



TECHNICAL BOARD

CEN/BT by correspondence

For vote in line with IR2 Clause 6.1.4

Issue date: 2020-09-02

Deadline: **2020-12-01**

SUBJECT

New CEN/TC on 'Management and preservation of digital content'

BACKGROUND

On 2020-08-19, CCMC received a proposal from AFNOR for the creation of a CEN Technical Committee in the area of management and preservation of digital content, for which details are provided in Annex. AFNOR is willing to undertake the secretariat of the Technical Committee.

Digital preservation allows organizations to be in control of their contents as they determine the appropriate level of confidentiality and the corresponding conditions of preservation – and to keep knowledge on where these contents are physically.

Therefore, the proposed Technical Committee will be responsible for standardization of processes in the field of long-term digital preservation of content, covering all functional, operative and technical aspects. Sectoral applications already covered by existing technical bodies will be excluded (e.g. preservation of digital cinema movie, long-term archiving, cybersecurity and data protection). The TC will not address standardization of technologies but will exclusively focus on processes.

The work programme will focus on the development of European standards in link with EU regulations (i.e. GDPR and eIDAS), complementary to those standards already developed or under development in ISO (TC 42, 171), CEN (TC 224), CENELEC (CEN-CLC/JTC 13) or ETSI (TC ESI).

By Decision BT 65/2017, BT decided that the following criteria are to be met for acceptance of a proposal for new field of work:

- Vote according to Internal Regulations Part 2 clause 6.1.4;
Note: possible votes are 'agrees', 'disagrees with comments' and 'abstains'. Any vote indicating 'Deferred decision' will be counted as 'Disagrees with comments'
- At least 5 members express commitment to participate

Consequently, BT members are requested to state explicitly, by means of the commenting field provided in the BT-balloting tool, whether or not they are committed to participate in the work.

PROPOSAL(S)

CEN/BT,

- having considered the proposal for a new field of technical activity submitted by AFNOR as included in BT N 12175;
- considering that the following members have expressed commitment to participate:
 - o <members>;
- decides to create a new CEN/TC XXXX with the following preliminary title and scope:

Title: Management and preservation of digital content

Scope: Standardization of processes in the field of long-term digital preservation of content, covering all functional, operative and technical aspects. This includes: the quality control and the maintenance of integrity; the implementation, inspection and quality procedures for the preservation of digital contents; the maintenance of the quality and the integrity of the content over its life cycle of the information exchange between systems; procedures and processes supporting legal admissibility and/or integrity and security; retrieval and accessibility of content within the GDPR framework. Excluded is: standardization of electronic signature (CEN/TC 224 and ETSI TC ESI); Sectoral applications already covered by existing technical bodies: preservation of digital cinema movie (CEN/TC 457), long term archiving and retrieval of digital technical product data (ASD-STAN/D 7/WG 1 aerospace LOTAR) cybersecurity and data protection (CEN-CLC/JTC 13).

- allocates the secretariat of CEN/TC XXXX to AFNOR;
- asks the new CEN/TC XXX to submit its final title and scope for BT approval after its kick-off meeting.

2020-08-24 – NA /CK



PROPOSAL for a NEW FIELD OF TECHNICAL ACTIVITY	
Date of circulation	CEN/TC / SC N (where appropriate)
Secretariat	CENELEC/TC / SC (Sec) (where appropriate)
Type of technical body proposed (TC / SC / BTTF)

IMPORTANT NOTE: Incomplete proposals risk rejection or referral to originator.

The proposer has considered the guidance given in Annexes 1 and 2 during the preparation

Proposal (to be completed by the proposer)

<p>Title of the proposed new subject (The title shall indicate clearly and unambiguously, yet concisely, the new field of technical activity which the proposal is intended to cover.)</p> <p>Management and preservation of digital content</p>
<p>Scope statement of the proposed new subject (The scope shall precisely define the limits of the new field of technical activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)</p> <p>Standardization of processes in the field of long-term digital preservation of content, covering all functional, operative and technical aspects.</p> <p>This includes:</p> <ul style="list-style-type: none">• the quality control and the maintenance of integrity;• the implementation, inspection and quality control procedures for the preservation of digital contents,• the maintenance of the quality and the integrity of the content over its life cycle and of the information exchange between systems;• procedures and processes supporting legal admissibility and/or integrity and security;• retrieval and accessibility of content within the GDPR framework. <p>Excluded:</p> <ul style="list-style-type: none">• Standardization of electronic signature (CEN/TC 224 and ETSI/TC ESI);• Sectoral applications already covered by existing technical bodies: preservation of digital cinema movie (CEN/TC 457), long term archiving and retrieval of digital technical product data (ASD-STAN/D 7/WG 1 Aerospace - LOTAR), cybersecurity and data protection (CEN/CLC/JTC 13).

