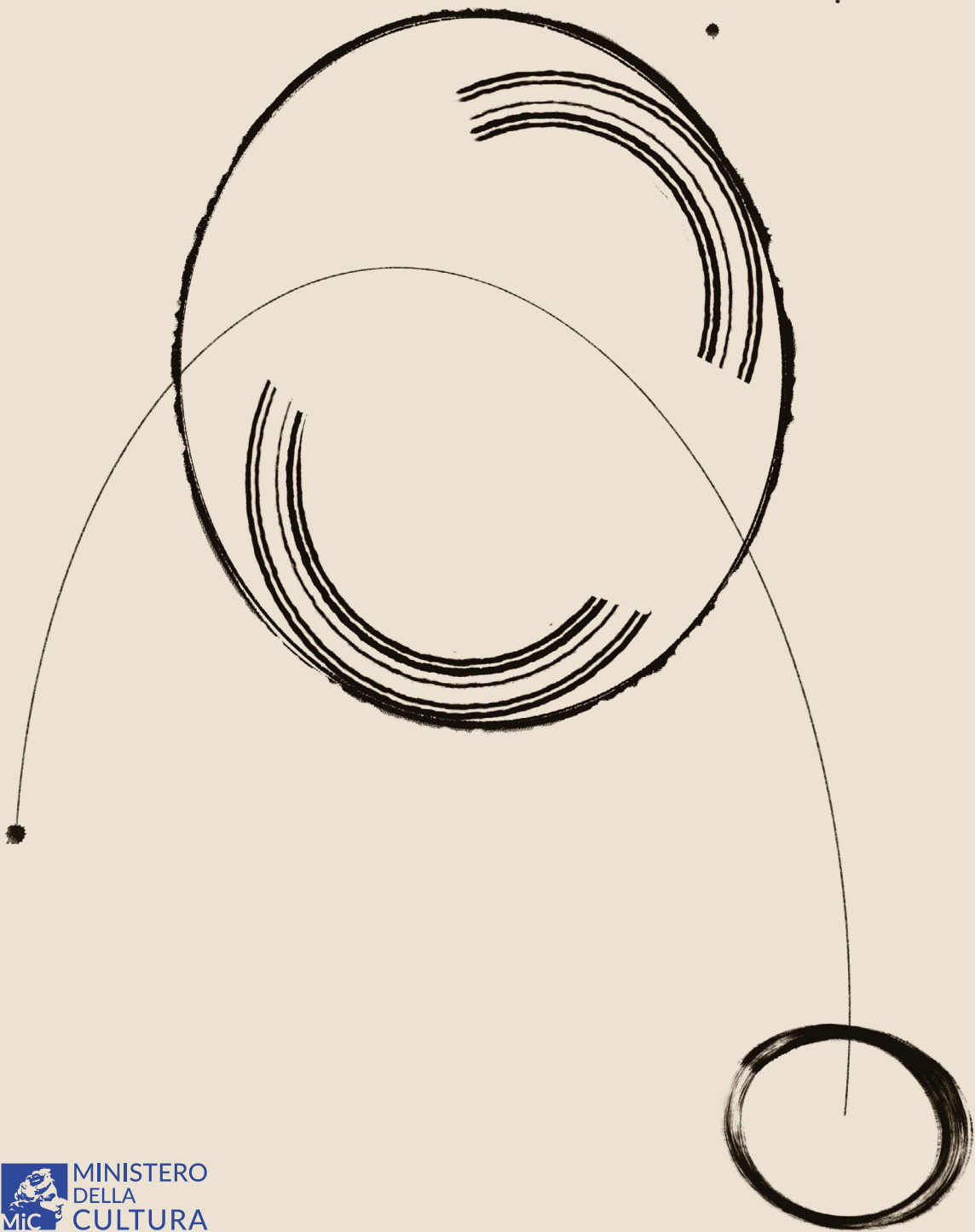


**NATIONAL PLAN
FOR THE DIGITALISATION
OF CULTURAL
HERITAGE
2022-2023**

Executive Summary

Version 1.1



National Plan for the Digitalisation of Cultural Heritage

The National Plan for the Digitalisation of Cultural Heritage – NPD (*Piano nazionale di digitalizzazione del patrimonio culturale*: PND) represents the strategic vision with which the Italian Ministry of Culture, working in coordination with the Regions, promotes and organises the process of digital transformation during the five-year period 2022-26 in the various sectors working in the cultural sphere. Above all, the initiative is directed at museums, archives, libraries, superintendencies, institutes and public cultural sites that preserve, safeguard, manage and/or enhance cultural assets. For this reason, the initiative also constitutes the strategic, intellectual and technical point of reference for achieving the objectives of the National Recovery and Resilience Plan (NRRP).

The project is the result of an activity which saw the involvement of various cultural institutions as well as a variety of figures who participated in public consultation sessions. As a result, the NPD represents a useful methodological and operational beacon for all institutions and professionals in both the public and private sectors who in their work recognise the values described here.

The present document is not prescriptive: each agency may develop its own digital strategy, provided that it falls within a shared vision of principles and methodologies and that it respects national norms and established guidelines for its particular sector.

