

43. It emerged that a majority of agencies now have Intranets, but that a "critical mass" of information has not been achieved. Therefore, the ISCC consensus was to request TF/NET to keep the Intranet "revolution" under review, investigating whether recommended (best) practices are needed to cover this sub-field of Internet activity.

44. The UN and ILO reported on their experiences in the use of the Integrated Management Information System (IMIS). ILO pointed out both the positive and negatives aspects in their implementation which covered only the Personnel area. The UN provided updates on the current status of various releases including areas which needed additional work. Critical issues were identified concerning whether agencies should wish to do similar systems on their own, whether resources existed and the possibility of co-operative efforts by additional participating agencies. Alternative models, using other commercially available software either as an alternative to IMIS or in tandem with its use, were discussed including the level of professional in-house, full-time support required.

45. It was suggested that perhaps smaller agencies of the UN system might wish to approach the UN about organizing a more detailed conference (either by video or in person) to go in depth into the matter of IMIS. Meanwhile, the UN kindly invited participants to a full demonstration of the system at a post-ISCC session.

Modernization of Dissemination of Information

46. The Chairperson of the Task Force on Inter-library Co-operation, Management and Standards (TF/LIB), Mrs. Eleanor FRIERSON (ILO) presented its final report for this biennium, contained in ACC/1997/ISCC/7 and associated Annexes.

47. The Task Force was in a position to report considerable progress, while much work remains to be done. An update was provided on the United Nations Shared Cataloguing and Public Access System (UNCAPS) prototype, which had been enhanced since the fourth session with additional test loading of participating agency data, including FAO, ILO, UNESCO, UNFPA and the Joint Library. Newer software versions were being employed. There followed a presentation on UNIVOC which is a scheme developed, in advance of its normally scheduled time, for subject searching across the various Web sites of the UN system. The scheme is available in three languages and had been reviewed in a collaborative effort of dozens of participants in several agencies.

48. A further report was given on the background for developing the core set of metadata from the TF/LIB perspective. It had been agreed with TF/DOM to achieve a core set which would be applicable both to external and internal documents. The team had benefited, in part, from the experience of agencies who do document classification on short notice all the time and from the experience to date in the use of UNIONS for "one stop shopping" for information.

49. The proposed inspection system for depository libraries was presented. Inspection had been spotty at best; and there existed a need which had been mandated by Member States in the General Assembly to introduce this element. UN had kindly offered to work, on a cooperative basis with the other agencies, taking the lead role.

50. The ISCC, in considering the report, found that for some products, such as UNIVOC, testing should proceed before endorsement. In this regard, it was suggested that during a later agenda item, a protocol be elaborated for approval of projects which involved production implementation and/or mandatory adherence to standards. This would apply, not to just this task force, but to all of the ISCC work programme.

51. Various agencies expressed support for the products which were being produced as a result of Task Force work which enabled agencies to benefit from expert collaboration with other agencies and adopt a shared approach with avoiding duplication of efforts.

52. Mr. John TIERNEY, ISCC consultant, presented the results of the study on the use of video conferencing in the UN system. Highlights including advice for agencies new to the experience about calling together stakeholders and primary candidates for video conferencing. On a technical note, there is a need to move quickly to 384 kbs and to follow standards. Engineering staff should not be employed as technicians; sharing of facilities and a repository of what facilities exist makes sense.

53. In the discussion which followed, it emerged that member agencies need to find a way of sharing experiences in what are best practices for the unique atmosphere of the UN system. It should be recognized that we are at an early stage, and that video conferencing would not

replace the meeting culture of international organizations except for the right type of meeting with a limited agenda and a focused attention span. For these types of meetings, however, there is an enormous advantage.

