ANVUR - National Agency for the Evaluation of Universities and Research Institutes

Digital Preservation Handbook
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1. Introduction

1.1 Purpose and scope of the document

This document is the Digital Preservation Handbook required by the Agid Guidelines on the production, management and preservation of Digital documents in force since 10 September 2020 (hereinafter referred to as the Agid Guidelines) and by the Digital Administration Code (Legislative Decree 82/2005).

As required by the Agid Guidelines, this document "must detail the Administration, the parties involved and their roles, the operating model, the process description, the description of the used architectures and infrastructures, the adopted security measures and any other information useful for the management and verification of the functioning, over time, of the Digital Preservation System".

In the event of inspection by the regulatory authorities in charge, the Digital Preservation Handbook allows an easy development of all control activities.

The Digital Preservation Handbook integrates and details the PA Digitale Preservation System Handbook of the external Data Custodian, reference document available on the websites:
https://www.padigitale.it/
https://www.agid.gov.it/it

Refer to PA Digitale Preservation System Handbook by for detailed information about:
- organizational structure and responsibilities of the Data Custodian;
- formats and metadata associated with stored objects;
- process of preservation and processing of deposit, filing and distribution packages;
- technical detail of the storage system;
- monitoring and supervision carried out by the Data Conservator;
- provisions in force in the places where the documents are kept.

As far as the types of objects to be preserved, the relationships with the PA Digitale which carries out the Preservation process, information security and data processing are concerned, this Handbook is integrated with the documents:
- Contract Detail, technical attachment and integral and substantial part of the contract for the assignment of the IT Storage Service of documents, that specifies the characteristics of the types of stored documents;
- Corporate information security policy, that describes the Information Security Management System (ISMS) of PA Digitale;
- Policy on the processing and protection of personal data;
- QA policy.

The documents are available at:
https://www.padigitale.it/

1.2 Handbook principles

The Digital Preservation Handbook is aimed at:
- providing a clear presentation of the Preservation System and the provided processes;
- including relevant information, with a sufficient level of detail in order to facilitate inspections, avoiding complex and unnecessary technical information.

The Digital Preservation Handbook is adopted by the Administration with a formal provision and is published on the institutional website, in the Transparent Administration Section.
1.3 Legislation and reference standard, terminology

The main regulatory references relating to conservation are:
- Digital Administration Code DLgs 82/2005

For further information and as far as the terminology (glossary and acronyms) and the standards in use are concerned, please refer to the *PA Digitale Preservation System Handbook*. 
2. Organizational model, roles, and responsibilities

2.1 Organizational model
The organizational model adopted is outsourced: the Administration entrusts the preservation service to an external Data Custodian, pursuant to art. 34, par. 1-bis of the Digital Administration Code DLgs 82/2005, without prejudice to the competences of the Ministry of Culture, pursuant to the Code of Cultural Heritage and Landscape DLgs 42/2004.

2.2 Administration, Data Owner
The Administration, ANVUR - National Agency for the Evaluation of the Universities and Research Institutes, is the Owner of the stored digital documents and folders. According to the adopted organizational model, ANVUR entrusts the management of the IT storage to the Data Custodian, PA Digitale, in accordance with the provisions of the relevant legislation and as specified in the service contract.

Administration: ANVUR - Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca
Address: Via Ippolito Nievo, 35 00153 Roma
Website: https://www.anvur.it
Tax ID Code: 97653310587

2.3 Data Preservation Manager
The Data Preservation Manager operates in accordance with the provisions of art. 44, par. 1-quater, of the Digital Administration Code DLgs Decree 82/2005.

The Data Preservation Manager:
- is a role envisaged by the organization chart of the Data Owner (ANVUR);
- is a formally designated manager or internal officer with suitable legal, IT and archiving skills;
- can be performed by the document management officer or by the document management coordinator, if appointed.

The Data Preservation Manager of the Administration defines and implements the overall policies of the Preservation System and manages it with full responsibility and autonomy, in relation to the adopted organizational model. The Data Preservation Manager is a natural person, permanently included in the staff of the Administration that owns the data to be preserved; the legislation assigns him/her tasks concerning the functions, fulfilments, activities and responsibilities of the preservation process. The main objective of the Data Preservation Manager is to define and set up methods for processing the documentation subject to storage.

