REPORT ON THE UNESCO/FIAF CATALOGUING COMMISSION WORKSHOP ON CDS/ISIS, BRUSSELS 8 - 9 OCTOBER 1987

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Prior to its submission, this report was circulated in draft form to the Chairman, Harriet Harrison, and a fellow member of the Commission, Jon Gartenberg; their comments have been reflected in the final text.

The recent meeting of the Cataloguing Commission of the Fédération Internationale des Archives du Film in Brussels was combined with a workshop on the software package CDS/ISIS, which has been developed by UNESCO as a microcomputer-compatible database management system derived from the earlier mainframe and mini-computer members of the ISIS family. CDS/ISIS is available without charge to non-profit organisations in UNESCO member countries, and especially in developing countries, and there has been interest among FIAF member archives in considering its possible suitability for cataloguing and related operations in film archives.

UNESCO participants in the workshop included Mr C Arnaldo, Ms A Fenton and Mr P Bettembourg, and Mr P Billiard (consultant, from CODATA); also present were Mr R Souto Pereira from the Cinemateca Brasileira in São Paulo, who has been developing a CDS/ISIS application for the Cinemateca, and Ms Brigitte van der Elst, Executive Secretary of FIAF, who is using the software for the administration of the Union Register of Feature Film Holdings from the Nitrate Era (Sound). Cataloguing Commission participants included all members of the Commission, although not all were able to attend for the whole of the workshop.

The workshop took the form of a number of presentations and demonstrations, each followed by opportunities for discussion and questions. Topics covered included the development of CDS/ISIS, an overview of the capabilities of the original software ("Version 1"), explanations of each of the three implementations represented at the workshop (the FIAF Register, the OPI production/library and distribution databases, and the various applications under development at the Cinemateca Brasileira), and an account of some of the enhancements included in "Version 2".

The software performed without problems (the same could not, unfortunately, be said for some of the additional hardware rented for the workshop, which somewhat disrupted the first day) and the demonstration of three separate implementations gave a good idea of the range of applications for which CDS/ISIS has been considered in the context of film cataloguing and administration. The demonstrations and ensuing discussions provided an opportunity to formulate recommendations for the consideration both of FIAF and UNESCO, and these are set out in the remainder of this report. The Cataloguing Commission members present would first like to record their gratitude to UNESCO and to the FIAF Secretariat for arranging the workshop.

RECOMMENDATIONS

1. [FIAF] It was noteworthy that the three applications seen, despite their common film background, demonstrated three very different points of view and emphasis: the OPI implementation those of a medium-sized library with despatch and movement control priorities; FIAF a large file of simple records compiled for a specific research/communication project; the Cinemateca Brasileira a wide range of cataloguing, filmographic and collection management priorities. On this occasion, each was successfully using CDS/ISIS, although in different ways: the reports included in the Commission's *Second Study on the Usage of Computers for Film Cataloguing* include examples of other archives meeting similar needs with other software. This serves as a reminder of the important point - made by the Commission in the *Study* and elsewhere - that there is no such thing as a single archive requirement for computer systems. Archives operate in a wide range of national and organizational contexts, perceive their problems in a number of different ways, and need access to a variety of solutions. It is therefore **recommended** that **FIAF should recognize and publicize any progress in computer developments** made by individual archives or other organisations - through such means as the *Study* or the *Bulletin* or, indeed, through the workshop - but should not encourage the interpretation that the solution adopted, no matter how successfully, by one archive, whether it be a specific software package or a particular application of a software package, is automatically the "only", the "right", or even the "best" solution for another archive or for all other archives.

2. [FIAF] The essential reciprocal to the foregoing point about the diversity of possible system responses to archive needs is appreciation of the importance of archives' sharing common standards for film (and especially for filmographic) data, whatever the physical system in which that data is held. Such data is the common language of film archives, and theory and experience both argue (as was amply demonstrated at the computer symposium at the FIAF Congress in Canberra in 1986) that the important point for inter-archive communication is the quality of the data to be communicated rather than the precise system used. In this context, it is **recommended** that the current Cataloguing Commission project of **the preparation of standard cataloguing rules** for the description of film in information exchange **be recognized as justifying the highest priority**. Although the completion of this project will be important, the acceptance of its results by FIAF's membership will be still more important: it is therefore the Commission's proposal that the completed draft (which will be ready in 1988) be circulated to the full FIAF membership for comment and criticism prior to publication, now targeted for 1989. Further work on the identification of key data for filmographic records may also be needed, although this issue is considered by implication in the present work and was

directly addressed in the Commission's earlier publication *Film cataloging*. In any case, the definition of "key data" varies with different archival purposes. It is suggested UNESCO might also play a part in increasing awareness of the importance of data standards, particularly in the community of new archives in developing countries which may not be within reach of FIAF itself, by supporting the development, publication and dissemination of appropriate work by the Cataloguing Commission. A precedent for such support exists in the assistance generously given by UNESCO to the preparation and printing of the *Glossary of Filmographic Terms*.