54. Agencies should start to share experiences with procurement and service providers, use ITU standards and, while not closing the door to audio conferencing, approach it with caution due to inherently greater difficulties in managing such conferences.
55. It was understood that a generic Memorandum of Understanding (MOU) regarding greater and shared use of leased lines in support of video conference would be drafted by the Inter-agency Telecommunications Advisory Committee (ITAC). Also, since the report had been written, more agencies had already proceeded to install video facilities. A standard job description covering all the skills needed to support this new activity should be produced.
56. An automated multi-site video booking system, including the ability to provide billing information for charge-back purposes, for the facilities of the member agencies of the ISCC should be implemented. Agencies which have not already done so were reminded that managerial responsibility for information technology and telecommunications should be amalgamated under the same head.
57. ITU, at the request of TF/NET, presented its experiences with Electronic Sales of Publications.
58. In the first part of the presentation, a detailed explanation of electronic commerce was given, including the potential benefits for business applications, security aspects and major advantages such as turning customers into human resources for such things as data entry with excellent results.
59. The ITU is using electronic commerce in its Electronic Bookshop. The operation is credit card based and employ user validation before downloading of publications starts. Once validated, the customer is able to purchase electronic copies of ITU publications instantly. Of major import is the fact there has been an increase in customers with little or no decrease in sales of printed publications. The service is growing at a rapid pace; and the service is trustworthy.
60. Using X.509 certificates in public key encryption schemes is already common in electronic commerce and will become even more important for many Internet authentication and encryption applications. The X.509 certificates depend upon a hierarchy of Certifications Authorities (CAs). There is a potential role for a designated UNO as a certification authority for UN System uses.
61. In its follow-up discussion to the presentation, it emerged that agencies selling publications are intrigued by the ITU experience. There is a possibility to profit from on their expertise in this area. While technology for encryption (which is an important aspect of the service) is not a matter for ISCC development, it was felt that TF/NET should maintain a technology watch in this area.

Opportunities for Inter-agency Co-operation

62. ILO presented a case for changing the name of the ISCC not to include the words Information Systems since this is somewhat out of style with current trends to refer to Information Technology. A discussion ensued as to whether the Committee should not approach more critical technical issues, focusing on information infrastructure while not neglecting information management aspects. For future reference as to the acceptability of considering name changes, the Secretary will consult the OC Secretariat.

63. Some agencies felt that Task Forces should be time limited; other felt that information management strategies should be presented at the annual sessions and a consolidated report of these presented to the ACC.

64. In addition, there was a discussion about the ongoing nature of TF/LIB and whether it still qualified as a Task Force of limited duration. The possibility of converting TF/LIB into an ISCC sub-committee or a separate body outside ISCC would be discussed with the Secretary of OC, so that it could be implemented during the next biennium.

65. In concluding the discussion, it was pointed out that while most Task Forces are, in fact, time limited, increased attention might be given to developing SARPs (including those which would apply with mandatory force) and that the Committee could define more closely what was expected from Task Forces, Working Groups and from ISCC projects undertaken by Committee decision.

66. ICC presented the report on its Support Activities for the ISCC. The report was concise and covered the type of work performed. An Attachment to the report gave details of all services offered by the ICC and identified those which the ISCC had requested. There was a consensus that progress reports should relate costs both of ICC services and ICC human resources to the work of Task Forces and other specific items not related to any single Task Force. This would serve as a basis to measure planned costs against actual costs in order to prepare future budgets.

67. UNCC presented a proposal to consider the introduction of an address book capability for e-mail systems of the Member Agencies of the ISCC, based on a recognized standard. As part of the proposal, it was emphasized that this needed to be adopted with mandatory force to be workable throughout the UN system.

68. In the ensuing discussion, it was decided to form a time-limited task force which would have UNCC, IAEA, ILO and IBRD as members to prepare a specific proposal. ITU would be the lead agency.

69. Mr. Robert LEWIS, Perot Systems, gave a presentation on the "*Total Cost of Ownership*" in which he questioned a widely used model. A key part of the thesis presented was that leading industry groups were asking the wrong questions with respect to cost of ownership (not focusing on value) which, *de facto*, led to meaningless answers.

70. UN introduced presenters from Global Decision Support Systems (GDSS) who presented

the latest technology being employed to solve so-called "wicked problems" about which it is difficult to reach a consensus. The system is proposed to be employed in enhanced negotiations as part of an international vision for Member States to have access to all aspects of the decision support process. Case example of use of the system, in industry settings, but which focused on the decision making process itself and its applicability to all settings, not on the specific decision being arrived at. There followed a hands-on exhibit of the use of the technology.

71. ITU, presented an oral report of the recent Inter-agency Telecommunications Advisory Committee (ITAC), which had held its meeting at the World Food Programme (WFP) in Rome, 18-19 November 1997.

Closed Session and Other Business

72. Co-ordination with the ECOSOC *Ad Hoc* Open-ended Working Group on Informatics was discussed. ISCC welcomes input from the Working Group and is willing to examine system-wide implications on behalf of the ACC. Reliance will be placed on the UN to provide liaison with the ECOSOC Working Group and to apprise the ISCC of any issues raised with implications for the system as a whole.