Purpose and justification for the proposal

Purpose of management and preservation of digital content - Electronic content archiving, which refers to the long-term preservation and management of digital documents and data, is highly relevant to all organizations, irrespective of their nature.

Digital preservation allows organizations to be in control of their contents as they determine the appropriate level of confidentiality and the corresponding conditions of preservation (including a specific timespan for the preservation of the data processing) - and to keep knowledge where these contents are physically. It also enables them to identify and to protect their confidential and strategic information.

Starting from the creation of content, the process of long-term preservation and management of digital content allows organizations to have the capacity to use such content as needed throughout its lifecycle. At a time when more trust is needed in the digital market and when information needs to be controlled according to EU values, principles and regulations, electronic preservation is crucial.

Preservation covers all means implemented to store, secure, restore, track, transfer and eventually dispose of and destroy archived digital content.

Electronic archiving thus includes all the actions, tools and methods implemented to collect, identify, select, classify, preserve and delete electronic content in a secure manner, with the aim of using it and making it accessible over time, whether as evidence or for information purposes. The duration of preservation depends on the value of the content as evidence and is most often defined on a medium or long term.

Interoperability is another important and necessary feature of digital preservation. The different technological solutions must be interoperable, using data exchange protocols to allow data sharing and distribution. Interoperability also promotes choices for users and healthy competition between providers.

Processes vs. technology - Digital preservation is part of a larger ecosystem for ensuring the authenticity of evidence.

Preserved content can be considered to be reliable and trustworthy, provided it cannot be altered. Its authenticity is therefore its most crucial characteristic. This can be achieved by many supporting technologies, such as hash functions, traceability of access and others.

Such supporting technologies include electronic signature and digital identity, which are already addressed within CEN and ETSI by established technical committees. Obviously, the new work proposed will rely on their work as processes and technologies interact with each other. In addition to the value brought by technology, the proposed dedicated work on standards for digital preservation processes is expected to provide a higher level of trust to electronic evidence and content integrity in the European Union. The new committee will therefore develop standards on a different and complementary plane, hence the absence of risk of overlap with TCs dealing with technologies, but a need to communicate with them.

The EU regulatory challenge - Today, this sector is facing important challenges with regard to compliance with legal and regulatory requirements, control of data protection and security related risks as well as ensuring the durability of documentary heritage and facilitating its use.

At the European level, the two main relevant regulations are:

- The General Data Protection Regulation (GDPR, EU 2016/679) on data protection and privacy and free movement of such data. The GDPR aims primarily to give control to individuals over their personal data and to simplify and unify the regulatory environment for businesses. This regulation also addresses the transfer of personal data outside the EU and EEA areas.
- The Electronic Identification, Authentication and Trust Services (eIDAS, EU 910/2014) is a regulation on electronic identification and trust services for electronic transactions in the European Single Market, which regulates electronic signatures, electronic transactions, involved bodies, and their embedding processes to provide a safe way for users to conduct business digitally, like electronic funds transfer or transactions with public services

Ideally, standardization work for the management and preservation of digital content could be undertaken globally. However, it has become obvious that the participants in such global arena do not and will not support the development of standards that meet the specific European expectations stemming from our set of EU regulations.

Standardization work within CEN therefore appears essential to develop a set of standards to meet the requirements of these regulations in terms of quality, security, interoperability and to ensure the integrity and preservation of digital content.

In a nutshell - The TC will not address standardization of technologies but will exclusively focus on processes. These processes are those necessary to meet legal requirements and patrimonial concerns and will address what to require from technologies in that respect, both for public and private organizations. European countries operate in a very specific legal environment in this regard, in particular due to the existence of the major EU regulations GDPR and eIDAS, which justifies launching this work at CEN level. The new CEN technical committee will complement the work done both at international by ISO/TC171 and ISO/TC46.

Is the proposed new subject actively, or probably, in support of European legislation or established public policy?

