Framework for digital archiving in France and eIDASv2 regulation : the challenges ahead

TRUST IN DIGITAL ARCHIVING - Expertisecentrum DAVID - Brussels May 8, 2025

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Archives in France

Public Archives	Private Archives

Interministerial delegate and committee for Archives of France

Ministry of Europe and Foreign Affairs

Ministry of Defence

Ministry of Culture

Private structures

Interministerial Archives of France

Archives Directorate

- Nantes Diplomatic Archives Centre

- La Courneuve Diplomatic Archives Centre

Directory of Memory, Culture and Archives

Historical Service of Defence

Archives and RM services in ministries

State agencies

Establishments under private law with a public service mission

Local Network

- National Archives
- National Overseas Archives
- National Labour Archives

Regional Archives (13)

Departemental Archives (99)

City Archives and inter-municipal Archives (approx. 500)

4

Interministerial strategy for archives 2025-2029

Putting archives to work for users (Axis 1)

Building the nation's digital heritage (Axis 2)

- Supporting the transition from paper to digital collection
- Prioritize and simplify acquisition and access to digital documents and data
- Supporting the digital archiving eco-system and facilitating the adoption of tools

Mobilizing and preserving for the future (Axis 3)

- Prevent risks (secure the conservation of digital archives and resources essential to the smooth running of an archives service)
- Long term preservation (developpe actions and strategies, encourage digital simplicity)
- Mobilising networks and sharing knowledge

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Support for government departments and local authorities for their digital archiving projects

For the ministries:

- Between 2014 and 2024, some forty projects have been supported. The project management assistance can concern the conduct of a study, transferring public records to VaS (Vitam as a service) or archives to the National Archives dedicated platform

For local archives :

- The actual call for projects in place since 2019 has helped 124 projects, while the previous scheme helped 141 projects over 5 years.

- This call for projects provides support for complex projects of digital archiving that require efforts to be made over a period of several years, involving the implementation of a strategy, the choice of an organization, the integration of the regulatory framework and concrete actions to support services.

- Criteria include compliance with norms, standards and best practices in the field: norms and standards (NF Z42-013, OAIS model, SEDA, etc.), general standards piloted by DINUM and ANSSI (RGI, RGS, RGAA), etc.
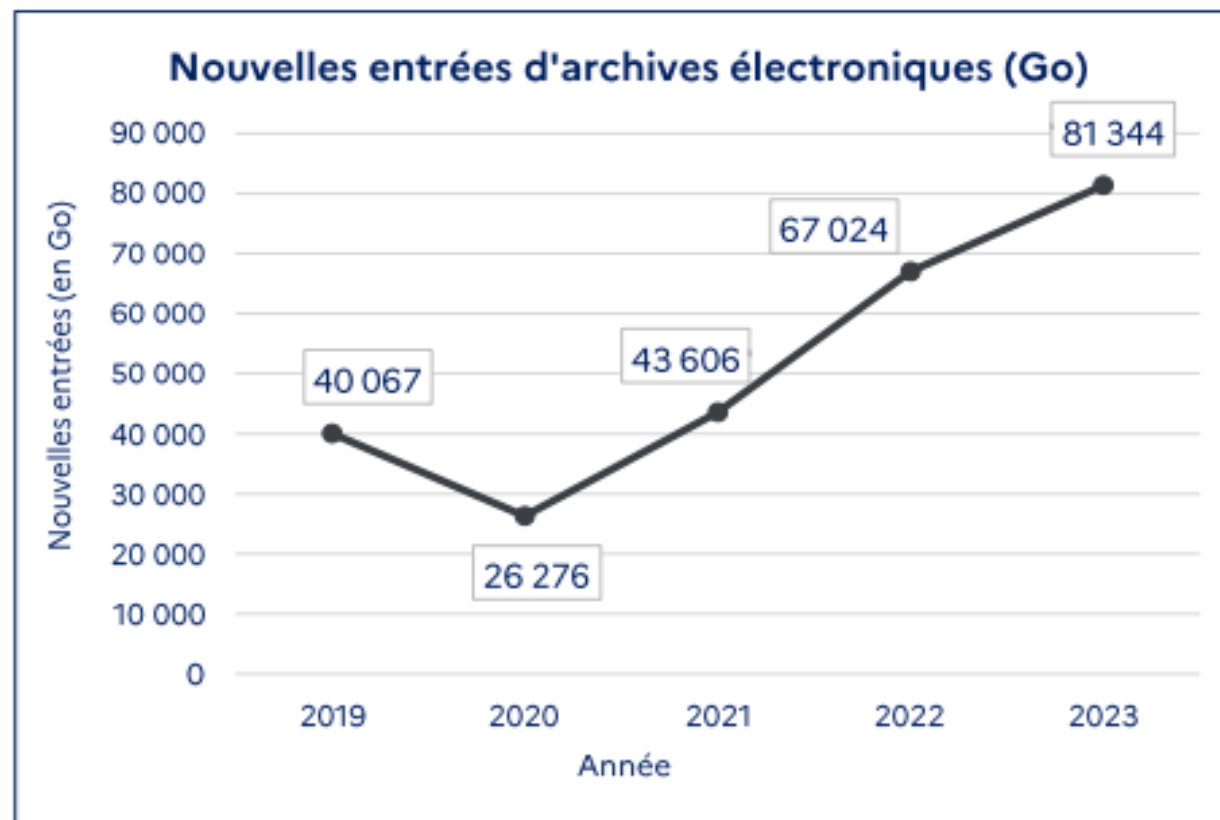
6

