
Canadian Research Team Report

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Introduction

As a final part of the work of the InterPARES Project on the preservation of authentic electronic records, the general findings relating to authenticity, appraisal, and preservation must be assessed against the specific national and multinational contexts in which they will be applied. The purpose of these investigations is to determine whether there is anything in a given context that will affect, either positively or negatively, the implementation of the project's findings.

This report looks at the situation of the federal government in Canada. The discussion of the various contexts relates to the government as a whole; the analysis of the individual InterPARES principles focuses primarily on national archives; and the review of the processes of appraisal and preservation addresses the practices of the National Archives of Canada (NAC) specifically.

The overall conclusion is that there is nothing in the InterPARES intellectual framework that is at odds with the various contextual aspects affecting record keeping and archiving in the Government of Canada (GOC). There is, however, a significant gap between the government's legal and policy framework (which are largely consistent with InterPARES requirements) and the current state of the matter on the ground, meaning that implementation of InterPARES requirements will be possible only once remedial measures that began in the government in 2002 take effect.

Assessment of the InterPARES principles against GOC contexts

In this section, the InterPARES principles as defined in the report of the Strategy Task Force are first considered as a set, and assessed against the various contexts that define the record-keeping (creation, management, and preservation) regime of the Government of Canada. Where appropriate, individual principles are then assessed against those contexts as well.

Principles overall

Juridical/administrative context

This is the key context defining the possibilities for successful implementation of the InterPARES findings. The juridical and administrative elements must be dealt with separately, as their effects are not uniform.

Juridical - Canadian information legislation (*National Archives of Canada Act, National Library of Canada Act, Access to Information Act, Privacy Act, Personal Information Protection and Electronic Documents Act*) provides a strong overall framework within which the InterPARES principles could be implemented. One minor caveat relates to the definition of record used in Canadian legislation, which does not associate records with the business processes they relate to, nor does it include the archival sense of "fixed and set aside."

Administrative - the overall administrative context of the GOC should be conducive to the implementation of the InterPARES findings, given the presence of policies on the management of government information; the management of information technology, and government security; and of record-keeping metadata requirements for the Government of Canada. However, due to a gap between the framework established by these policies and actual practice in government institutions, the federal government does not currently have an effective information management regime for its records. Initiatives are now under way to address this problem, but it will be several years at least before the state of information management will support a general adherence to the principles enunciated in the InterPARES framework.

Provenancial / Procedural / Documentary contexts

As a result of the overall weakness of information management in government, these are contexts in which InterPARES principles would not currently fit. However, improvements in the administrative context would have a direct beneficial effect here, particularly in strengthening the procedural context to link record creation more closely to the business functions it supports.

Technological context

A technological context appropriate to the realization of InterPARES principles exists (the Records, Documents and Information Management System or RDIMS—an integrated suite of software available to all government departments and agencies), but needs to be more fully implemented across government. Separation between the information technology (IT) and the information management (IM) spheres within government institutions, which frequently leads to IM considerations being inadequately reflected in IT implementations, is another concern, even with a full implementation of RDIMS.

Individual Principles

Any records preservation policy, strategy, or standard should:

- *address records specifically rather than digital objects generally* - this principle is not explicitly reflected in the overall government context, but is directly supported by the electronic records policy and the appraisal methodology of the National Archives of Canada.
- *focus on authentic electronic records* - the management of government information (MGI) policy, although it covers records in all forms, reflects an awareness of the challenge to records' authenticity presented by electronic systems; the National Archives' appraisal methodology supports this principle, particularly in the early years of the twenty-first century, when the relative authenticity of parallel paper and electronic versions of records must be considered.
- *recognize and provide for the fact that authenticity is most at risk when records are transmitted across space or time* - this fact is certainly recognized in the MGI policy, although the extent to which it is reflected in current implementations of RDIMS or other record-keeping systems is uncertain; the National Archives both recognizes and provides for this fact in its procedures for transferring, processing, and preserving electronic records.
- *recognize that preservation of authentic electronic records is a continuous process that begins with . . . records creation* - this requirement is reflected in the record-keeping guidance that the National Archives provides to government, in the terms and conditions of transfer that govern the transfer of electronic records to the institution's custody, and in the NAC's internal procedures for electronic records.
- *be based on the . . . concepts of a trusted record-keeping system and the role of the preserver as a trusted custodian* - RDIMS fulfils, in theory, the requirement for a trusted record-keeping system in the Government of Canada, but actual current implementations may fall short of fully ensuring records' authenticity—this gap will be addressed in the coming years with increased NAC involvement in information management across government; the National Archives of Canada fulfils in its practices the role of trusted custodian.
- *be predicated on the understanding that it is not possible to preserve an electronic record as a stored physical object: it is only possible to preserve the ability to reproduce the record* - the NAC fully understands this principle, and its preservation strategy focuses on maintaining the ability to reproduce records in authentic form (while still accounting for the need to maintain the various physical carriers on which records are stored over time).
- *recognize that the physical and intellectual components of an electronic record do not necessarily coincide and that the concept of digital component is distinct from the concept of element of documentary form* - the former point is generally recognized among those who deal with electronic records, but it is highly unlikely that the diplomatic concept of "element of