Agid Guidelines emphasize the role of the Data Preservation Manager that is fundamental within the preservation process, together with his/her delegates or entrusted third parties. When the preservation service is entrusted to a Data Custodian, the activities performed by the Data Preservation Manager are delegated, all or in part, to the Data Custodian’s Preservation Service manager. The general legal responsibility on the preservation processes cannot be delegated and remains in the hands of the Administration’s Data Preservation Manager.

The Data Preservation Manager prepares the storage handbook and takes care of its periodic updating, following significant regulatory, organisational, procedural or technological changes.

The activities attributed by Agid Guidelines to the Data Preservation Manager and possibly entrusted to the Data Custodian are:
- to define the preservation policies and of the functional requirements of the Preservation System, in accordance with current legislation and taking into account international standards, based on the specificities of the digital objects to be stored (Digital documents and Digital aggregations), the nature of the activities that the Data Owner performs and of the characteristics of the adopted Digital document management system;
• to manage the IT storage process and compliance with current legislation over time;
• to generate and sign the data delivery report;
• to generate and sign the Data distribution package with digital signature or qualified electronic signature;
• to monitor the correct functionality of the IT storage system;
• to verify periodically, with frequency not exceeding five years, the integrity and legibility of the Digital documents and of the documentary aggregations of the archives;
• in order to ensure the conservation and access to Digital documents, to adopt measures to promptly detect any degradation of the storage systems and records and, if necessary, to restore correct functionality, adopting similar measures against the obsolescence of formats;
• to provide for the duplication or copy of Digital documents in relation to the evolution of the technological context;
• to prepare the necessary measures for the physical and logical security of the IT storage system;
• to ensure the presence of a public official, in the cases in which his/her intervention is required, guaranteeing him the assistance and resources necessary to carry out his/her activities;
• to ensure that the competent bodies envisaged by current regulations receive the assistance and resources necessary to carry out the verification and supervisory activities.

Data Preservation Manager Valter Brancati,
Administration: ANVUR - Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca
Deed of appointment: resolution n. 172 of 17 July 2019

The Data Preservation Manager, under his/her own responsibility, can delegate the performance of his/her activities or part of them to one or more subjects within the Administration, that have specific skills and experience.

Administration: ANVUR - National Agency for the Evaluation of the Universities and Research Institutions
Delegates for consultation and technical supervision.

2.4 Data Custodian

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions, according to the provisions of the Digital Administration Code DLgs 82/2005 and the Agid Guidelines, has entrusted the performance of conservation activities to PA Digitale which carries out these activities through the provision of the service called CDAN - Digital preservation by law.

Company name: PA Digitale SpA
Registered office: Pieve Fissiraga (LO), via Leonardo da Vinci 13
Operational offices: Arezzo (AR), via Piero Gobetti 21/A; Roma (RM), via Filippo Caruso 23; Napoli (NA), via Giovanni Porzio 4 - Centro Direzionale Isola E3
website: web https://www.padigitale.it/
E-mail: amministrazione@padigitale.it
Pec protocollo.pec.padigitalespa@legalmail.it
Telephone: 0371-5935460, 0371-5935780
Tax ID Code: 06628860964
Economic and Administrative Index No (REA Number): 1464686

The objectives of PA Digitale through the CDAN service are:
• to ensure conservation, archiving and management of digital documents and folders;
• to provide access services based on stored digital content;
• to provide support, training and advice to the Data Owner for the dematerialization processes.
PA Digitale carries out the activities entrusted by the Administration Data Preservation Manager in accordance with the provisions of the contract, the contractual technical annexes and the provisions of the Agid Guidelines. PA Digitale assigns the activities to the preservation service officer and to a number of people that, by virtue of their expertise and experience, guarantee the correct execution of the preservation processes defined by the rules, the contract and the Digital Preservation System Handbook. For details on the internal responsibilities of the Data Custodian, please refer to the PA Digitale Preservation System Handbook.

The identification details of the officer in charge of the CDAN storage service of PA Digitale (surname, first name, tax code) are also reported in the information associated with the stored documents. The activities of the Data Preservation Manager have been assigned by ANVUR to PA Digitale upon signing the contract of adhesion to the CDAN service. Conservation is carried out by entrusting PA Digitale with the role and tasks set out in the document appointing the Data Preservation Service Manager.