Yes No

If Yes, indicate if the proposal is

▪ in relation to EC Directive(s)/Regulation(s):

The General Data Protection Regulation (GDPR, EU 2016/679) on data protection and privacy

The Electronic Identification, Authentication and Trust Services (eIDAS, EU 910/2014)

Proposed initial programme of work

The work programme will focus on the development of European standards answering specific European needs in link with EU regulation. The first work item will cover specifications concerning the design and the operation of an information system for electronic information preservation.

The initial work programme will also cover the following topics:

- ⇒ Logical aspects of storage and preservation (short and long term preservation)
- ⇒ Files formats
- ⇒ Electronic document management system (EDMS) functionalities and architecture
- ⇒ Evaluations and qualification of EDMS
- ⇒ Workflow
- ⇒ Authenticity of information requirements
- ⇒ Digital storage

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing CEN, CENELEC, ISO and IEC deliverables

The new technical committee will consider specific aspects of the European digital market and of its needs.

Its purpose is to develop standards complementary to that developed by the following ISO committees, while taking into account their work and deliverables:

- **ISO/TC 171 Document management applications**, which standardizes technologies and processes involving capture, indexing, storage, retrieval, distribution and communication, presentation, migration, exchange, preservation, integrity maintenance and disposal in the field of document management applications.
- **ISO/TC 171/SC 1 Quality, preservation and integrity of information**,
- **ISO/TC171/SC2 Document file formats, EDMS systems and authenticity of information**
- **ISO/TC 42/JWG 26 Imaging system capability qualification for archival recording and approval**, which has been created to standardize tools and techniques for maintaining consistency when digitizing cultural heritage materials.
- **ISO/TC 46 Information and documentation**, which standardizes practices relating to libraries, documentation and information centres, publishing, archives, records management, museum documentation, indexing and abstracting services, and information science
- **ISO/TC 46/SC 4/WG15 Technical interoperability**— in particular Data Exchange Protocol for Interoperability and Preservation (DEPIP) which specifies a standardized framework for the various data exchange transactions, including both data and related metadata, between archives and their producers and consumers.
- **ISO/TC 46/SC 11 Archives/records management**, responsible for developing standards on records/archives management.
- **ISO/JTC1/SC23 Digitally Recorded Media for Information Interchange and Storage**, which develops and facilitates standards within the field of removable digital storage media for digital information interchange.
- **CEN/TC 224 Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment**, which develops standards for strengthening the interoperability and security of personal identification and its related personal devices, systems, operations and privacy in a multi sectorial environment, and covers applications and services such as electronic identification, electronic signature, payment and charging, access and border control.
- **ETSI/TC ESI Electronic Signatures and Infrastructures**, which covers the format of digital signatures, as well as policy, security and technical requirements for trust service providers (TSP) such as certification authorities, time-stamping authorities, TSP providing remote signature creation or validation functions, registered e-delivery providers, and long-term data preservation providers.
- **CEN/CLC/JTC 13 Cybersecurity and Data Protection**, which primary objective is to transport relevant international standards (especially from ISO/IEC JTC 1 SC 27) as European Standards (ENs) in the Information Technology (IT) domain, on cybersecurity and data protection challenges.

- **CEN/JTC19 Blockchain and distributed ledger technologies**, covering the following aspects: organizational frameworks and methodologies, including IT management systems; processes and products evaluation schemes; blockchain and distributed ledger guidelines; Smart technology, objects, distributed computing devices, data services.

- **CEN/TC 457 Preservation of digital cinema movie**, aiming to find a data structure and a set of file formats for long term archiving of digital movies

A listing of relevant existing documents at the international, regional and national levels

The following preexisting documents have been identified, without being limited to:

⇒ **In ISO :**

- ISO 14721:2012 Space data and information transfer systems — Open archival information system (OAIS) — Reference model
- ISO 16363:2012 Space data and information transfer systems — Audit and certification of trustworthy digital repositories
- ISO 14641:2018 Electronic document management : Design and operation of an information system for the preservation of electronic documents - Specifications
- ISO 12651-2 Electronic document management -- Vocabulary -- Part 2: Workflow management
- ISO DIS 19005-4 Document management -- Electronic document file format for long-term preservation -- Part 4: Use of ISO 32000-2 (PDF/A-NEXT)
- ISO DIS 16175-1 Information and documentation -- Principles and functional requirements for records in electronic office environments -- Part 1: Overview and statement of principles

⇒ **In ETSI :**

- EN TS 101 533-1, detailing security requirements for Information Preservation Service Providers, or electronic data archiving services, applying the provisions of ISO/IEC 27001.

