# IBICT DIGITAL PRESERVATION POLICY



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Versão 09/04/2019 PORTARIA IBICT Nº 79, DE 28 DE SETEMBRO DE 2021

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#### THE INSTITUTIONAL MISSION OF IBICT

Ibict promotes the competence and development of information resources and infrastructure in Science and Technology for the production, socialization and integration of scientific-technological knowledge.

#### THE NATURE OF THE POLICY

Ibict's digital preservation policy is part of the institutional mission. The digital files are part of Ibict's documental collection and subject to the same selection and permanence criteria. As such, they are included in this preservation policy with the goal of guaranteeing that digital collections remain available over time, through damage and deterioration prevention; reverting damage as much as possible; and, when necessary, changing the source format to preserve their intellectual content.

As an organization that has the responsibility of making information available in the long term, Ibict will carry out digital preservation activities, according to the conditions of what should be considered in the establishment of a preservation system, according to the Open Archival Information System (OAIS) reference model (ISO 1471)<sup>1</sup>, applicable to any type of digital archive and compatible with systems based on the Open Archive Initiative (OAI) metadata harvesting protocol<sup>2</sup>.

As with all documentary collections, decisions on digital preservation must be made by teams of professionals in the areas of Librarianship, Archival Science, Museology, and by consultants with recognized experience by institutions in the area, including the National Library and the National Archive. The preservation action priorities will be based on this policy and on the guiding principles of Ibict's research project on networked digital preservation services.

In order for Ibict's digital collections to have value over time, their preservation will be defined as the actions necessary to ensure permanent access to the complete content of the collections with guarantees of authenticity and integrity, as well as the hierarchical and structural relationship between the files and their correlations.

Digital collections may exist in multiple versions. Ibict is committed to preserving the most complete version and making available the digital documents, and their descriptive, structural and technical metadata associated with them.

<sup>&</sup>lt;sup>1</sup> http://public.ccsds.org/publications/archive/650x0m2.pdf

<sup>&</sup>lt;sup>2</sup> https://www.openarchives.org/OAI/openarchivesprotocol.html

#### THE SCOPE OF RESPONSIBILITY

- 1. Responsibility for the management and long term permanence of:
  - a. digital collections created by Ibict, of which no other version exists and with permanent value;
  - b. digital versions of collections reformed by Ibict, with a digital format with permanent value;
  - c. unique digital collections acquired by Ibict (via donation or purchase) as part of manuscript collections, files that are unlikely to be preserved by another institution;
  - d. digital records (bibliographic and personal) with recognized value or essential to lbict's operation, and not preserved in any other institution.
- 2. Responsibility to work cooperatively with partner institutions and with external consortia initiatives, to ensure the execution of appropriate preservation actions and adequate continuous access to documents by the Institute's employees:
  - a. digital collections created at Ibict considered part of the institutional repository and the general archive;
  - b. digital collections acquired or licensed by Ibict, with emphasis on documents that exist only in digital versions.

## COMMITMENT TO LIFE CYCLE ACTIONS OF THE INSTITUTIONAL DIGITAL COLLECTIONS

Ibict is committed to managing the life cycle of its digital collections. Procedure guides and manuals must be prepared and will be revised after any technological change or institutional demand. The preservation model adopted should allow the integration of the systems recommended and disseminated by Ibict so that interoperability is not lost in the future.

#### **Development of preservation actions:**

- integration with storage, backup and preservation of collections outside of the general archive and the institutional repository;
- backup plans, monitoring, updating, redundancy via mirroring or distributed networks;
- survival actions (migration or emulation);
- technical cooperation agreements on digital preservation services.

#### Selection by digitization and new selection for retention:

- based on the institutional mission, norms, needs and priorities, included in a selection based on the institution's digitization project criteria, and with national consortium and international responsabilities<sup>3</sup>;
- follow relevant standards and best practices of digital conversion, documented in projects such as the Library of Congress, Research Libraries Group (RLG), and others<sup>4</sup>;
- creating and managing metadata according to international standards and best practices in metadata management from leading institutions in the field.

#### Storage:

- follow relevant established standards and best practices of storage documented at recognized institutions in the field, such as the Library of Congress and the Research Libraries Group (RLG) among others;
- the archival version of the digital object will be preferably preserved in a nonproprietary format;
- responsibility for the storage plan will delineate:
  - documents in use: keep them online with backup, updating and migration;
  - all archivable versions, whether online or not, should be stored in the Cariniana Network, with updates and migrations scheduled;

<sup>&</sup>lt;sup>3</sup> ex.: Selection Criteria for Digital Imaging Projects http://www.columbia.edu/cu/libraries/digital/criterua.htm

<sup>&</sup>lt;sup>4</sup> ex.: Technical Recommendations for Digital Imaging Projects

• all file versions that are not online should be copied and stored in a separate location.

#### Access:

• Ibict will follow relevant internationally established standards and best practices for access definitions and dissemination of preserved materials.

# MANAGEMENT OF THE DIGITAL PRESERVATION POLICY AND PLAN FOR THE PRESERVATION OF DIGITAL COLLECTIONS

The scope of Ibict's Digital Preservation Policy and Plan management is centered on fulfilling the functional requirements that allow for the preservation and real custody of digital collections. The projects that make up the Plan are based on a common analytical structure, it's subdivisions and their formalization and acceptance will be subject to the scrutiny of technical and scientific committees at Ibict. The committees analyze the digital preservation process to be formally sequenced in the Plan, identifying changes in planning, for resource estimates that prioritize and reinforce the digital preservation properties of the adopted solutions. Ibict is committed to supporting the management of the digital preservation properties of the digital preservation plan, including:

- · technological infrastructure;
- long-term financing of the digital preservation plan;
- structure for human resources (hiring and training);
- rights management.

## RESPONSIBILITIES RELATED TO NATIONAL AND INTERNATIONAL AGREEMENTS

Since there is the possibility that the digital collections created by Ibict participate in national or international cooperative efforts for long-term preservation, and that their contents may also be preserved in other institutions, Ibict will evaluate the capacity of these initiatives to provide long-term access to its digital collections, metadata and functionalities, so that the same level of preservation offered by the Institute is maintained. Some aspects can be taken into consideration:

- sharing obligations and cooperative preservation;
- information sharing;
- technological support (e.g. reuse of migration strategies and recommended management practices);
- development of minimum standards for capturing, managing and maintaining cooperative digital collections.

#### Frequency of updating the digital collections preservation policy

This policy must be reviewed annually to ensure updates arising from technological changes and the maturation of lbict projects. The Institute's General Coordinations will collaborate in all stages of the life cycle of lbict's digital preservation projects, considering the processes used to manage the scope, as well as the support tools and techniques, which may vary according to the area of application.