Digital archiving in France : key elements 2023

81 To

New acquisitions of electronic archives
61 public, 20 private

350 To

Total volume of electronic archives held

Nouvelles entrées d'archives électroniques (Go)

Nouvelles entrées (en Go)

|	
2019	40 067
2020	26 276
2021	43 606
2022	67 024
2023	81 344

Année

Main typologies
Mailboxes and files mainly from ministerial cabinets offices, statistical data, digital audiovisual archives, data from information systems, digital private archives
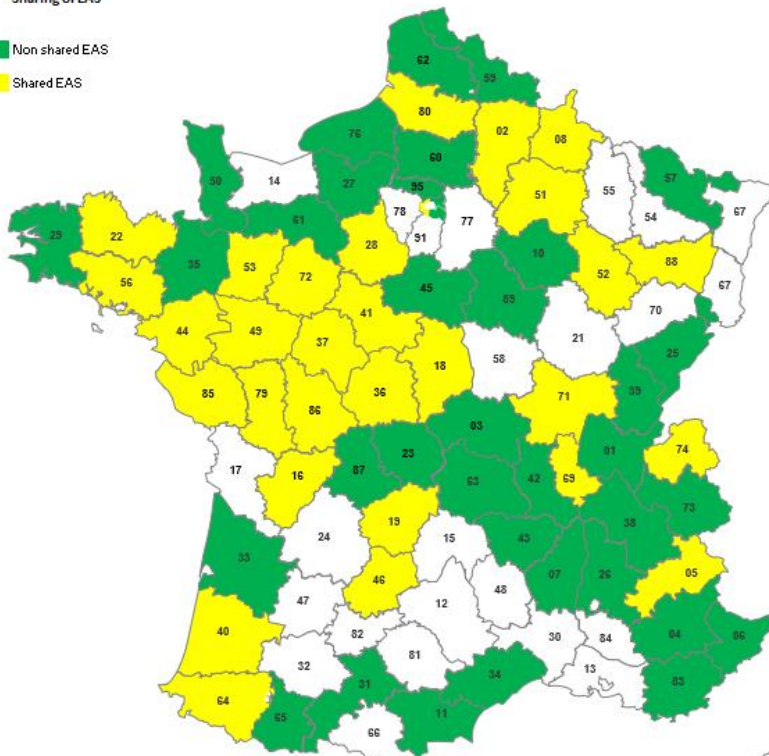
Electronic archiving systems in France