2.5 Producer of the data delivery packages

The document management officer performs the role of Producer of the data delivery packages and sends them to the Preservation System of the PA Digitale Custodian.

Data delivery package means: a finite set of several files (possibly organized in a sub-tree structure within a file system) that collectively as well as individually constitute a unitary and self-consistent information content and that is sent by the Producer to the IT storage system.

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions provides for:

- generating and transmitting the data delivery packages to the IT storage system in the manner and with the formats agreed with the Data Custodian and described in the PA Digitale Preservation System Handbook;
- verify the successful outcome of the transfer operation to the Digital Preservation System by having read the data delivery report produced by the same Digital Preservation System itself.

2.6 User

The user is the subject who can request access to the IT storage system to acquire the information of interest within the limits established by law. This information is provided by the IT storage system according to the PA Digitale Preservation System Handbook.

The Digital Preservation system allows authorized subjects direct access, even remotely, to the stored Digital documents and allows the production of a distribution package that can be acquired directly by authorized subjects.

Distribution package means: a finite set of multiple files (possibly organized in a subtree structure within a filesystem) that collectively as well as individually constitute a unitary and self-consistent information content and that is sent by the IT storage system to the User in response to his/her request for access to stored objects.

The IT Storage officer is identified as a User of the IT Storage System. The Administration can enable additional operators as Users.

The enabling and authentication of users is base on the user management procedures indicated in the Security Plan of the Digital Preservation System, and in compliance with the security measures provided for by the Code regarding the protection of personal data DLgs 196/2003 (2018 update).
3. Creation and management of digital documents and folders

3.1 Creation and management of digital documents and folders to be preserved
ANVUR - National Agency for the Evaluation of the Universities and Research Institutions forms and manages digital documents and folders following the provisions of the Digital Administration Code DLgs 82/2005 and the Agid Guidelines, using the IT tools available, including applications *Urbi* by PA Digitale directly in communication with the CDAN Digital Preservation System.

3.2 Controls
ANVUR - National Agency for the Evaluation of the Universities and Research Institutions ensures that the documents sent for storage are static and unchangeable, so that the content cannot be altered during the storage and access phases and is therefore unchangeable over time.

3.3 Management of anomalies
The CDAN archiving system is configured to accept documents in pre-established formats and with defined metadata. When one of these conditions fails, making it impossible to accept the document, CDAN leaves document as incoming without uploading it in the IT storage system and simultaneously reports the anomaly to the Administration. The processing of anomalies takes place using a web interface available and accessible to those responsible for monitoring the deliveries to the IT storage system.

3.4 Format of electronic documents
ANVUR - National Agency for the Evaluation of the Universities and Research Institutions uses the formats suitable for long-term preservation to form the documents to be preserved (DPCM 3/12/2013 Technical rules for the IT protocol, Annex 2 Formats up to 1st January 2022 and Agid Guidelines, Annex 2 File formats and transfer, for the following period) and defined in the *PA Digitale Preservation system Handbook*.

3.5 Digital documents’ Metadata
ANVUR - National Agency for the Evaluation of the Universities and Research Institutions associates the documents with the metadata required for Digital administrative documents (DPCM 3/12/2013 Technical rules for the IT protocol, Annex 5 Metadata up to 1 January 2022 and Agid Guidelines, Annex 5 The metadata, for the following period) and described in the *PA Digitale Preservation System Handbook*. Any further additional metadata are identified and specified in the document Contract Details, technical attachment, and integral and substantial part of the contract for the assignment of the IT Storage Service of documents, that specifies the characteristics of the types of documents stored by the Administration.

3.6 Digital dossiers’ Metadata
ANVUR - National Agency for the Evaluation of the Universities and Research Institutions associates the dossiers with the metadata required for Digital document aggregations (DPCM 3/12/2013 Technical rules for the IT protocol, Annex 5 Metadata up to 1 January 2022 and Guidelines of Agid, Annex 5 The metadata, for the following period) and described in the *PA Digitale Preservation System Handbook*. 
4. Digital Preservation System

4.1 General description of the CDAN Digital Preservation Service

The CDAN preservation service, in compliance with current legislation, maintains and guarantees the characteristics of authenticity, integrity, reliability, readability, availability and legal validity of electronic documents over time. The service is provided in SaaS (Software as a Service) mode through a web interface available and accessible to the resources in charge identified by the Administration.