documentary form," *per se*, will figure in the federal government's or the NAC's policies, strategies, or standards.

- *specify the requirements a copy of a record should satisfy to be considered equivalent to an original* - in the case of the National Archives of Canada, the requirements to be satisfied will relate primarily not to the copy itself but to the system used to transfer, store, and maintain the record's digital components and to reproduce the record. But the system used will be selected only once it has demonstrated that it can be used to reproduce accurately both the content and documentary form of the record.
- *integrate records appraisal in the continuous process of preservation* - preservation considerations play an important role in the National Archives' appraisal methodology; the information thus generated will increasingly be reflected in archival descriptions as the institution's automated information systems become more closely integrated.
- *explicitly state that the entire process of preservation must be thoroughly documented as a primary means for protecting and assessing authenticity over the long term* - this requirement is not reflected in the management of government information policy; it is, however, met by the NAC's interpretation of chapter 9 of the Canadian Rules for Archival Description, which calls for the documentation of all transfer and preservation practices.
- *explicitly recognize that the traditional principle that all records relied upon in the usual and ordinary course of business can be presumed to be authentic needs to be supplemented . . . by evidence that the records have not been inappropriately altered* - the management of government information policy does not explicitly include such recognition, but implicitly supports this requirement in its repeated emphasis that information must be maintained in a manner that preserves its authenticity. Similarly, there is no NAC document on electronic records that explicitly states this, but it is certainly institutional practice to document the continuing authenticity of its electronic records over time.
- *recognize that the preserver is concerned with both the assessment and the maintenance of the authenticity of electronic records* - the National Archives of Canada assesses the authenticity of records before they are transferred; maintenance of authenticity is a critical part of all preservation activities following transfer.
- *draw a clear distinction between the preservation of authenticity . . . and . . . authentication* - it is not certain that this distinction is well understood in government generally, but it is recognized by the NAC, which has reflected the distinction in its guidelines for records created in a PKI environment.

Processes

This section relates to the work of the National Archives of Canada with historically valuable records.

Appraisal

Overall there is very good fit between the NAC's approach to appraisal and the activity as modelled in the InterPARES findings. At a more detailed level, however, it must be admitted that the NAC does implicitly or somewhat informally what InterPARES requires explicitly and formally—the assessment of authenticity against the benchmark requirements, and the determination of feasibility at the level of record elements. There is nothing in the appraisal process as modelled by InterPARES, however, which the NAC would be unable to do.

Preservation

As with the process of appraisal—there is nothing in the InterPARES model of the preservation process that NAC either doesn't already do or could not begin doing.

Effects and stakeholders

The principal direct effect of the implementation of the InterPARES requirements in the Government of Canada context would be a stronger archival record in electronic form, with a more explicit focus on determining the authenticity of the records being transferred to the NAC, and greater confidence by the NAC in asserting their authenticity when reproduced. The principal indirect effects would be government-wide, and considerable, namely both the costs and the benefits (better current records, improved accountability, increased access) associated with the implementation of the record-keeping infrastructure necessary to meet the benchmark authenticity requirements.

Conclusion

There is nothing intrinsic in the InterPARES principles that would prevent their incorporation in policies, strategies, and standards at the national level in Canada. To the extent that there are obstacles, they relate primarily to the current administrative context in the GOC, and the weak information management found there, which is neither an intrinsically Canadian phenomenon, nor unique to Canada.