Departments equipped with EAS
- EAS in production
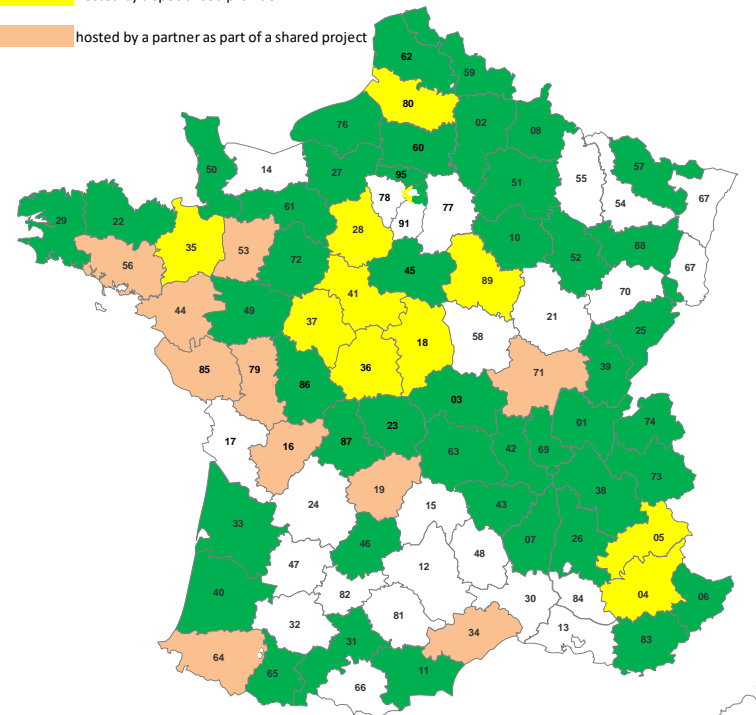- EAS being deployed (2024-2025)
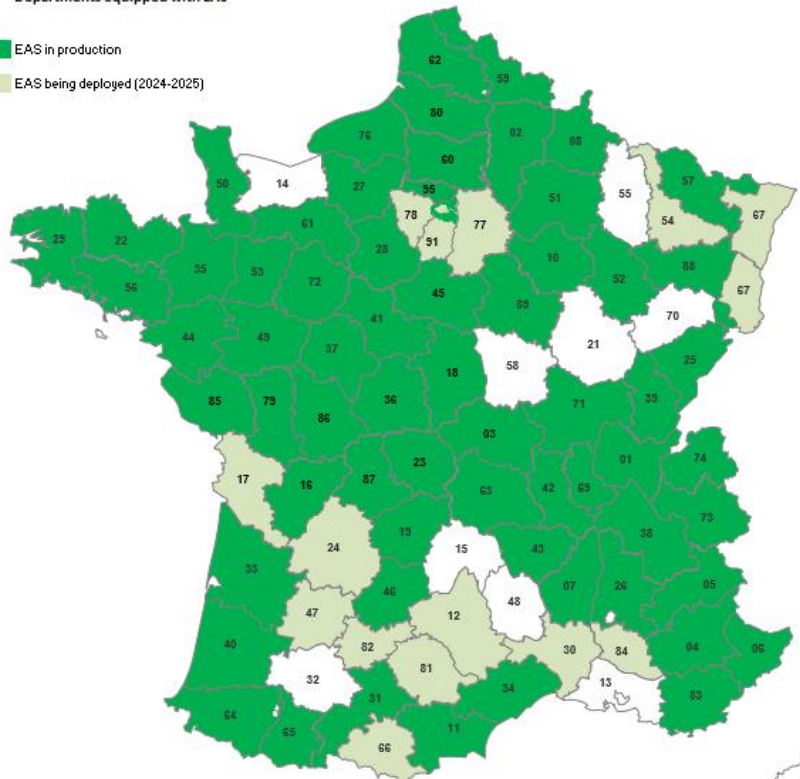
Sharing of EAS
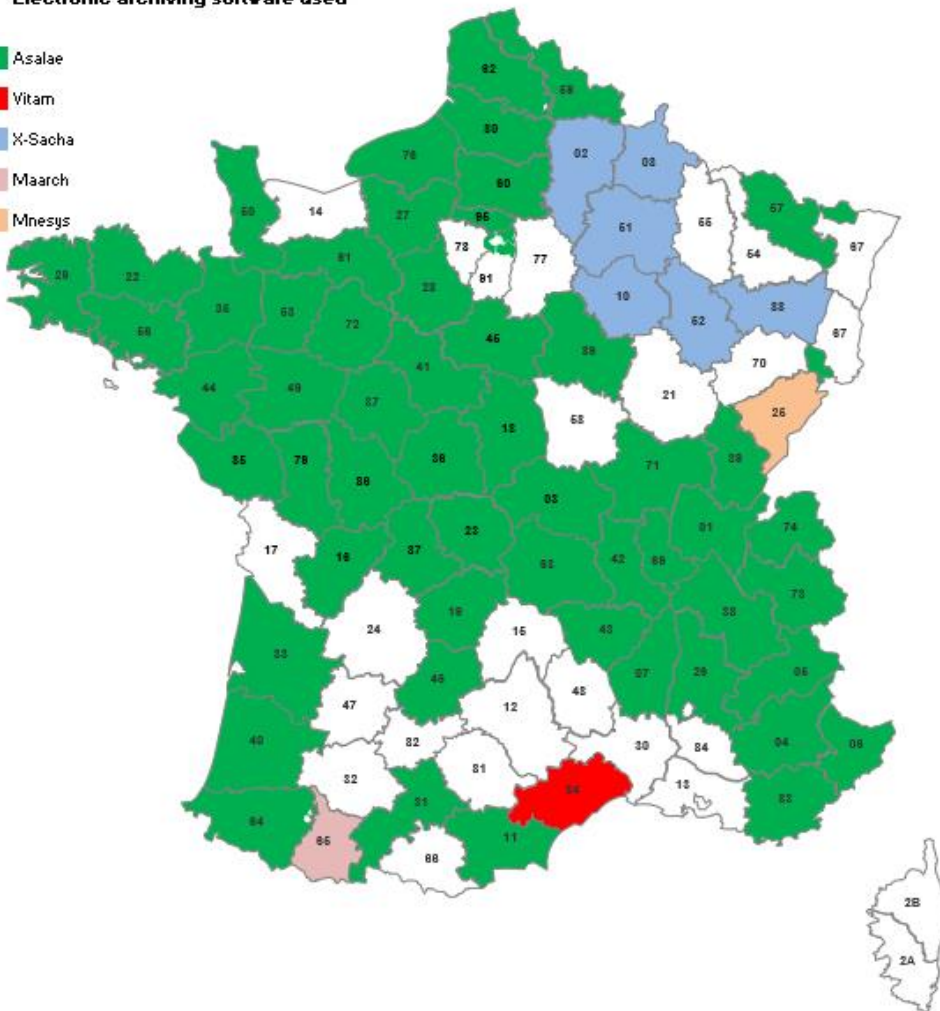- Non shared EAS
- Shared EAS