3. [FIAF] In recognition of the growing importance of computer projects to film archives, it is **recommended** that the **Cataloguing Commission undertake to prepare or collect tools that could help member archives in the consideration of software packages**. This work would have to be accommodated around its existing programme of commitments and it is of course not possible or appropriate for the Commission to evaluate software itself: it does not have the resources, staff or facilities to undertake such a task and, in any case, the undertaking would be ethically dubious because of the divergent contexts, characteristics and needs of member archives. Possible courses of action for the Commission could, however, include: the tracing of third party reports on software and the issuing of a bibliography; the location or compilation of guidelines (such as sets of questions to be put to suppliers) to assist acquirers of software; seminars or publications on the importance of software being able to conform to the emergent data standards; and encouragement of the reporting of practical experiences in software use, data exchange etc. The Commission recognizes its role in this area, and will be considering priorities between these issues (and others) at its next meeting in 1988.

4. [UNESCO] It was apparent from the demonstrations that considerable effort was being devoted to the development of the OPI and Cinemateca Brasileira implementations by dedicated and expert staff (this comment is in no sense to disparage the FIAF implementation which is, however, much more modest in its ambitions than the other two). Archives receiving the software, particularly in developing countries, may have problems in gaining access to equivalent expertise, and it is strongly **recommended** that **UNESCO address the problem of software support for novice users**. This seems to us the more urgent since it is our understanding that the development and enhancement of the software is currently the responsibility of a single individual who, with the best will in the world, can clearly not be expected to provide central support for a large number of novice users spread through several continents. The establishment of regional centres of expertise is already under consideration by UNESCO: we would

endorse this idea, although wishing to stress the continuing importance of professional software support to users and central supervision of devolved representation. There are dangers to all parties in overburdening staff who are working members of archives by giving them far-reaching extra-mural obligations. We feel UNESCO may still have to expand the size of the central development team to improve its ability to provide support and response to users - especially if a sizeable community of audiovisual archival users comes into being with specific needs at odds with those of the majority of users of the software. Related to the issue of software support is the question of software development, and of the intended role in the latter context of the regional centres of expertise. This is an area to which UNESCO may also need to address itself.

5. [UNESCO] A related topic of potential future difficulties is the possible divergence between hardware available to some end-users (particularly those in the target constituency of developing countries) and "state of the art" technology that may be available to other users and to system developers: it is **recommended** that **UNESCO develop and announce a policy of continuing support for users of the software on current-specification machines**, regardless of its intentions in the development of future versions dependent on new hardware capabilities or operating systems. This is of course not to deny that UNESCO should be considering the possibilities opened up by new advances in computing and other aspects of information technology (for example interaction between information retrieval software and various forms of disc-stored images). The point is only that such developments should not leave a potential class of users behind.

6. [UNESCO] It was the common experience of all participants in the workshop - and indeed the workshop itself offered further instances of this process in action - that the successful development of a software application requires constructive interaction between the intended or actual users of that software and those responsible for supplying, maintaining and enhancing it. There should be channels for users and potential users to share opinions about what is possible and desirable in computer operations; there must be procedures for the users to channel suggestions or requests for enhancements to the suppliers of software; and there must be some machinery (this requirement overlaps with that noted in the previous sections) for the dissemination to users of news and, more particularly, explanations of the significance of new developments. It is **recommended** that **UNESCO consider the the establishment of something akin to a CDS/ISIS users' group**, with support for aspects of the work of such a group including meetings, a newsletter etc., and with procedures to ensure that the group has useful dialogue with the software development team. The group might also be encouraged to

communicate with users of other software for similar purposes.