73. Continued co-ordination with other inter-agency mechanisms is also important. Other matters raised during the closed session are reported on in Part I of this report: the nomination of the next Chairperson and the date/venue for the next meeting.

Annex I

Annex I - Agenda

Annex I

1 December Morning session 09h30 - 12h30

- 1) Opening of the meeting
- 2) Adoption of agenda [ACC/1997/ISCC/2]
- 3) Theme of the morning - *Information Infrastructure*
 - a) Report of the Task Force on Document Management Technology (TF/DOM) – presented by FAO; remarks by other Task Force lead agencies [ACC/1997/ISCC/4]
 - b) Consideration of TF/DOM recommendations by the ISCC
 - c) Migration to WIN/NT (presentation by World Bank, UNFPA and UNIDO)
 - d) Draft Working Paper on CIOs for the UN system [ACC/1997/ISCC/5]

1 December Afternoon session 14h00 - 17h45

- 4) Theme of the afternoon - *Improved Access to Information*
 - a) Report of the Task Force on Expanded Internet-based Services (TF/NET) – presented by IAEA; remarks by other Task Force lead agencies [ACC/1997/ISCC/6]
 - b) Consideration of TF/NET recommendations by the ISCC
 - c) Agency Intranets (presentation by group of agencies with established Intranets)
 - d) IMIS experience-to-date (presentation by group of agencies using IMIS)

Annex I

2 December Morning session 09h00 - 12h30

- 5) Theme of the morning - *Modernization of Dissemination of Information*
- a) Report of the Task Force on Inter-library Co-operation, Management and Standards (TF/LIB) - presented by ILO; remarks by other Task Force lead agencies [ACC/1997/ISCC/7]
 - b) Consideration of TF/LIB recommendations by ISCC
 - c) Presentation of Working Paper on Video Conferencing; consideration of recommendations of TF/IMS by the ISCC [ACC/1997/ISCC/8]
 - d) Electronic Sales of Publications (presentation by ITU)

2 December Afternoon session 14h00 - 18h15

- 6) Theme of the afternoon - *Opportunities for Inter-agency Co-operation*
- a) Consideration of the Name of the ISCC
 - b) Report of ICC on Support Activities for ISCC [ACC/1997/ISCC/9]
 - c) Total Cost of Ownership (presentation by Robert Lewis, Perot Systems)
 - d) Decision Support Systems (presentation introduced by Luciana Murulli-Koenig, UN Headquarters)

Annex I

3 December

Afternoon session

14h00 - 17h45

- 6) *Opportunities for Inter-agency Co-operation* - (continued from previous day)
 - f) Oral Status Report on Inter-agency Telecommunications Advisory Group (ITAG) by UN
- 7) Co-ordination with ECOSOC Ad Hoc Open-ended Working Group on Informatics [ACC/1997/ISCC/11]
- 8) Confirmation of membership of Task Forces and Working Groups for the 1998-1999 biennium, including confirmation of lead agencies [ACC/1997/ISCC/10]
- 9) Nomination of next Chairperson, ISCC for consideration by OC [ACC/1997/ISCC/11]
- 10) Date and Venue for sixth session
- 11) Adoption of Report [ACC/1997/ISCC/12]

Annex II

ATTENDEES

(*) indicates an ISCC focal point

<i>Chairperson</i>	Ms Kerstin LEITNER
FAO	Mr Giuseppe PACE (*)
IAEA	Mr Jerry BARTON (*)
	Ms Denise LOEHNER
IBRD	Mr William McDonald BUCK
ICAO	Mr Albert PELSSER (*)
ILO	Mr Nadim HABRA (*)
	Ms Eleanor FRIERSON
IMF	Mr Robert KLINE
	Ms Gertrude LONG
IMO	Mr Newton WRIGHT (*)
ITU	Mr Lucio GOELZER (*)
	Mr Stephen GEIS
UN	Mr Will SCHIEBER
	Ms Luciana MARULLI-KOENIG
	Ms Vladislava BARTOSCH
	Mr Christopher HACKETT
UNCTAD	Mr Paul ROBERTSON (*)
UNDCP	Mr Anders NORSKER (*)
UNDP	Mr Fikret AKURA (*)
	Ms Linda SCHIEBER
UNEP	Mr Barry HENRICKSEN
UNESCO	Mr Mauricio MILCHBERG (*)
UNFPA	Mr Rafiodin MALIKZAY
	Mr George PRICE
UNICEF	Mr André SPATZ (*)
UPU	Mr Akhilesh MATHUR (*)
WFP	Mr Gyorgy KONDA
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OBSERVERS