EAS hosting

Legend
- internal hosting
- hosted by a specialised provider
- hosted by a partner as part of a shared project

Software and perimeter

Electronic archiving software used
- Asalae (green)
- Vitam (red)
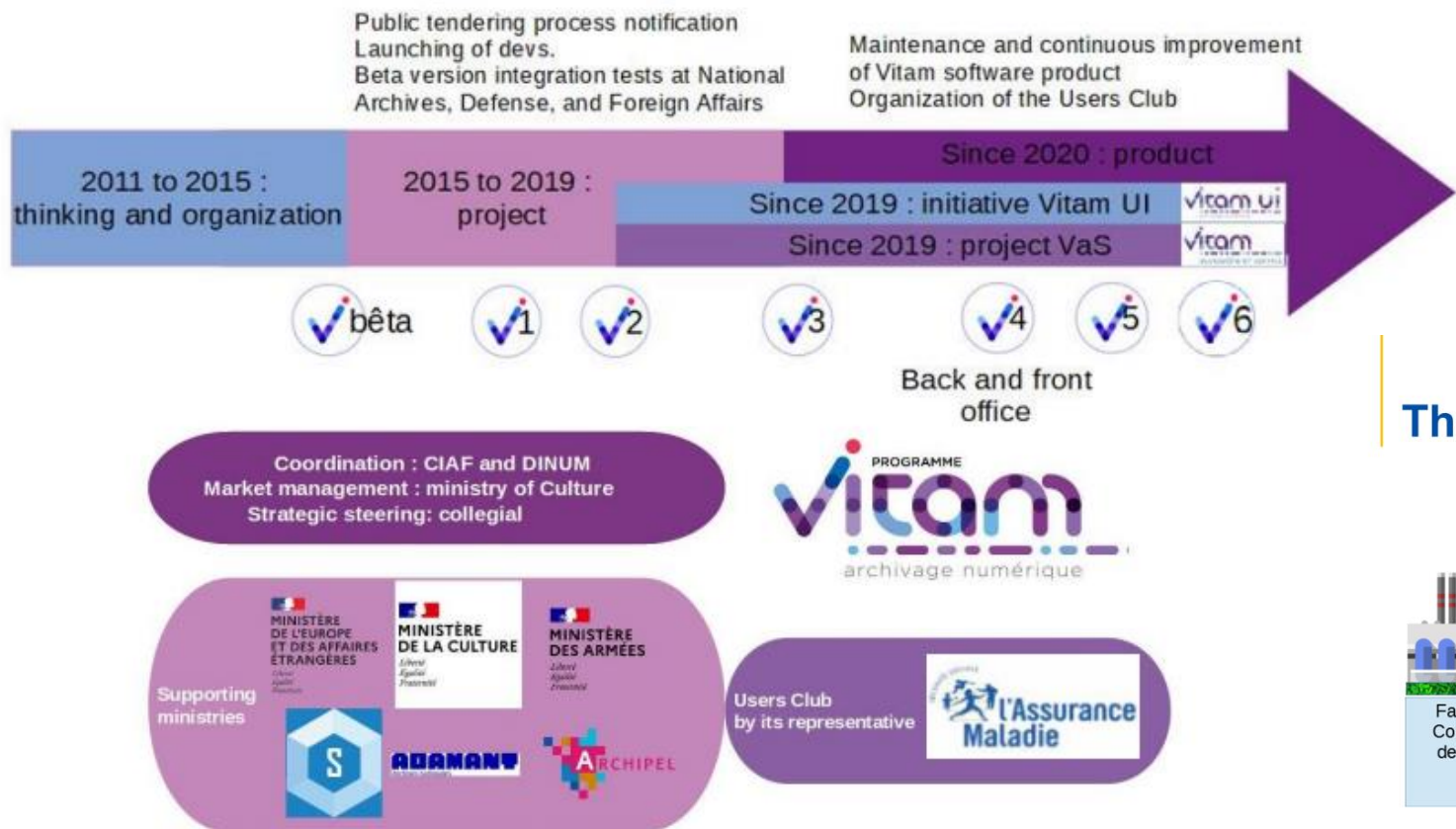- X-Sacha (blue)
- Maarch (pink)
- Mnesys (orange)

EAS perimeter
- Definitive archives (green)
- Intermediate and definitive archives (yellow)
- Current, intermediate and definitive archives (light blue)
- Intermediate archives (orange)

