Draft Report Outline for DPC Members

"Preserving Moving Pictures and Sound" DPC Technology Watch Report

1. Introduction

This Schedule outlines the contents and context of a report which will form part of the DPC's Technology Watch Report series and which will discuss the thematic topic of the preservation of digital Moving Picture and Sound files. The purpose of this document is to frame the contents of the report and in this way act as a project initiation document. The resulting report will conform the relevant sections of the the DPC Notes for Authors Reviewers and Editors (version 1.0) supplied to the author.

As a general guide, the purpose of the Technology Watch Report series is to provide thematic authoritative support and foresight to those engaged with digital preservation or having to tackle digital preservation problems for the first time. To ensure this the report will:

- Be informed, current, concise and balanced.
- Lower the barriers to participation in digital preservation.
- Be derived from the needs of the membership and deliver benefit to members.
- Be consistent with the mission of the Coalition.
- Be of utility to non-members.
- Have explicit quality criteria and impact measures.

2. Scope of this report

This report will provide a guide to current developments, practical and emerging issues which organisations are facing in preserving digital moving picture and sound. Chapters and contents will be as follow:

Executive Summary: A one page précis of the report is required, including a succinct statement of why the topic should be considered at this time and concise recommendations. The scope of the report will be clearly defined and any major exclusions made explicit.

Abstract: The report will open with a description of the intended audience and key message of the report that can be used for resource discovery and publicity. The key message will be not more than fifty words.

Background: The landscape for "Moving Pictures and Sound" is complicated. Physically there are large differences between audio, video and film recordings. Culturally (or economically), there are large differences between the area of commercial music recordings, broadcasting, cinema – and the vast range of uses of audiovisual content that is not in any of these categories (eg medical imaging, surveillance recordings, seismic data, ethnological research and dozens more). In terms of preservation and curation, there are significant differences between collections formed by commercial interests (music, cinema and commercial broadcasting); public service broadcasters; heritage institutions such as national museums, libraries and film institutes; academic collections; and 'other'. Within the landscape is a range of specialists, in engineering, computing, Internet, archiving, media, museums, preservation, access, knowledge management and resource discovery and onward. The report will aim at the common ground, avoiding jargon and striving to use clear language – and real-life examples. The background section will set out this common ground. A brief summary of the development of audiovisual media – and audiovisual heritage institutions – will be included. Efforts will be made in this section to introduce key terminology, to define terms that might be ambiguous and to introduce acronyms which will be used later in the report.

Issues: The primary issue is the *need* for technology: setting out the current audiovisual preservation and access crises, as the fundamental motivation for the technology being reviewed.

The report will then proceed to the following technology issues; reference will be made to current areas and gaps in policy development.

- Conservation and Preservation: current best practice
- What's different about digital? Updating best practice to suit file-based content
- Moving into the file-based world:

- o Digitisation of analogue material.
  - o Digital but not files: migration of digital carriers (CD and DVD, digital video and audio tape) to file formats
  - o "Born Digital" material.
- Maintaining file-based content
  - o Trusted digital repositories
  - o Digital Preservation: what it means
- Collecting policies for UK audiovisual content
- IPR and copyright
- Use cases and user requirements. Implications for small, medium, and large organizations.
- International, national and regional collaboration.

Standards: The report will include description of specific standards that are relevant to preserving digital moving picture and sound files. This could be offered as a separate section of the report or be included in the main text. Standards will include:
- Files, Wrappers, Packages
- Coding and Compression
- Policy: OAIS as applied to audiovisual content
- Metadata: technical, administrative, descriptive and preservation metadata for audiovisual content
- Version, Migration, Provenance and Authenticity: what are we really keeping? .
- A preservation roadmap: practical guidance for format migration

Technology: A description of the workflows for handling audiovisual content, and the tools and techniques within those workflows: what they do, how they are used, likely developments, and links to other technologies, standards and tools where appropriate. Specific issues to be covered will include the following:
- Production: institutional and personal generation of content
- Storage: special storage requirements: large files of time-based content
- Distribution: how media is moved about: carriers and networks
- Collection: bringing content into formal audiovisual collections
- Discovery: data and metadata supporting resource discovery, and how to produce it
- Preservation: digital preservation challenges and how they are being addressed by practitioners.
- Description of gaps where automation might help but tools are either not available yet or where existing tools need to be integrated more effectively.
- A gap analysis of preservation activities and commentary on how these gaps might be filled.
- Discussion of emerging technologies and their impact on preserving digital moving picture and sound files.

Specific Domains: a section on 'issues that are not common', describing the major physical, economic and heritage categories in general terms.
- Audio, video and film: what they *don't* have in common
- Commercial, non-commercial, academic and personal production of audiovisual content
- Collections of audiovisual content: why there isn't just one national institutions, and a description of the range of collecting organization
- Access: who can (and can't) see what (depending upon when and where), and why the situation is so complex.

Current Activities and Case Studies: The report will be illustrated with examples and case studies. The author is encouraged to seek examples of good practice internationally, commensurate with the readership of the report. Outcomes of previous research projects as well as emerging or planned services may be presented. The activity and results of several large Europeans projects (TAPE, Presto., Euromedia) and UK projects (JISC, SCA, UK Sound and Vision) will be presented, plus several brief summaries of the situation at a small number of individual institutions.

Conclusions: a reasoned assessment as applicable of the current or potential:
- Direction of user requirements (in preservation and access)
- Technology meeting those requirements

- Problems with current technology
- Gaps: technology needs
- Status and prospects for preservation of UK audiovisual content
- Risks and limitations of present preservation effort, resources, technology and funding
- The timescales for change: what will be lost, and when, without change—and what can be achieved with change (in investment and technology for audiovisual preservation and access)

Recommended Actions: The report will conclude with recommended actions for the digital preservation community and the general stakeholder community for audiovisual content (which includes government, broadcasting, and a score of major national institutions), and a clear indication of the agencies or individuals that are required to take up these actions. The recommended actions will be re-iterated in the Executive Summary.

Glossary: A list of non-standard acronyms, abbreviations, and vocabulary will be included. Care will be taken in the text to clarify technical terms which may be ambiguous. Jargon will be avoided as is the use of common vocabulary in non-standard ways.

Further Reading: The report will include an annotated bibliography of useful resources and publications for readers who require more detail or who require advice on topics tangential to the main thrust of the report.

References: Bibliographic references will be presented in Harvard format. See the DPC Notes for Authors for more guidance.

Appendices: appendices may be included if required, such as lists of service providers or sources of additional advice.