CDAN integrates the document production and management systems and tools used by the Administration, intervening only in the conservation phase for the documents and folders that the Administration chooses to keep. The Urbi PA Digitale applications for the production and management of digital documents and folders communicates with CDAN.

The delivery into the storage system of digital documents and folders is made only by operators authorized by the Administration, using the methods made available by PA Digitale also through Urbi applications.

The preservation process is divided into the following phases:
1. Acquisition by the storage system of the Data delivery package for its processing;
2. Verification the consistency of the data delivery package and the objects contained with the procedures set out in the Digital Preservation System Handbook, with the preservation formats and with any specific customizations made for the Administration;
3. Preparation of confirmation report;
4. Possible refusal of the data delivery package, if anomalies and/or non-compliance have been detected by the verification phase (phase 2);
5. Reception of the objects to be stored;
6. Verification of the objects to be stored;
7. Automatic generation of the data delivery report relating to each data delivery package, containing a unique identifies and a time reference, based on the Coordinated Universal Time (UTC), and one or more imprints, calculated on the entire contents of the data delivery package;
8. Signing of the Data delivery report with digital signature by PA Digitale;
9. Preparation and management of the archiving package;
10. Signing of the archiving package with digital signature by PA Digitale and timestamping the relative imprint (Closure of the archiving package);
11. When requested, preparation and signing with digital signature of PA Digitale of the distribution package to be exhibited to the User;
12. When requested, production of electronic duplicates made at the request of the Administration, in compliance with the provisions of current legislation;
13. When requested, elimination of the archiving package from the archiving system;

For a detailed description of the CDAN storage service, please refer to the PA Digitale Preservation System Handbook.

4.2 Digital Preservation System

The logical structuring of the Digital preservation application created and managed by PA Digitale has a three-level architecture:
• The Presentation Level constitutes the interface through which the Administration operator or the Urbi PA Digitale applications can interact with the Digital Preservation System;
• The Management Level is responsible for defining and managing all the operating logics of the system;
• The Data Layer is instead responsible for physical access to system detail.

The technological components, i.e., the IT tools supporting the functions of the Digital Preservation System, that implement the conservation system, are:
  • client of the operator that uses the storage service; it is the primary and essential component for interacting with the Digital Preservation System and can be represented by the browser or by the Urbi applications by PA Digitale that communicates with the system for the execution of automated operations;
  • web server, server that deals with access management, traffic control, filtering of any anomalous requests, performance control, etc.
  • preservation application and database, a digital preservation program that runs on a dedicated application server;
  • database, server responsible for storing data and information;
  • digital signature service provider, integrated certified body allowing automatic digital signing;
  • time-stamp service provider, integrated certified body allowing automatic timestamping;
  • backup manager, automatic system for periodically saving data from the Digital Preservation System to guarantee the protection of information;
  • disaster recovery manager, automatic system for periodically saving the storage system data in a site different from the primary site; this guarantees data integrity even in the event of catastrophic events affecting the primary site;
  • internet network, a network which allows access to the Digital Preservation System and that allows the interconnection of the various components.

For the description of the physical components and the monitoring, control, and evolution procedures of the Digital Preservation System, please refer to the PA Digitale Preservation system Handbook.

4.3 Search procedures and exhibition of preserved documents

The functions made available to Users identified by the Administration allow them to autonomously request the distribution packages and to access specific areas of the web application to download the packages made available by the system into their workstation.

Distribution package means: a finite set of multiple files (organized in a subtree structure within a filesystem) that collectively as well as individually constitute a unitary and self-consistent information content and that is sent by the IT storage system to the User in response to his/her request for access to stored objects.

Data exhibition can take place through special functions of the PA Digitale software:
• Data exhibition through the Digital Preservation System;
• Data exhibition through Urbi;
• The production of electronic duplicates of stored documents can take place following a request from the Urbi environment or from a request made directly within the IT storage system.

For a detailed description of how to display and export distribution packages, see the *PA Digitale Preservation System Handbook*.

### 4.4 Strategies adopted to guarantee preservation

The Data Custodian, PA Digitale, carries out the readability check according to the following methods:

- **readability check**, that consists in verifying that the individual bits of the objects are all correctly readable, guaranteeing the good condition of the IT storage system
- **integrity check**, that consists in recalculating the hash of each object and verifying that it corresponds to the hash stored in the system, reasonably assuring the integrity of the objects, since the hash function returns a different value even if only a bit has been modified.

