

# *Domain 1: Authenticity Task Force*

## Methodology

Diplomatics for definition of concepts of record (including the identification of its characteristics), reliability, authenticity, authentication the construction of a template for analysis, the formulation of the benchmark requirements

Diplomatics is a science developed in the 17<sup>th</sup> century for the purpose of verifying the authenticity of records of disputed origin. It comprises:

- a theory that describes the nature of the record and of its components
- a method that establishes the procedure to follow in the analysis and assessment of a record
- a practice, called special diplomatics, that applies theory and method to real situations

# Authenticity

Refers to the fact that a record is what it purports to be and has not been tampered with or otherwise corrupted.

In other words, the trustworthiness of the record as a record.

# Identity of a Record

- It refers to the attributes of a record that uniquely characterise it and distinguish it from other records. These attributes include: the names of the persons concurring in its formation (I.e., author, addressee, writer and originator); its date(s) of creation and transmission; an indication of the matter or action in which it participates; the expression of its archival bond; as well as an indication of any attachment(s).
- These attributes may be explicitly expressed in an element of the record, in metadata related to the record, or implicit in its various contexts (documentary, procedural, technological, provenancial, or juridical-administrative).

# Integrity of a Record

- Its wholeness and soundness. A record has integrity if it is intact and uncorrupted
- A record is intact and uncorrupted if the message that it is meant to communicate in order to achieve its purpose is unaltered
- A record's physical integrity, such as the proper number of bit strings, may be compromised, provided that the articulation of the content and its required elements of form remain the same
- Integrity may be demonstrated by evidence found on the face of the record, in metadata related to the record, or in one or more of its contexts

# Template for Analysis

- Based on diplomatic assumption that , regardless of differences in provenance, date or presentation, all records are similar enough to make it possible to conceive of one typical, ideal documentary form containing all possible elements of a record
- Based on Task Force assumption that, while they may manifest themselves in different ways, the same elements that are present in traditional records exist in electronic records and that all records share the same attributes, either explicitly or implicitly.

# Template for Analysis

It is a decomposition of an electronic record into its constituent elements which defines each element, explains its purpose, and indicates whether and to what extent that element is instrumental in verifying the record's authenticity

# **CATEGORIES OF RECORD ELEMENTS**

- **MEDIUM**
- **DOCUMENTARY FORM**
  - **intrinsic elements**
  - **extrinsic elements**
- **ANNOTATIONS**
- **CONTEXT**

# INTRINSIC ELEMENTS OF DOCUMENTARY FORM

- elements that convey aspects of the record's juridical and administrative context
- elements that communicate the action itself
- elements that convey aspects of the record's documentary context and its means of validation

# EXTRINSIC ELEMENTS

- presentation features
- electronic signatures
- electronic seals
- digital time stamp of a trusted third party
- digital watermarks
- other special signs

# INTRINSIC ELEMENTS

## GROUP 1

- Name of Author
- Name of Originator
- Chronological date
- Name of place of origin of record
- Name of Addressee(s)
- Name of Receiver(s)

# INTRINSIC ELEMENTS

## GROUP 2

- Indication of action or matter
- Description of action or matter

# INTRINSIC ELEMENTS

## GROUP 3

- Name of writer
- Attestation
- Corroboration
- Qualification of signature

# ANNOTATIONS

- Additions made to the record after its creation as part of the execution phase of an administrative procedure.
- Additions to the record that reflect subsequent actions taken after the creation of the record *to handle the activity or the matter* in which the record participates.
- Additions to the record that reflect subsequent actions taken after the creation of the record *to handle the record for records management purposes*.

# CONTEXTS

- Juridical-Administrative
- Provenancial
- Procedural
- Documentary
- Technological

# Diplomatic Analysis

- It consisted of answering questions about the nature of the entities found in each case studies, their function, form, action(s) they were connected to, etc.
- When the system did not contain records, the questions regarded whether it should, and whether the system itself can be considered a record.

# Usefulness of Diplomatic Analysis

- Demonstrated when systems were designed to contain data rather than records
- Showed what attributes of a record's identity are implicit in the system and need to be made explicit and linked to the record to ensure that they are not lost when the record is removed from the system
- Revealed the fundamental indifference of the creator to the issue of authenticity, due to confidence in technology
- Supported the identification of the requirements for authenticity

# Contrast of Diplomatic Analysis

- The classic concept of record limits our capacity to understand electronic systems containing a variety of complex entities that do not correspond to it
- That which is known is not always very useful to understand the unknown
- General diplomatics, which decontextualizes the record, is not useful to deal with the variety and complexity of systems: special diplomatics would be better
- Diplomats is based on an understanding of individual records, rather than records aggregates

# Conceptual Framework for the Requirements for Authenticity

- In archival theory and jurisprudence, records that are relied upon by their creator in the usual and ordinary course of business are presumed authentic
- In electronic systems, the presumption of authenticity must be supported by evidence that a record is what it purports to be and has not been modified or corrupted in essential respects. To assess the authenticity of a record, the preserver must be able to establish its identity and demonstrate its integrity

# The Records of the Creator

- The records that exist as created. They are considered authentic because they are the same as they were in the first instantiation
- The records that have undergone some change and therefore cannot be said to exist as first created. They are considered authentic because the creator treats them as such by relying on them for action or reference in the regular conduct of business. However, their authenticity is threatened whenever they are transmitted across space or time. Therefore, an inference of their authenticity must be further supported by evidence that they have been maintained in a way that guarantees their continuing identity and integrity.