ICC	Mr Edward GELBSTEIN
	Mr Andreas CHRISTOFORIDES
UNAIDS	Mr David FITZSIMONS
UNCC	Mr Anthony SALMON
UNJSPF	Mr Paul DOOLEY
UNOG	Ms Marguerite BURNETT
UNOV	Ms Barbara KLOPP

AGENCIES NOT IN ATTENDANCE

IFAD, ITC, UNHCR **, UNIDO, UNU, WIPO, WMO

** Mr. M. Elias was called away at the last minute due to family emergency.

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**Executive Statement for the ACC:
Migration to Contemporary
Document Management**

BACKGROUND

1. There has been a growing tendency towards converting and creating large quantities of information in electronic format, brought about by the highly increased use of desktop computing.
2. Simultaneously, Governments, businesses and other institutions have been faced with a dramatic change in the way they handle documents since, on the one hand, the stages of document processing, initiation, control, editing, referencing, storing and archiving are becoming electronic, and, on the other hand, the nature of documents are also evolving and their content progressively starting to be stored in databases, images and other formats.
3. The ability to store information in a range of electronic formats combined with the available 'handling' technology has not always been used to its full advantage. Mostly, this technology has been applied to limited purposes, such as printing or publishing.
4. Collections of information, whether contained in paper documents or in electronic form, must be organized, secured, made available to those who need ready access and preserved to ensure that the institutional memory of each United Nations Organization (UNO) is preserved. Without management of its important document collections, a UNO risks losing something irretrievable.
5. Although it is recognized that United Nations agencies are at different points in implementing electronic document management, there is a need for adherence to an agreed-upon framework for development and implementation. To this end, the Information Systems Co-ordination Committee of the ACC (ISCC) established a Task Force on Electronic Document Management with the mandate to examine this area and to develop the strategic statement of direction for the ACC.

CHALLENGES

6. The Task Force has concluded that in today's environment there are a number of challenges in the perception of what documents are which need to be recognized by senior management, so as to form a generally agreed-upon understanding of what is needed to reform the present, somewhat chaotic, information-management situation.

7. First, it must be recognized throughout the UN system that documents (in both paper and electronic format) are fundamental for the business processes of each Organization, typically representing 75% or more of its information assets and institutional memory.

8. In addition, electronic documents now encompass different types of information media (referred to by document experts as "information objects"), including text, data, tables, graphics, images, voice annotations, video clips and interactive animation. Indeed, many documents, even if printed, contain more than one information object, with the various components all generated and stored in electronic format.

9. In this context, some UNOs have already come to grips with the fact that many electronic documents will not have printed versions and that, for those which do, the printed version is a by-product of the authentic electronic version. The perception that the printed version is the most authentic copy needs to be corrected. It is the final electronic copy, captured and safeguarded from alteration, which is the copy of most authenticity.

10. Considering that electronic documents co-exist with much material still processed and produced in paper (printed) format, it is clear that the relevant information management system is an Enterprise (and not merely Electronic) Document Management System (EDMS) that is document-centric in terms of the whole enterprise (*i.e.*, based on document content and context within an Organization), regardless of the medium used in the authoring, processing and delivering stages.

11. In conclusion, "the goal of document management is to share critical corporate information resources by making them secure, accessible, retrievable, and interchangeable".¹ Thus, there is a need for issues related to enterprise document management to be recognized at the highest levels of management, taken seriously and addressed to preserve the institutional memory of each organization. All administrative, operational and programme documents are included in what must be re-organized into a collection of electronic documents and implemented as an on-line system to those who need access, whether within UN Secretariats or in Member States.

OPPORTUNITIES AND "WAYS TO GET THERE"

12. The Task Force believes that now is the time for action. The technology is maturing. Users and managers are becoming aware of the need to get a grip on electronic document collections. And the numbers of electronic documents are growing, in some cases exponentially.