For a detailed description of the legibility control methods, refer to the *PA Digitale Preservation System Handbook*. 
5. Preserved Documents

5.1 Typologies of preserved documents

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions agrees with PA Digitale on the types of documents (document classes) to be preserved. The Digital folders are also included, stored as files in xml format. The documents typologies managed by the CDAN system are described in detail in the document Contract Detail, technical attachment, and integral and substantial part of the contract for the assignment of the IT Storage Service of documents. The technical annex for each type of stored document defines formats, metadata, digital subscription, data delivery frequency and software/other information for viewing the documents.

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions preserves the following types of documents through the CDAN service:

<table>
<thead>
<tr>
<th>Document typology</th>
<th>Description</th>
<th>Activation date</th>
<th>Allowed formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata integration</td>
<td>Metadata integration</td>
<td>11-12-2016</td>
<td>XML Metadata integration</td>
</tr>
<tr>
<td>[Analog] Generic document</td>
<td>Generic document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
<tr>
<td>[Analog] Generic protocol document</td>
<td>Generic protocol document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
<tr>
<td>[Digital] Generic document</td>
<td>Generic document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
<tr>
<td>[Digital] Generic protocol document</td>
<td>Generic protocol document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
<tr>
<td>[Digital] Active electronic invoice</td>
<td>Active electronic invoice</td>
<td>02-08-2016</td>
<td>.XML (FE PA)</td>
</tr>
<tr>
<td>[Digital] SDI notification</td>
<td>SDI notification</td>
<td>02-08-2016</td>
<td>.XML (FE PA)</td>
</tr>
<tr>
<td>[Digital] FAE PEC</td>
<td>FAE PEC</td>
<td>02-08-2016</td>
<td>FAE e. EML e .XML</td>
</tr>
<tr>
<td>[Not Compliant] Generic document</td>
<td>Generic document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
<tr>
<td>[Not Compliant] Generic protocol document</td>
<td>Generic protocol document</td>
<td>29-09-2016</td>
<td>All formats</td>
</tr>
</tbody>
</table>

For the description and characteristics of the typologies of documents stored in the CDAN system, please refer to the
document Contract Detail and to the *PA Digitale Preservation System Handbook*. 
6. Responsibility for the preservation process

6.1 Model of operation

The Digital Preservation System operates according to the organizational models explicitly agreed by the Administration with the PA Digitale.

Storage is not carried out within the organizational structure of the Administration, owner of the documents and Digital files to be stored, but is entrusted to PA Digitale, that carries out the formally assigned activities, within the limits of the same and for which operates autonomously and is responsible for them.

The sequence of activities, from the preparatory phase to the formation of digital documents and folders to their conservation, is schematically represented below:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description and MACRO PHASES of the preservation process</th>
<th>Activities charged to the Administration</th>
<th>Activities charged to PA Digitale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Production/redaction/issuing of digital documents and folders and contextual generation and association of the related metadata</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>Production of the Data delivery packages</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>Storage of the Data Delivery package and related digital documents and folders with the related metadata. The Administration keeps a copy of the documents sent in storage at least until the Data delivery report is made available by the storage system.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Acquisition by the Digital Preservation System of the Data delivery package produced by the Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Verification of the consistency and compliance of the Data delivery package and the objects described therein with the requirements of the IT storage system Handbook and their customizations</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Refusal of the data delivery package, in case of anomalies highlighted by the controls referred to in phase 5</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Generation, even automatically, of the Data delivery report for each Data delivery package</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Signature of the Data delivery report and their availability to the Administration</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>Recovery of the digitally signed data delivery report</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Preparation and management of the archiving package</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>“Closure” of the archiving package with digital signature by PA Digitale and time stamping</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Requests for the exhibition of stored IT documents</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Preparation of the distribution package for the exhibition requested by the user with all the elements necessary to guarantee the integrity and authenticity of the package</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Request of Digital duplicates by the Administration</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Production of electronic duplicates at the request of the Administration</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Closure of the conservation service</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions defines with PA Digitale the configuration of the CDAN service based on specific needs, agreeing on the management and use methods as well as the quantity and type of documents to be kept.
For a detailed description of the CDAN storage service operating model and the types of envisaged tasks, please refer to the PA Digitale Preservation System Handbook.
7. Security measures