VITAM history and governance

Public tendering process notification
Launching of devs.
Beta version integration tests at National Archives, Defense, and Foreign Affairs

Maintenance and continuous improvement of Vitam software product
Organization of the Users Club

2011 to 2015 : thinking and organization

2015 to 2019 : project

Since 2020 : product

Since 2019 : initiative Vitam UI

Since 2019 : project VaS

bêta 1 2 3 4 5 6

Back and front office

Coordination : CIAF and DINUM
Market management : ministry of Culture
Strategic steering: collegial

PROGRAMME Vitam archivage numérique

Supporting ministries

MINISTÈRE DE L'EUROPE ET DES AFFAIRES ÉTRANGÈRES

MINISTÈRE DE LA CULTURE

MINISTÈRE DES ARMÉES

ADAMANT

ARCHIPEL

Users Club by its representative

l'Assurance Maladie

**92
PARTNERS**

The software solution

| Factory/ Continus delivery | Shared or dedicated instance | | Approval and compliance | | In house Owner |
| SaaS | | | | | On premise |

Front-office + back-office + hosting

Vitam Functional architecture and normative context

Digital Archiving norms

ISO 14721 (OAIS)
- Open Archival Information System
- A reference conceptual model designed for long term digital information management, preservation and access
- Defined NASA recommendation

NF Z 42-013 / ISO 14-641-1
- Electronic archiving - Guidance and Requirements

Connectors:
SIP Ingest
(Seda /
Medona /
DEPIP)

Business Applications
Archives, HR...

Connector:
Requests f
Business
Application

Functional Rules

Heritage Code

**ISO 20614 /
NF Z 44-022 / Seda**
- Data exchange protocol for interoperability and preservation

EAC-CPF, EAD, ISDF
- Standard archival descriptions

Ingest | Functionnal Administration | Acces

VITAM Software Solution
(OAIS et NF Z 42-013)

Data management

Preservation planning

Archival storage

AIP Lifecycle management

Technical Administration

vitam
archivage numérique

Several storage offers
(At least 1 proposed by Vitam)

Connector:
Read and write
access to
archives

Storage offer
(NF Z 42-020)

Storage offer
(NF Z 42-020)

**Access
Rules and regulations**

General data protection Regulation

Directive on the re-use of public sector information (PSI)

Relationships between Public/ administration Code

Data Protection and Liberties Regulation (Loi CNIL)

Records Management norms

ISO 15489

NF Z 30-300...

Réglementation Classifié de Défense

Defence Code

IGI 1300
- Protection du secret de la défense nationale

**Security
Rules and Regulations**

eIDAS
- Electronic identification and trust services for electronic transaction

NF Z 42-020
- Description of a digital safe deposit box in an archival information system
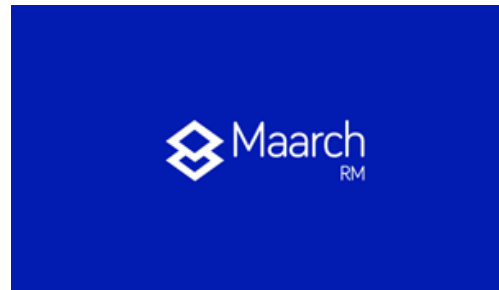
Other Applications meeting the challenges of dematerialization: secure transactions, electronic signatures, administrative acts, citizen relations, mobility, **electronic archiving**, etc.

Following digital archiving norms, interoperability standards,

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National regulation

The Heritage Code

- Several successive laws on archives were adopted in France in 1979, 2008 and 2016
- These laws were codified in the **Heritage Code**:
  - This text defines archives as all documents **and data** produced or received by any person or by any public or private organization in the course of its activity.

Code of relations between the public and the administration

- In order to manage administrative records and in particular their access, this Code must be linked to the Heritage Code
- [An order of 8 December 2005 also regulates the exchange of information between users and administrations, and between administrations themselves]

Referentials

- **General reference framework for records management**, which sets out all the rules and recommendations on which administrations must base their management of the documents and data they produce.
- **General security reference framework**: this is a collection of rules and good practices in the field of information systems security
- **General interoperability reference framework,** which recommends a certain number of standards to facilitate the functioning of the French administration and its information systems

National regulation

Civil Code

- Article 1366 : "An electronic document has the same evidential value as a paper document, provided that the person from whom it originates can be duly identified and that it is drawn up and stored in conditions that guarantee its integrity"

- Article 1379 : « A reliable copy has the same probative value as the original. Reliability is left to the discretion of the judge. Nevertheless, an enforceable or authentic copy of an authentic writing is deemed reliable. Any copy resulting from an identical reproduction of the form and content of the document, the integrity of which is guaranteed over time by a process that complies with conditions laid down by decree of the Conseil d'Etat, is presumed reliable until proven otherwise. If the original remains, its presentation may still be required.