13. Each UNO needs to exploit the capabilities of digital media for document creation, re-use and electronic dissemination on-line. Only by so doing will we be able to meet the on-

¹ Sutton, Michael J. D. *Document Management for the Enterprise*. New York: John Wiley & Sons, 1996, p. 5.

going demands of our Members States for easy, unencumbered access to UN system information.

14. There is a need to preserve what information experts refer to as **"metadata" or information describing other information** (examples of which are: unique identifier, author, recipient, date created, subject, document type, version number, retention period, access rules, *etc.*). This preservation is not only for those responsible for the official records of each organization, but is, most importantly, for the benefit of document users who often must search through large and growing document collections to find the exact information needed.

15. Users of paper documents are well aware of the fact that the capability of searching through metadata is essential to find material in a large collection. The same is true of electronic documents: while on-line users increasingly have capabilities for full-text searching, **the importance of searching metadata needs to be continued to be recognized** – if for no other reason than to offer the capability to sift through what is typically a large amount of material retrieved using full-text searching or to find information objects which have no text, such as an audio or video recording.

16. In this context, the Task Force has produced the following products with the intention to provide a basis for starting to work:

- (a) **"Strategies for Implementing Document Management Technology"**: a report serving as a "road map" for project managers in the UN system to select the paths to take to arrive at a managed system;
- (b) **Statement of "high-level" requirements**, which apply to all agency members of the ISCC;
- (c) **"Core Set of Metadata"**: Metadata, carried with the document at the electronic level, **provide business-acceptable communications by preserving the context, content and structure of the document.**

The strategy document referred to above was considered by the ISCC and commended for distribution by each member agency to middle managers responsible for document management. The statement of high-level requirements and the core set of metadata were endorsed by the ISCC and, for ease of reference, are repeated later in this statement.

17. Some organizations have started down the path to electronic document management, while others have not. If the process has already begun, then that UNO needs to continue on the path chosen, but alter it where necessary for a consistent UN-system approach in light of the findings and products of this task force.

18. Such UNOs should also contribute experiences to date, pitfalls encountered and lessons learned so that sister UNOs can benefit. This is particularly important, since the ISCC will, during the next biennium, be setting system-wide "best practices" for document management.
19. If the process has not already begun, then the UNO concerned needs either to form a steering committee or to assign a project manager to "jump start" the process of electronic document management.
20. Early in the process, the UNO should **identify business processes and their associated documents**. By using a modular approach and implementing prototype systems for priority business processes before changing to an entirely electronic environment, business processes and their associated documents can be added to the new environment, thus achieving an overall plan to convert entirely to a managed system.
21. If it makes sense, **partnerships can be formed with other agencies** or sub-sets of agencies in acquiring supporting information technology.
22. Advantage must be taken of the **low-cost opportunities afforded by use of Internet/Intranet technologies** to provide faster access and dissemination and to provide enhanced retrieval and research capability for staff.
23. In seeking to manage its electronic document collections, each agency needs to take care that e-mail, with associated attachments, are captured for preservation as one key component of documentary evidence. It often happens today that critical documentary evidence supporting work and business processes – for both substantive and administrative matters – is contained in electronic correspondence. **Steps must be taken to ensure that evidentiary material is not lost.**
24. In addition, electronic forms are being increasingly introduced into many organizations to advantage, replacing paper forms which often are prepared and dispatched with numerous copies. Attention needs to be paid to which of these need to be included in any document management system as **key records supporting various business processes**.

BENEFITS

25. Any Organization undertaking a reform project of this magnitude needs to understand why an Enterprise Document Management Systems (EDMS) implementation (properly done) is worthwhile. While a myriad of explanations could be cited (as is evident by the fact that whole volumes of works are now being produced by experts in the field), the explanations of most relevance to senior management knowledge are detailed in the following paragraphs.
26. There is the **issue of productivity**, on which not only senior management but, indeed, management at every level needs to concentrate increased attention. Any EDMS

implementation worth its cost should provide for documents being located at a moment's notice from the desktop, eliminating costly searching for manual files. Studies have shown that the effort of searching for paper documents is typically four to seven hours a week for each office-based staff member. Paper-based systems also mean that typically each year one tree is consumed for each three staff members. With tens of thousands of staff members in the UN system, it is not hard to build a business case for conversion to an electronic environment, given the rich collections of information within our organizations and the constant need to use previous information to place into context matters of present concern.