7. [FIAF/UNESCO] We believe the experience of the workshop, and the degree of overlap between the preceding recommendations, confirm the value of a dialogue between the FIAF Cataloguing Commission and UNESCO and/or the users of CDS/ISIS. The Cataloguing Commission is not able for the ethical reasons previously suggested to take on any direct responsibilities for CDS/ISIS development - and, indeed, with its present resources and commitments could not accept such a role even if it wished to do so. This is not to say, however, that the Commission is unwilling to share its work with the community of CDS/ISIS users or that some input from CDS/ISIS users into the work of the Commission would be other than most welcome. As the Commission has no present members who are such users, it is **recommended** that the **FIAF Executive Committee consider the possibility of appointing Mr Roberto Souto Pereira of the Cinemateca Brasileira to the current vacancy on the Cataloguing Commission** and that, should such an appointment be made, **UNESCO consider the possibility of subsidizing his membership** by financing his attendance at Commission meetings, as it is our understanding that his own archive would not be able to carry such a financial burden.

8. [UNESCO] The various demonstrations indicated that UNESCO has, in CDS/ISIS, a software product that stands comparison with other microcomputer database systems. It has some limitations, many of which it shares with such other systems, including those determined as much by the microcomputer environment as by the software in use; some of these limitations, including restrictions on file size though not, we understand, on record size, will be eased with the release of "Version 2". It also has some positive features, among which should be numbered various interesting retrieval facilities and the terms of availability of the software to certain classes of potential users. It was agreed that the Commission was not being asked to endorse or evaluate CDS/ISIS but the hope was also expressed that Commission members would share with the developers of CDS/ISIS any thoughts on possible further improvements that could be made to the software. In this spirit, therefore, it is **recommended** that **the following points be passed on for consideration by the software development team**:

a. Thought should be given to providing an enhanced level of control over terminology used at data entry, for example through interaction with the inverted file (or better, with designated subsets of the inverted file) as an authority list for terminology: new or inappropriate terminology could be challenged or, for fields where strict vocabulary control is required, rejected.

b. Users might appreciate other aids to data entry, including the ability to generate full field entries from entered abbreviations (for example to generate an entry for "35 mm. acetate viewing print" from the code "PA35") or to have an entry in one field calculated from entries made in others (for example, running time from length, gauge and projection speed).

c. It could be helpful to enable users to designate one or more fields in a record structure which the software would use to guard against the inadvertent entry of duplicate records: since CDS/ISIS uses a system-allocated "master file number" as the primary record designator, there seems to be no present way of guarding against this within the system.

d. Several of the preceding points could be met by the writing (or acquisition) of a specific data entry module for the software which, if written such that it could also be run independently of the main software, might help users escape the classic "single user" trap, where once the system is tied up in data entry or amendment it is not accessible for retrieval: users could contemplate carrying out data entry on simple PCs (without hard disc, for example) while reserving their main machine for active system use.

e. Since many users will be found either in or on the fringes of the conventional library world, and since library-derived formats such as MARC and ISBD (despite their acknowledged imperfections in this context) are being actively considered as the basis for data exchange in other media, consideration should be given to providing an ability for the software to use such formats for communication purposes - in other words, to read MARC data in to a CDS/ISIS environment and/or to generate MARC or ISBD output from such an environment.

f. The software should be developed to recognize "date" as a specific type of field, and to offer a range of date-specific facilities in such areas as searching, sorting etc., which would reflect the full range of precision likely to be encountered in date usage at both data entry and retrieval from specific days to generalizations or approximations covering a whole decade or longer. International Standard ISO 2014 (1976) prescribes a format for calendar dates.

g. Despite the acknowledged inadequacy of password protection in a PC/MS-DOS environment, some thought should be given to writing such provision into the system - not all those against whom it might be desirable to seek protection will be DOS-literate, and any security provision is to be welcomed.

h. Consideration should be given to increasing the overall maximum record size available within the system: the present limit (4096 characters) is adequate for many purposes in film archivism, but filmographic data with long credits listings, detailed summaries etc. can be extremely space-consuming and

a more generous upper limit might be appreciated; similar arguments may also apply to the system limit on the number of terms allowable in the inverted file.

i. It is suggested that potential users would be helped towards a more easy appreciation of the applicability of the system to their needs if consideration were given to the provision of a wider range of sample database applications than the single bibliographic example currently offered in the demonstration disk(s) supplied with copies of the CDS/ISIS software. It is also our feeling that novice users would benefit from the introduction into the manual of chapters recommending procedures and explaining the need for such system 'house-keeping' practices as regular generation and secure storage of back-up copies of the data-base etc. These are, we acknowledge, general requirements of computer usage rather than CDS/ISIS-specific ones, but a novice user may not fully comprehend the vulnerability of his data base to power failures etc. without "on-the-spot" warnings. It may also be true of CDS/ISIS as of other software of which we have experience that the performance of a large database will deteriorate with frequent amendment but that performance can be restored by down-loading then re-building the database: if this is the case, the manual should explain this procedure as well.

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