Public Health Code

- Law no. 2024-449 of 21 May 2024 on securing and regulating digital space (SREN) provides for sovereignty guarantees in the event that government departments or operators use a private cloud provider to store or process sensitive data, particularly health data (article 31).

Archiving standards ecosystem

INFORMATION AND DOCUMENTATION

(AFNOR CN 46 / ISO TC 46)

Technical Interoperability (AFNOR CN 46-4)

Identification and description (AFNOR CN 46-9)

Archives/Records management (AFNOR CN 46-11)

Requirement for document storage and conditions for preservation (AFNOR CN 46-10)

Document management applications

(AFNOR CN 171/CEN TC 468/ISO TC 171)

Electronic archiving

Faithful digitization

Visible electronic seal

Electronic safe component…

CONSERVATION OF CULTURAL PROPERTY

(AFNOR CNCBC CEN/TC 346)

Conservation / Restoration: terminology and methodology
Buildings
Climate control
Collection management
Exhibition
Packaging and transport
Disaster management
Packaging
Conservation of photographic documents

Archiving and outsourced document management services on physical media

(AFNOR/Z40G without international mirroring structure)

AFNOR GROUP

AFNOR and its subsidiaries form an international group serving the public interest and sustainable development. The Group, with 1318 employees, 37 sites worldwide and 68,000 customers, has been designing solutions based on voluntary standards, a source of progress and trust, since 1926. Its vocation is to support organizations and individuals in spreading this confidence. This support is provided through 4 areas of expertise.

FOUR INTERNATIONAL BUSINESSES

afnor NORMALISATION	afnor ÉDITIONS	afnor COMPÉTENCES	afnor CERTIFICATION
As the driving force behind the French standardization system, AFNOR Normalisation supports and guides professionals in drawing up national and international voluntary standards.	The official distributor of voluntary standards in France, AFNOR Editions offers professional and technical information and monitoring solutions, designed for easy online use.	AFNOR Compétences offers a complete range of training, coaching and consulting solutions for all organizations and individuals wishing to guarantee, enhance and certify a market-recognized increase in skills.	AFNOR Certification provides services and engineering for the certification and assessment of products, systems, services and skills, delivered under brands such as AFAQ, NF, or European Ecolabel.

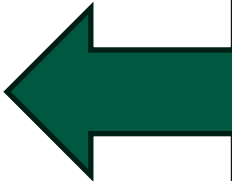# Standardisation of digital archiving in France: the players

27 member organisations of the CN171, mainly private sector representatives:

- **Manufacturers/providers**
- **Users:** Association des archivistes français, Comité français d'organisation et de normalisation bancaires (CFONB), etc.
- **Public administrations:** SIAF, Agence nationale pour la sécurité des systèmes d'information (ANSSI), Centre informatique national de l'enseignement supérieur (CINES)
- **Technical support**
- **Assessors:** AFNOR Certification...

Last norms from CN 171

- Recommendations for implementing Standard NF Z 42-026 with mobile equipment FD Z42-028, published 09/10/2024

- Definition and specification of services for the faithful digitisation of paper documents and control of these services NF Z42-026 published 29/03/2023