# Presumption of Authenticity

An inference that is drawn from known facts about the manner in which a record has been created and maintained. The evidence supporting it is enumerated in the Benchmark Requirements. A presumption of authenticity will be based upon the number of requirements that have been met and the degree to which each has been met.

# Verification of Authenticity

- The act or process of establishing a correspondence between known facts about the record and the various contexts in which it has been created and maintained, and the proposed fact of the record's authenticity, when there is an insufficient basis for a presumption of authenticity.
- It involves a detailed examination of the record in all their contexts and of reliable information available from other sources (audit trails, backups, copies preserved elsewhere, textual analysis)

# Benchmark Requirement A1:

## *Expression of Record Attributes & Linkage to Record*

The value of the following attributes are explicitly expressed and inextricably linked to every record.

These attributes can be distinguished into categories, the first concerning the identity of records, and the second concerning the integrity of records.

# Benchmark Requirement A1:

- *A.1.a*  
Identity of the record:
- *A.1.a.i*  
Names of the persons concurring in the formation of the record, that is: name of author, writer, originator, and addressee
- *A.1.a.ii*  
Name of action or matter
- *A.1.a.iii*  
Date(s) of creation and transmission, that is: chronological date, received date, archival date, transmission date(s)
- *A.1.a.iv*  
Expression of archival bond
- *A.1.a.v*  
Indication of attachments

# Benchmark Requirement A1:

- *A.1.b*  
Integrity of the record:
- *A.1.b.i*  
Name of handling office
- *A.1.b.ii*  
Name of office of primary responsibility
- *A.1.b.iii*  
Indication of types of annotations added to the record
- *A.1.b.iv*  
Indication of technical modifications

# Benchmark Requirement A2:

## *Access Privileges*

The creator has defined and effectively implemented access privileges concerning the creation, modification, annotation, relocation, and destruction of records

# Benchmark Requirement A3:

## *Protective Procedures: Loss and Corruption of Records*

The creator has established and implemented procedures to prevent, discover, and correct loss or corruption of records

# Benchmark Requirement A4:

## *Protective Procedures: Media and Technology*

The creator has established and implemented procedures to guarantee the continuing identity and integrity of records against media deterioration and across technological change

# Benchmark Requirement A5:

## *Establishment of Documentary Forms*

The creator has established the documentary forms of records associated with each procedure either according to the requirements of the juridical system or those of the creator

# Benchmark Requirement A6:

## *Authentication of Records*

If authentication is required by the juridical system or the needs of the organization, the creator has established specific rules regarding which records must be authenticated, by whom, and the means of authentication

# Benchmark Requirement A7:

## *Identification of Authoritative Record*

If multiple copies of the same record exist, the creator has established procedures that identify which record is authoritative

# Benchmark Requirement A8:

## *Removal and Transfer of Relevant Documentation*

If there is a transition of records from active status to semi-active and inactive status, which involves the removal of records from the electronic system, the creator has established and implemented procedures determining what documentation has to be removed and transferred to the preserver along with the records

# Baseline Requirements for the Production of Authentic Copies

- After the records have been presumed or verified authentic in the appraisal process, and have been transferred from the creator to the preserver, their authenticity needs to be maintained by the preserver by reproducing them and authenticating the resulting copies
- The production of authentic copies is regulated by a second set of requirements that must all be met and are therefore called “baseline requirements”

# Baseline Requirement B1:

## *Controls over Records Transfer, Maintenance, and Reproduction*

The procedures and system(s) used to transfer records to the archival institution or program, maintain them, and reproduce them embody adequate and effective controls to guarantee the records' identity and integrity, and specifically that:

- unbroken custody of the records is maintained;
- security and control procedures are implemented and monitored; and
- the content of the record remains unchanged after reproduction

# Baseline Requirement B2:

## *Documentation of Reproduction Process and its Effects*

The activity of reproduction has been documented, and this documentation includes:

- the date of the records' reproduction and the name of the responsible person;
- the relationship between the records acquired from the creator and the copies produced by the preserver;
- the impact of the reproduction process on their form, content, accessibility and use; and
- in those cases where a copy of a record is known not to fully and faithfully reproduce the elements expressing its identity and integrity, such information has been documented by the preserver, and this documentation is readily accessible to the user

# Benchmark Requirement B3:

## *Archival Description*

The archival description of the fonds containing the electronic records includes—in addition to information about the records' juridical-administrative, provenancial, procedural, and documentary contexts—information about changes the electronic records of the creator have undergone since they were first created.

# Authentic copies

- An electronic copy of an authentic electronic record is authentic if attested to be so by the official preserver. Such attestation is supported by the preserver's ability to demonstrate that it has satisfied all the baseline requirements for the production of authentic copies. By virtue of this attestation, the copy is deemed to conform to the record it reproduces until proof to the contrary is shown