7.1 Security measures of the Administration

ANVUR - National Agency for the Evaluation of the Universities and Research Institutions provides for the security measures in the stages of processing, redaction and management of the Digital documents and folder to be preserved. The web interface for managing documents sent for storage (dedicated to checking the status of documents, displaying them, etc.) can only be accessed by users identified by the Administration and with access privileges. Before sending the documents to the Digital preservation System, the Administration ensures that the documents are free from any alteration agent, therefore the documents to be stored must not contain viruses, macro-instructions in internal commands that, following certain events, can automatically generate changes or variation of the document’s data, executable codes in instructions, not always visible to the operator, that allow the computer to modify the content of the Digital document.

The Conservator declines all responsibility if mutual safeguarding is not respected.

7.2 Security measures of the Digital Preservation System

The CDAN system complies with the safety requirements prescribed by law. As required by current regulations on the subject, PA Digitale adopts suitable and preventive security measures to minimize the risks of:

- destruction or loss, even accidental, of Digital documents;
- damage to the hardware resources on which the Digital documents are recorded and to the premises where they are kept;
- unauthorized access;
- data processing not permitted by law or company regulations.

The security measures adopted ensure:

- the integrity of Digital documents, to be understood as safeguarding the accuracy of the data, defending them against tampering or modifications by unauthorized parties;
- the availability of data and electronic documents to be understood as the certainty that access is always possible when necessary; therefore guarantees usability of Digital documents, avoiding the loss or reduction of data, even accidental, by using a backup system;
- the confidentiality of electronic documents to be understood as a guarantee that the information is accessible only by authorized subjects and as a protection of transmissions and as access control.

For a description of the security measures and infrastructures, see the PA Digitale Preservation System Handbook and the Company Policy document on Information Security.
8. Processing of personal data

8.1 Measures for personal data protection and processing

In the phases of creation, digitization, processing, and delivery for storage of electronic documents, the Administration takes the utmost care in compliance with the provisions of the Code regarding the protection of personal data DLgs 196/2003 (2018 update).

In relation to personal data processing of, PA Digitale guarantees the protection of data subjects in compliance with the provisions of EU Regulation 2016/679, regulated in Italy by DLgs 101/2018. In particular, the data subjects are provided with the information pursuant to articles 13 and 14 of the provisions. In the provisions, the Administration is informed about the rights of access to personal data and other rights (Article 15 of EU Regulation 2016/679). The ownership of the processing of personal data contained in the documents to be stored lies with the Administration, as their producer and owner.

PA Digitale is appointed as "external manager" of the processing of personal data necessary for carrying out the Digital preservation process. Therefore, in the processing of the data, PA Digitale is committed to comply with the instructions and to carry out the tasks indicated by the Administration.

The PA Digitale personal data processing manager assumes responsibility for guaranteeing compliance with current provisions on personal data processing and for guaranteeing that the processing of data entrusted by the Administration takes place in compliance with the instructions given by the owner of the processing of personal data, with a guarantee of security and confidentiality.

PA Digitale, in its role of Data Custodian, processes personal data with automated tools for the time strictly necessary to achieve the purposes for which they were collected. Specific security measures, as described in the PA Digitale Preservation System Handbook, are observed to prevent data loss, illicit or incorrect use and unauthorized access.

The purposes of the treatment are:

- **Provision of the IT storage service for Digital documents**
  Collected data is used to activate the CDAN Digital Preservation Service. PA Digitale uses the data collected to carry out the activity connected to and/or deriving from the Administration Digital document preservation service.

- **Purposes of a commercial nature**
  PA Digitale may use the e-mail provided by the Administration to send communications relating to products and/or services like those purchased by the Administration, without prejudice in any case to the possibility of the interested party to oppose such treatment.

- **Other Forms of Data Usage**
  For reasons of public order, in compliance with the provisions of the law for the security and defence of the State, for the prevention, detection and/or repression of crimes, the Digital documents and data provided to PA Digitale may be communicated to public subjects, such as law enforcement agencies, public authorities and judicial authorities for carrying out the activities within their competence.

For a detailed illustration of personal data processing carried out by PA Digitale, please refer to the document Policy on the processing and protection of personal data and the PA Digitale Preservation System Handbook.