- Electronic archiving - Certificates FD Z42-027 published 16/02/2022

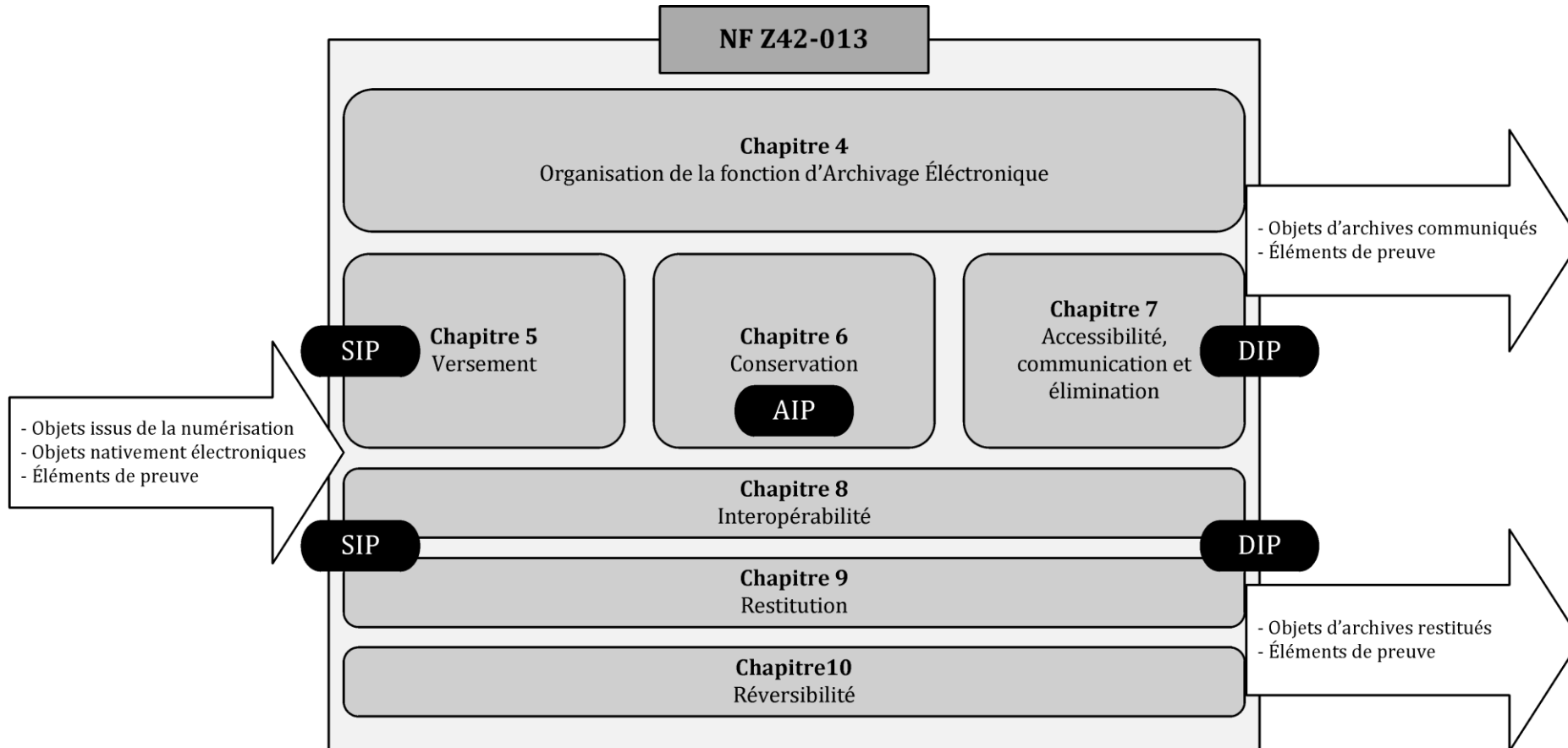- Electronic archiving - Recommendations and requirements NF Z42-013 published in october 2020

NF Service for the faithful digitization of paper documents (NF 544)

NF certification - Electronic archiving system (NF 461)

BASED ON OAIS

	Exigences	Recommandations
Fonctionnelles (FCT)	115	35
Organisationnelles (ORG)	121	48
Infrastructure (INF)	39	12
Total	275	95

Certification and Accreditation

- Origin: Preservation of public archives within the public sphere, but de facto recourse to third-party archiving probably began in the 1960s, with an increase in importance in the 1990s for practical and economic reasons.

- 1997: Possibility of outsourcing archives from government departments that can be disposed of in the long term, with initial security requirements (DAF AD 97-1 circular dated 16 January 1997).

- 1999: 1st version of NF Z42-013 standard (revised in 2009 and in 2020)

- 2009: Creation of a specific legislative and regulatory framework authorizing the outsourcing of current and intermediate public archives, subject to mandatory approval (French Heritage Code, articles L212-4 and R212-19 to R212-31).

- 2012: creation of certification NF 461 at the request of SIAF (Service Interministériel des Archives de France) in partnership with APROGED (Association des Professionnels pour l'Economie Numérique) and FNTC (Fédération Nationale des Tiers de Confiance).

- 2021: Modernization of the system by convergence of file assessment practices with AFNOR quality criteria, simplification and devolution of the approval procedure to the prefecture where the company is based for the decision, and to the director of the Departmental Archives for the examination (decree no. 2020-733 of 15 June 2020 applicable from 1st January 2021).

Certification scheme

Signature du contrat de certification

Cycle triennal

Envoi du dossier d'admission

pour l'étude de recevabilité

Instruction de la demande (pré audit)

Audit annuel

➔ Préparation
➔ Visite
➔ Rapport
➔ Écarts

Décision de certification

(avec action complémentaire éventuelle)