27. EDMS implementations, however, should **fit the organization** where they are being introduced. Senior management should have two concerns about the "fitness" of any new system. Does it respect the information-sharing traditions of the Organization which are still relevant? Is the system adaptable to emerging management directives which senior managers wish to consider? Stated differently, an EDMS implementation should contribute to reform – either by making current information-sharing more timely and/or more transparent or by introducing an improved information-sharing mechanism.

28. There is the **question of scalability**. No organization today can afford to incur huge financial risks in implementing large systems which cost significant portions of annual budgets. Any new or revised system for EDMS can be introduced in such a way as to limit the financial risk associated with failure of large projects by adopting a modular approach. For example, each Organization can choose for itself whether to implement systems, for example, for discrete areas, one at a time, or for discrete types of material, each in turn. However, no Organization should find it necessary to adopt an "all or nothing" approach to getting a grip on organizing its electronic material.

29. One of the most important benefits to be recognized – and one which anyone who has ever searched for or awaited a file which is on someone's desk can appreciate – is the fact that when access to documents can be made available on-line, **many users may access the same document at the same time**. The importance of this in improving efficiency cannot be underestimated. In the future, no one should ever have to wait for access to an authentic document because the original is on someone else's desk.

30. Any system implemented should provide assurance that the copy of the version selected on-line is the authentic intellectual property being sought. As was pointed out earlier in this paper, but bears repeating, the **electronic version of a document, in most cases given the current office environment, is the "original"**.

31. Using electronic means to manage and make available electronic documents, properly organized systems can ensure that documents can be shared widely or restricted, depending on their sensitivity. Among the benefits which can be additionally cited: the institutional memory of the organization is preserved at low cost, while storage space for paper versions is reduced

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and liberated for other uses.

CONSEQUENCES OF INACTION

32. If UNOs fail to seize the opportunities now at hand, there are a number of risks.

33. **Loss of institutional memory** of the organization, at a time of reduced human and financial resources, is a risk from which it can take years to recover. During the next ten years, approximately half of UN system staff will retire or otherwise leave their organizations. UNOs cannot rely on human memory to make up for any loss of institutional memory. There is a danger that the accuracy and integrity of information resources will be compromised if an unorganized collection of electronic originals continues to be the norm.

34. There will be an **increasing inability to locate current information quickly**, at the time and at the place most needed. In an electronic age, opportunities will be lost to exploit the best means of communications and documentation of UN-system activities. Stated differently, the management of each Organization will *not* be accorded as fast an access to information as is possible given current trends in information technology.

35. A **loss of credibility** will result by not providing easy, unencumbered access to information resources, which Member States have demanded repeatedly.

36. Manual processing will continue, requiring the employment of numbers of back office staff in an era of zero or negative growth in human resources – but at a time when the size of each Organization's paper and electronic document bases continues to grow, resulting in **duplication of management costs**.

37. On an **environmental note**, continued reliance on paper records means that the printing of every 12000 sheets by any Organization results in the consumption of one tree. Each year, the UN system collectively produces millions of sheets of paper consuming hundreds, if not thousands, of trees.

BUDGETS

38. Given current average costs, it is reasonable to assume that most professionals in the UN system cause, on average, the consumption of USD 250 - USD 500 in paper-generated documents *per annum*.

39. Even one hour a week spent looking for paper documents – the average per staff is probably considerably higher – results in a further average cost of USD 500 - USD 2500 *per annum*. Even if the above expenses were cut only by half, it would still be reasonable to invest up to USD 2000 per staff member to implement an EDMS. For a small agency, this might be an investment of USD 1.2 million; and for a large agency, perhaps as much as USD 30 million.

40. Not only would savings fund the investment, but, most importantly, information could be located faster and from the desktop. It would appear that not to invest in EDMS and to continue to look for information manually is the more expensive solution in the long term.

41. Experience has shown that, within the UN system and based on actual data, the reduction in time saved (upon the introduction of EDMS) in filing and retrieving paper documents is real, measurable and substantial. Savings realized in this area can be used as a resource to create a range of electronic services for internal and external users.

HIGH-LEVEL REQUIREMENTS INCLUDING THE CORE SET OF METADATA

42. It is the expert opinion of the Task Force that ALL agencies of the UN system have a common set of high-level requirements which must be met in any electronic document management system, although agencies remain free to implement whatever system solutions they deem for themselves to meet best those requirements.