⇒ **In CEN: Aerospace series - LOTAR LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data**

- EN 9300-013 : Aerospace series - LOTAR LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data - Part 013: Reference process description "Archival Storage"
- EN 9300-014 : Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data - Part 014: Reference process description "Retrieval"

A listing of national standards is available in annex.

Known patented items

Yes No If "Yes", see CEN-CENELEC Guide 8 and provide full information in an annex

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) in particular those who are immediately affected from the proposal (see Annexes 1 and 2) and how they will each benefit from or be impacted by the proposed deliverable(s)

Main categories of stakeholders are:

- **Large enterprises** (those employing 250 staff or more): service providers such as third party archivers, trusted third parties and law offices, as well as users such as healthcare, pharmaceuticals, energy and aeronautic industries, banking and insurance groups, cloud services, will benefit from a clarified state of art and a coherent set of standards to answer legal requirements.
- **Small and medium sized enterprises (SME)** (those employing 250 staff or fewer): those are mainly service providers, such as third party archivers, trusted third parties, law offices, judicial officers, consultancies, electronic invoices companies, EDI companies. They will also benefit from a clarified state of art for the benefit of their customers, with an easier access thanks to a coherent set of standards to answer legal requirements.
- **Government:** government assumes a number of different roles, whether as user or regulator, including public archival, cybersecurity services, ministries of Economy, Health, Justice, Home affairs, Culture, national and local administrations... However all have in common that they act as promoters of initiatives and best practices over the past 20 years with regard to this issue. An example of good practices developed by government is the definition of personal qualification for staff handling preservation of digital contents.
- **Consumers:** ANEC, national consumers associations and **Labour:** trade unions:
This standardization initiative will act as a trust building tool. Indeed, products, like the digital strong box, are so complex that consumers cannot assess themselves the significance of the service level and of its quality.
- **Non-governmental organizations (NGO)** are relevant and include archiving professional associations and federations such as International Council on Archives (ICA), European archivist group (EAG), Open preservation foundation (OPF), Digital preservation coalition (DPC), International Federation of Library Associations and Institutions (IFLA), UNESCO, Preservation and Archiving Interest Group (PASIG),...
- **Academic and research bodies**, research laboratories, research projects and programs: these stakeholders can be considered as users. They can also be considered as contributors, promoting their research results in standardization.
- **Standards application business** (e.g. testing laboratories, certification bodies), certification bodies: They are expected to contribute standardized common methods stemming from their professional experience.

Liaisons:

A listing of relevant external European or international organizations or internal parties (other CEN, CENELEC, ETSI, ISO and/or IEC committees) to which a liaison should be established (in the case of ISO and IEC committees via the Vienna or Dresden Agreements).

- ISO/TC 171 Document management applications
- ISO/TC 171/SC1 Quality, preservation and integrity of information
- ISO/TC 171/ SC2 Document file formats, EDMS systems and authenticity of information
- ISO/TC 46/ SC11 Information and documentation - Archives/records management
- CEN/TC 457 Preservation of digital cinema Movie
- ISO/TC 42 Photography
- ETSI/ TC ESI Electronic signatures and infrastructures
- CEN/TC 224 Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment
- CEN/TC 224/ WG 17 Protection Profiles in the context of SSCD
- ASD-STAN/D 7/WG 1 Aerospace - LOTAR Long Term Archiving and Retrieval of digital technical product data
- CEN/CENELEC JTC13 Cybersecurity and data protection

Joint/parallel work:

Possible joint/parallel work with:

- CEN (please specify committee ID)
- CENELEC (please specify committee ID)
- ISO (please specify committee ID)
- IEC (please specify committee ID)
- Other (please specify)

Name of the Proposer

(include contact details)

AFNOR

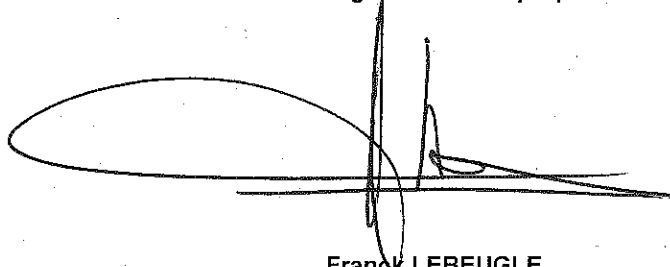
Contact details :

Fanny LANNOY
Standardization Project Manager
fanny.lannoy@afnor.org

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

If the proposal is accepted, AFNOR is willing to undertake the secretariat of the new TC, and is committed to providing all resources to successfully run the secretariat.

