



# InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

## Diplomatic Analysis

### Case Study 09(4): Digital Moving Images - WGBH Boston

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## INTRODUCTION

Case study 09(4), *Digital Moving Images, WGBH Boston*, examines the workflow involved in WGBH Boston's production of documentary television programs. Established as a radio station in 1951, WGBH began offering television channels four years later, and is now a Public Broadcasting Company delivering radio, television and multimedia programming.

Case study 09(4) focuses specifically on two sets of files, both of which are analysed in the following diplomatic analysis. The first is original footage generated during the production process, which consists of videotape or film shot by and for a specific production, either within or outside the studio. The second set of files consists of original footage logs, which are descriptive catalogue listings of every shot, including subject of discussion, who is in the footage, location, environment, context and record time. While the case study notes that both file types can be generated in either analogue or digital form,<sup>1</sup> the following diplomatic analysis focuses solely on the digital entities.

Note that WGBH is currently implementing a Digital Asset Management system;<sup>2</sup> where appropriate, information is provided to clarify the changes to workflow and procedures that will result from this new system and affect the analysis of the digital entities.

## IDENTIFICATION OF RECORD(S)

A record, as defined by the InterPARES glossary, is a document made or received and set aside in the course of a practical activity. A record must also possess all of the following five

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<sup>1</sup> The case study report makes reference to the fact that logs and footage can be created in either analogue or digital form; however, insufficient information is provided to explain how analogue entities are treated and if or how they are converted to a digital format.

<sup>2</sup> At the time of the writing of the Final Report for this case study, WGBH was preparing to implement an Artesia TEAMS system customized in-house.

components, as established by InterPARES 1 research conclusions: fixed content and form, embedded action, archival bond, persons and contexts. The application of the definition of a record to the creator's digital entities is therefore analyzed according to the following parameters:

**1. To be identified as a record, the digital entity must possess fixed content and form,<sup>3</sup> and be affixed to a stable medium (or physical carrier).**

Both the original footage and accompanying logs are affixed to a stable medium, as they are stored in a FileMaker Pro 7 database. They also possess fixed content and form: the footage logs consist of data in a structured form fed directly from the production unit's database to the Archives' database, and are available in a read-only format. Original footage is generated on a variety of formats video and film formats.<sup>4</sup>

**2. A record must also participate in an action, defined as the conscious exercise of will by an officer of the creator or by an external person, aimed to create, maintain, modify or extinguish situations. A record results as an unintended by-product or product of the action.**

The original footage and accompanying logs are created during WGBH's production of documentary television programs. This action is in accordance with the company's mandate.

**3. A record must possess an archival bond, which is the relationship that links each record to the previous and subsequent record of the same action and, incrementally, to all the records which participate in the same activity. The archival bond is originary (i.e., it comes into existence when a record is made or received and set aside), necessary (i.e., it exists for every record), and determined (i.e., it is characterized by the purpose of the record).**

Original footage and the corresponding logs are linked to each other through a unique identifier prescribed by WGBH's in-house naming standards. In addition, all, or portion of, these entities are linked to the final production as source material and information.

With the implementation of the Digital Asset Management system, further entities will be linked to a production, including other supporting documentation, stock footage, releases and audio tracks.

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<sup>3</sup> The InterPARES1 Authenticity Task Force has defined fixed form as the following: 1) binary content of the record, including indicators of documentary form, must be stored in a manner that ensures it remains complete and unaltered, and 2) technology must be maintained and procedures defined and enforced to ensure that the content is presented or rendered with the same documentary form it had when set aside. (See ATF Research Methodology Statement, available at: [http://www.interpares.org/documents/interpares\\_ResearchMethodologyStatement.pdf](http://www.interpares.org/documents/interpares_ResearchMethodologyStatement.pdf)).

<sup>4</sup> Formats include MiniDV, BetaSP, Digital Beta, DVCPro, DVCam, HDCam, VHS, 16mm film and Super 16mm film. See Case Study 09(4) Final Report, p. 4.

**4. Record creation must involve at least three persons, whether or not they explicitly appear in the record itself. These persons are the author, addressee and writer; in the electronic environment, one must also take into account two additional necessary persons: the creator and the originator.**

- The record's **author** is the physical or juridical person having the authority and capacity to issue the record or in whose name or by whose command the record has been issued.

WGBH Boston is the author of both the original footage and the accompanying original footage logs. The Archives, specifically, authors the records by determining which entities are permitted to enter the Archives; only those entities maintained by the Archives are considered to be WGBH's records.

- The **addressee** the physical or juridical person(s) to whom the record is directed or for whom the record is intended.

The addressee of the original footage is WGBH itself, using this material to produce a full-length program. WGBH is also the addressee of the original footage logs, which are used to link descriptive catalogue information to the footage.

- The **writer** is the physical or juridical person having the authority and capacity to articulate the content of the record.

A professional cameraperson in the Production Unit shoots the original footage. Trained production assistants complete the original footage logs in a FileMaker Pro 7 database.

- The **creator** is the person in whose fonds the record exists.

The creator is WGBH itself, as the records exist in its fonds.

- The **originator** is the person to whom the Internet account issuing or the server holding the record belongs.

While not made explicit in the case study report, it is presumed that WGBH owns the database platform and is thus the originator of the records.

**5. Finally, a record must possess an identifiable context, defined as the framework in which the action in which the record participates takes place. The types of context include juridical-administrative, provenancial, procedural, documentary, and technological.**

- The **juridical-administrative context** is the legal and organizational system in which the creating body belongs.

The juridical-administrative context consists of the conditions of WGBH's mandate, its in-house retention schedule, and the checklist of items that each Production Unit must submit to the Archives.

- The **provenancial context** refers to the creating body, its mandate, structure and functions.

In this case study, WGBH, a public broadcasting company, is the creating body. The mandate of WGBH is to deliver radio, television and multimedia programming to the public to help people make connections to the world they live in. WGBH aims to make programs and services to educate, inspire, entertain, and foster citizenship, culture and the acceptance of diverse perspectives. The function of WGBH is to produce and broadcast television, radio and web productions; to produce teaching tools for school and home schools; to produce IMAX films; and to produce services for those persons with hearing and sight impairments. The company is governed by a Chairperson and President.

- The **procedural context** comprises the business procedure in the course of which the record is created.

[Editor's note: Analysis of the **procedural phases** was not carried out for this case study.]

- The **documentary context** is defined as the archival fonds to which a record belongs and its internal structure.

The original footage and accompanying logs form part of the fonds of the creating body, WGBH. All records are subject to a company-wide retention schedule and in-house naming standards.

- The **technological context** is defined as the characteristics of the technological components of an electronic computing system in which records are created.

The original footage are shot on a variety of video and film formats (see footnote 4), which is entered into a networked FileMaker Pro database for access. Digital original footage logs are created and maintained in a structured FileMaker Pro 7 database.

## CONCLUSIONS

The above analysis of WGBH Boston demonstrates that the both the original footage and the original footage logs posses all the elements required of a record, and are both therefore, considered records.

The authoritative record to be preserved is comprised of both digital and intellectual components. WGBH must preserve the original footage, the original footage logs and the links between the two entities.

Based on the above analysis our recommendations for preservation include the following:

1. To establish formal policy and standardized procedures with respect to technological obsolescence, the preserver:
  - a. needs to be aware of any technological changes, and
  - b. must prepare for necessary conversion or migration.

2. WGBH must continue to maintain the links that identify the relationships between original footage and accompanying logs throughout the implementation of the DAM system.<sup>5</sup>

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<sup>5</sup> If analogue footage and logs are converted to a digital format, WGBH should maintain links between these entities as well.