43. These high-level requirements were defined by the task force and endorsed by the ISCC, including a core set of metadata which also forms part of the high-level requirements:

- a) **stopping the loss of electronic information which forms part of the intellectual memory of each UNO;**

While this requirement is not new, staff are not always aware of the implications of potential losses as they have been in the case of paper (legacy) documents. The fact is that electronic documents are, in most cases, evidential material for a business purpose. It has long been taken for granted that evidential material will be preserved, but this appears to be not always the case with respect to electronic documents.

- b) **providing on-line access to documents with their metadata;**

To the extent that technology enables, the access to documents should provide a range of services such as browsing, printing, downloading (for re-use), extraction of text, *etc.*

- c) **paying attention to the necessity for records management;**

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Records are a sub-set of documents, which are a sub-set of information; comprehensive information management includes not only document management but records management with stringent metadata.

- d) **providing appropriate access rights, including security, for documents with restricted use;**

On one level, access rights ensure the authenticity of documents by protecting against their unauthorized alteration. On another level, access rights determine how wide an audience is allowed access to documents. In the organizational culture of UNOs, many documents with restricted access nevertheless must be seen by other individuals who need fast, accurate retrieval of information – for example, by the translation staff.

- e) **assuring the authenticity of electronic documents;**

The authenticity of both the source and contents of electronic documents must be assured (*i.e.*, proof needs to be provided that a document/message stems from the sender, and that its contents have not been altered since leaving the signatory). For this purpose, digital signature technology will be required when available.

It should also be noted that the ISCC Task Force on Information Access and Dissemination (TF/IAD) has pointed out that UNOs have a responsibility not to duplicate each other's information providing the originating agency has undertaken to ensure its accuracy. Authenticity in an electronic environment is consequential to ensuring accuracy.

- f) **identifying responsibility for electronic document management in a corporate capacity;**

Within UNOs, it has long been known which organizational entities are responsible for acting in a corporate capacity to ensure that

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originals of legacy (paper) documents which comprise the institutional memory of the organization are preserved in an organized collection.

Electronic documents, in order to be widely accessible in today's on-line environment, now deserve the same treatment. They should no longer be perceived only as an instrument for producing paper "originals" (which are then retained for future reference) but as "originals" in themselves, or authentic electronic copies as is the case for scanned documents, which need to be organized for rapid retrieval by a wider audience than the author or collecting departments. Responsibility for organizing this, acting in a corporate capacity, needs to be assigned.

g) using standards;

Examples of standards relevant to document management are: i) text processing and formatting; ii) organizationally-defined templates; iii) document id's and descriptive information; iv) version control; v) indexing (to facilitate retrieval); vi) comprehensive list of categories of documents essential for later retention and use; and vii) data elements to facilitate retrieval.

h) creating repositories of an organization's document-based knowledge;

The repositories should be accessible to users at the desktop using standard (off-the-shelf) Web browsers, among other access mechanisms that may be available.

i) employing the core set of metadata;

Metadata, carried with the document at the electronic level, provide business-acceptable communications by preserving the context, content and structure of the document.

The metadata elements recommended for the core set are contained on the following 2 pages.

Task Force on Document Management Technology

Core Set of Metadata

for use by United Nations Organizations

(CATEGORY/Element)	(provisional explanation)	(normally repeatable at the organizational level?)
-	-	-
HANDLE METADATA	Flag the document as a record or a non-record, and assigns a distinguishing unique identifier	-
Records declaration	Official record flag (yes/no)	no
Unique identifier	Number used to identify the document, usually agency prefix and unique string	no
-	-	-
CONTEXT METADATA	Identify the provenance of the document (<i>i.e.</i> , the person or system that is responsible for generated the document) and provides data that support its use as evidence of a transaction.	-
Author/creator	Person/organization responsible for the intellectual content of, or contribution to, the document	yes
Other contributor	Person/organization who made secondary intellectual contribution to the document	yes
Originator	Organization/person/system that initiates the document	yes
Responsible functional/organizational Unit	Identifies the functional/organizational unit authorized to create the document	yes
Publisher	Entity responsible for making the document available	yes
Recipient/destination	Office/person/system that receives the document	yes
Date/time	Date/time associated with the represented document (creation/transmission/receipt/publication); YYYYMMDD; HHMMSS	no
-	-	-
CONTENT METADATA	Describe the actual document	-
Subject/content descriptors	Keywords or phrases in English that describe the subject or content of the document, at least one of which must be derived from a thesaurus of standardized terminology agreed by the ISCC for use across the UN system	yes
Abstract/summary	Description of the contents of the document	yes
Title	If applicable; name given to the document by the creator (should include any sub-titles)	no
Document language	The language of the document; specify name of language in English	yes
Source language	If applicable, the language from which the document was translated; specify name of language in English	yes
Document type	The category of the document, such as letter, memorandum, conference document, home page, dictionary, technical papers, <i>etc.</i> ; it is expected that document type will be chosen from [a list of types enumerated by each agency] [a standardized list of types enumerated by the ISCC]	no
Document number/Series symbol	If applicable, an identifier assigned by the originating agency which serves to identify the document to the user community	no
Notes	Additional information about the document	yes