Délivrance du certificat
&
référencement sur le site marque-nf.com

Usage de la marque

Promotion & communication
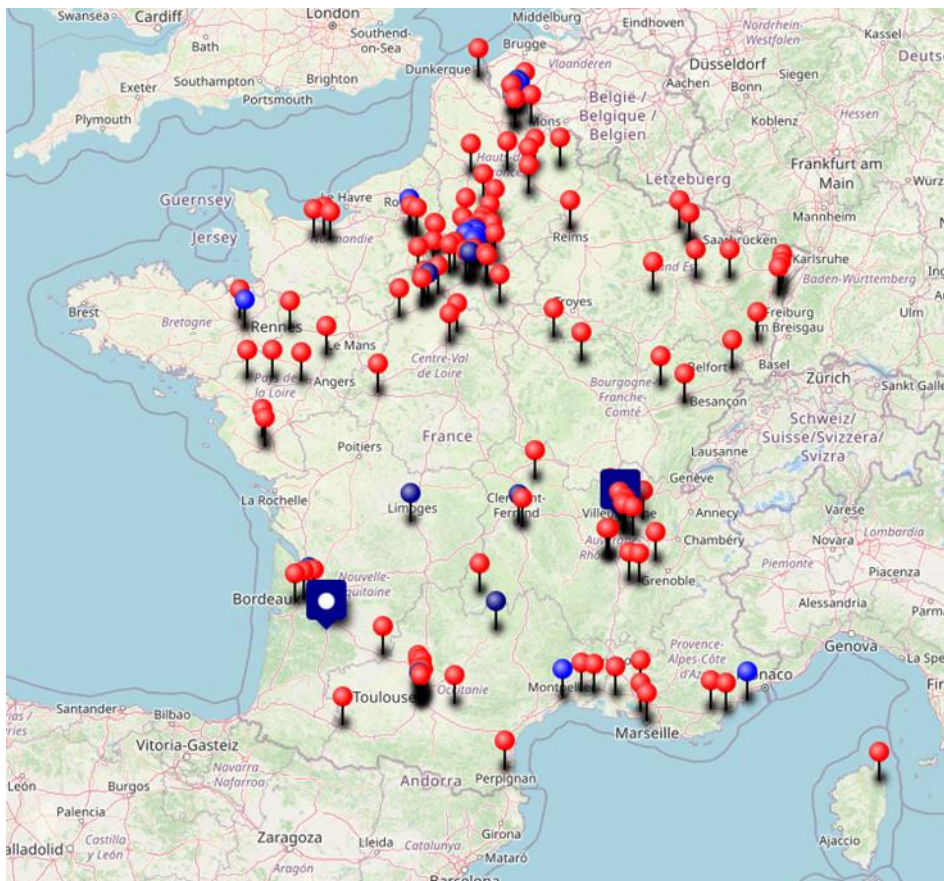
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Approved third-party archiving sites (April 2025)

23 approved third-party archivers for paper records
128 approved conservation sites

19 approved third-party archivers for digital records
42 approved server centers

30 certified NF 461

Challenges ahead:

How articulate NF 461 and certification for qualified archiving by maintaining or improving quality ?
Is it necessary to change some national regulations?

We are preparing by participation at :

- CN 171 working group : studying regulations concerned
- NF 461 : road map
- National agency for information systems security : meetings on trusted services

Is it wise to make a distinction between qualified and non-qualified digital archiving within the same archival institution?

RACI = to guide choices

Particularly in the context of shared EAS, questions arise about the nature of the responses to be put in place, the level of service to be adopted, and so on.
We therefore strongly recommend the use of the RACI method (responsible, accountable, consulted et informed) ou RAM (responsibility assignment matrix).
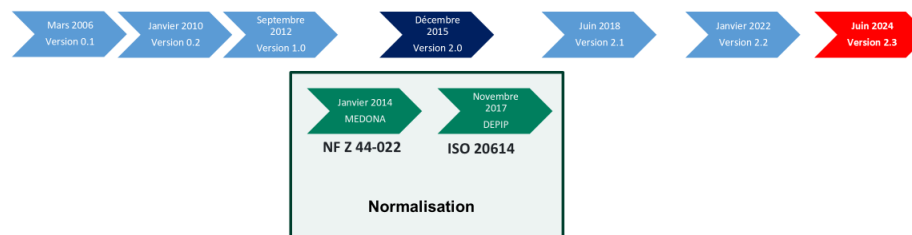
Interoperability = an answer

Whatever the situation, we are convinced that interoperability makes it possible to limit risks by ensuring good communication between different systems.

That's why we regularly upgrade our exchange standard to incorporate new requirements, such as accepting signed documents.

Les versions du SEDA

Mars 2006 Version 0.1	Janvier 2010 Version 0.2	Septembre 2012 Version 1.0	Décembre 2015 Version 2.0	Juin 2018 Version 2.1	Janvier 2022 Version 2.2	Juin 2024 Version 2.3

Janvier 2014 MEDONA → Novembre 2017 DEPIP

NF Z 44-022   ISO 20614

Normalisation

La version 2.3 du SEDA [juin 2024]

https://github.com/culturecommunication/seda/tree/seda-2.3

Les nouveautés

- Identifiants pérennes (objets et métadonnées descriptives)
- Distinction des *versions* et *usages* des objets
- Signature numérique des documents
  - Ajout du bloc *SigningInformation*.
  - Dépréciation « douce » du bloc *SignatureGroup*

Présentation détaillée des nouveautés

https://raw.githubusercontent.com/culturecommunication/seda/seda-2.3/doc/seda-2.3-documentation_sommaire.pdf

Thank you

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