Signature of the proposer



Franck LEBEUGLE
AFNOR Standardization Director

Annex(es) are included with this proposal (give details)

- List of national standards identified

Annex: List of national standards

⇒ In France (other national standards may be included depending on members approval):

- NF Z 42-020 Functional specifications for a Digital Safe-Deposit Box Component designed for the preservation of digital information in such conditions as to guarantee its long-term integrity

Country	Reference	Title
FR	NF Z42-013	Digital content preservation – guidelines and requirements
FR	NF Z 42-020	Functional specifications for a Digital Safe-Deposit Box Component designed for the preservation of digital information in such conditions as to guarantee its long-term integrity
FR	XP Z42-101	Electronic archiving - Specifications for the implementation of the Visible Digital Seal (VDS) for authentication, verification and acquisition of data carried by an object - General structure
FR	XP Z42-102	Electronic archiving - Specifications for the implementation of the Visible Digital Seal (VDS) for authentication, verification and acquisition of data carried by an object - Data dictionary for French use to be used for VDS with a DC identification marker
FR	XP Z42-103	Electronic archiving - Specifications for the implementation of the Visible Digital Seal (VDS) for authentication, verification and acquisition of data carried by an object - Use case of a document bearing a VDS with a DC identification marker, used as a proof of residency
FR	XP Z42-104	Electronic archiving - Specifications for the implementation of the Visible Digital Seal (VDS) for authentication, verification and acquisition of data carried by an object - Use case of the verification of a document bearing a VDS with a DC identification marker.
DE	DIN 31645	Information and documentation - Guide to the transfer of information objects into digital long-term archives
DE	DIN 31646	Information and documentation - Requirements for the long-term management of persistent identifiers
GB	BS 10008:2014	Evidential weight and legal admissibility of electronic information. Specification
GB	BIP 0142:2014	Evidential Weight and Legal Admissibility Collection

Country	Reference	Title
GB	BS 10008-1	. Evidential weight and legal admissibility of electronically stored information (ESI). Part 1. Specification
GB	BS 10008-2	. Evidential weight and legal admissibility of electronically stored information (ESI). Part 2. Code of practice for implementation of BS 10008-1
CN	GB/T 33190	Electronic files storage and exchange formats -Fixed layout documents
CN	GB/T 33777	General specification for network attached storage devices
CN	GB/T 35313	General specification for modular storage system
ES	UNE 71505-1:2013	Information Technologies (IT). Digital evidences management system. Part 1: Vocabulary and general principles.
ES	UNE 71505-2:2013	Information Technologies (IT). Digital evidences management system. Part 2: Good practices for the digital evidences management.
ES	UNE 71505-3:2013	Information Technologies (IT). Digital evidences management system. Part 3: Formats and technical mechanisms.
IT	UNI/TS 11465-3:2013	Electronic Signatures and Infrastructures (ESI) - Data Preservation Systems Security - Italian Complement to ETSI TS 101 533-1 and ETSI TR 101 533-2
IT	UNI/TS 11465-1:2012	Electronic Signatures and Infrastructures (ESI) - Data Preservation Systems Security - Part 1: Requirements for Implementation and Management
IT	UNI/TR 11465-2:2012	Electronic Signatures and Infrastructures (ESI) - Data Preservation Systems Security - Part 2: Guidelines for Assessors
IT	UNI 11386:2010	Supporting Interoperability in Preservation and Retrieval of digital Objects (SInCRO)
JP	JIS Z 6017	Document management - Long-term preservation for electronic imaging documents

Country	Reference	Title
JP	JIS Z 6019	Long-term preservation for digital information by magnetic tape
SK	STN 97 0070	Electronic data interchange. Data base elements for supply, sale and storage
TR	TS 13298	Electronic records and archives management system
US	ANSI/CEA 775-2-A	Service Selection Information for Digital Storage Media Interoperability
US	ANSI/IEEE 1667	Standard for Discovery, Authentication, and Authorization in Host Attachments of Storage Devices
US	ANSI/NISO Z 39.18	Scientific and Technical Reports - Preparation, Presentation, and Preservation.
DE	DIN 67700	Constructing libraries and archives - Requirements and recommendations for planning
TR	TS 13298	Electronic records and archives management system
CN	GB/T 18894	Specification on electronic documents archiving and electronic records management
CA	CAN/CGSB-72.34-2017	Electronic records as documentary evidence