Task Force on Document Management Technology

Core Set of Metadata

for use by United Nations Organizations

(CATEGORY/Element)	(provisional explanation)	(normally repeatable at the organizational level?)
-	-	-
ACCESS AND USE METADATA	Identify conditions for access to (appropriate population) and use of (purpose) of document. Documents evidentially significant access to and use of the document subsequent to creation. Can be used to invoke controls over access and use, and to implement disposition of the document according to records retention schedules.	-
Access rules	Define access rights and conditions	yes
Use rules	Define use rules and conditions	yes
Access/Use history	Identifies the history of access to and use of the document; by whom it was accessed and when; and the type of use, when it was used and by whom	yes
Rights Management	Copyright notice/statement	no
Disposition authority	Identifies under whose/what authority the document may be purged from the system	no
Retention period/end time	Indicates the document's scheduled retention period end date	no
-	-	-
STRUCTURAL METADATA	Enable the document to be utilized over time and to be migrated to new software and hardware dependencies	-
Components (files and other information objects)	Enables the identification of individual files that comprise the document, affording the ability to bring together all of the parts to form the whole; also defines the structure of the content of the record	yes
Version	Identifies any previous versions of the document	yes
Relationships	Identifies the document as belonging, for business purposes, to an overall set of documents: can consist of a classification code or identifier of other documents	yes
Technical (system-related) format	Includes all information required to allow people or machines to use the document, including standards used in data representation, encryption software, compression algorithm, etc.	yes

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contact Information Systems Coordination Committee (ISCC), northcut@uniscc.org

Home Page URL - <http://www.unsystem.org/>

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ISCC RECOMMENDATIONS TO THE ACC FOR A SYSTEM-WIDE MEDIUM-TERM ENTERPRISE DOCUMENT MANAGEMENT STRATEGY:***CONCURRING THAT***

- a) documents represent the major portion of UNO's information assets;
- b) the goal of Document Management is to share critical corporate information resources by making them secure, accessible, retrievable and interchangeable; and
- c) the goal of sharing and making information accessible across UNOs ought to be based on an agreed-upon framework for the development and implementation of Document Management strategy;

THE ACC ENDORSES THE VIEW THAT**A. ALL AGENCIES MUST START ON A TIMELY BASIS TO MANAGE ELECTRONIC DOCUMENTS SYSTEMATICALLY THROUGH:**

- i) an enterprise approach to cover all instances of documents;
- ii) a structured approach, that clearly assigns project responsibilities, roles and adequate procedures in accordance with the multi-disciplinary nature of this task.

B) COMMON UNO CHALLENGES IN THE ELECTRONIC INFORMATION MANAGEMENT ERA BE ADDRESSED THROUGH AN INTEGRATED AND COLLABORATIVE APPROACH BOTH WITHIN EACH ORGANIZATION AND AMONG THE VARIOUS AGENCIES:

- i) the harmonized views of high-level requirements with respect to document management are endorsed;
- ii) the core set of metadata developed by the ISCC is endorsed, normally to be respected by all agencies, to the extent that technology allows, for electronic documents which are to be shared both internally and, where warranted, with other agencies (the core set should also be included in any call for proposals sent to commercial vendors);
- iii) agencies should evaluate systems to be implemented based on high-level requirements and the core set of metadata, sharing results of the evaluation with other agencies.

C) ISCC INTER-AGENCY COLLABORATION BE PURSUED WITH THE OBJECTIVE OF AVOIDING UNNECESSARY DUPLICATION AND BE GEARED TOWARDS A COMMON AND HARMONIZED EFFORT BY UNOs.