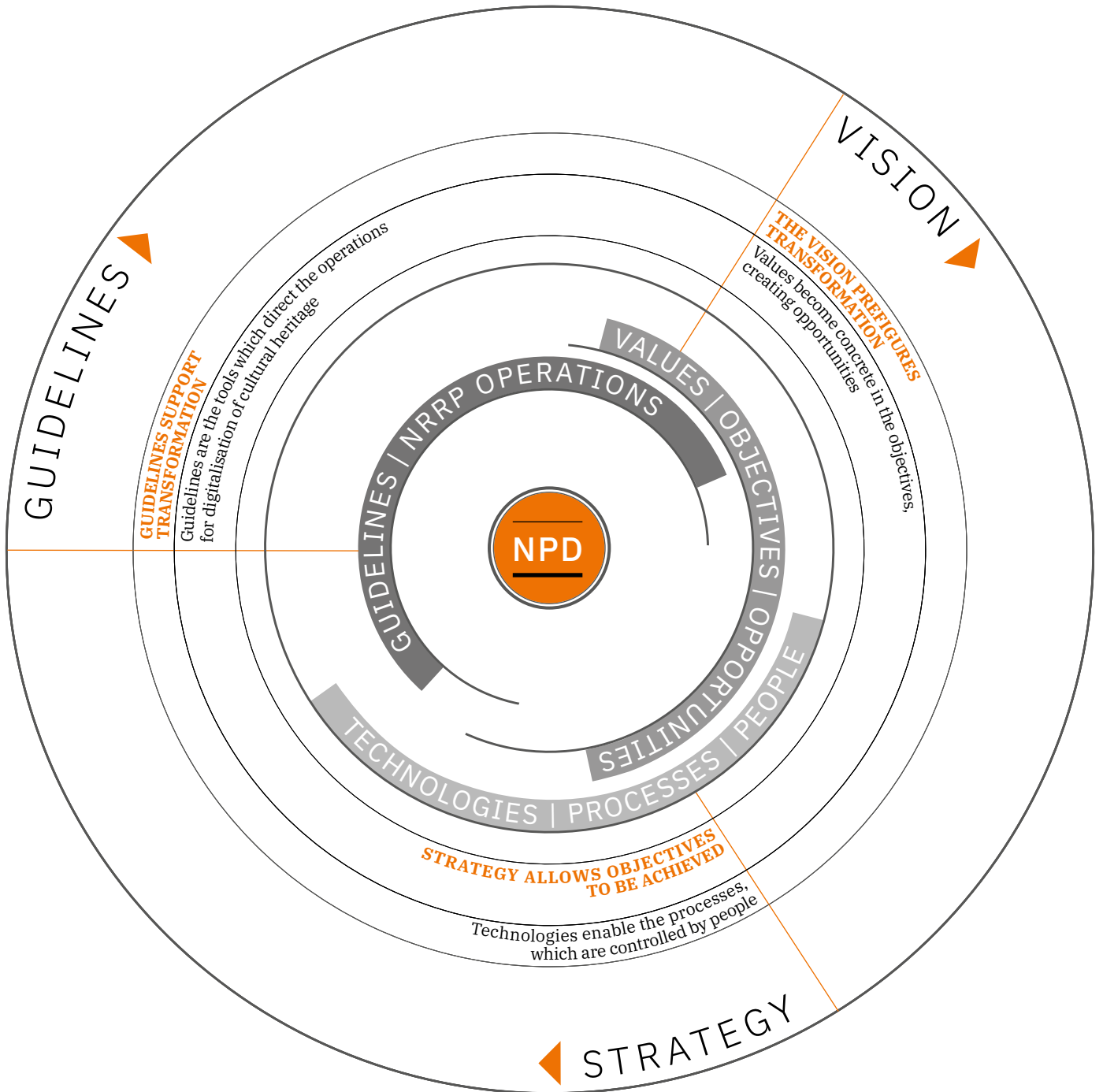
The NPD is articulated in three interrelated sections that together form a unified process:

- **vision** (see page 4), which prefigures the transformation and opportunities for change and indicates the long-term objectives;
- **strategy** (see page 7), which defines the path for implementing and achieving the objectives;
- **guidelines** (see page 10), which are presented as operational tools that support the planning and execution of the activities connected with the digitalisation of cultural heritage and the digital transformation of cultural sites and institutes.

↔ see figure 1

1 – This document was compiled in the context of technical panels which saw the participation of 24 institutes of the Ministry of Culture, representing all the various disciplinary and regional actors. Public feedback was gathered through the portal *ParteciPa*, the platform of the Italian government dedicated to public consultation and participation processes (<https://partecipa.gov.it/processes/piano-nazionale-digitalizzazione-patrimonio-culturale/f/144/>). Comments were collected and summarised in a document available on the same platform. The entire process is described on the Digital Library website (<https://digitallibrary.cultura.gov.it/il-processo/>).

FIGURE 1.
GRAPHIC REPRESENTATION OF STRUCTURE AND CONTENTS OF THE NPD



1. VISION

The National Plan for the Digitalisation of Cultural Heritage aims to take advantage of the opportunities offered by the digital world to create a cultural ecosystem capable of increasing potential demand and broadening accessibility for various sectors of the public.

In this light, the NPD endeavours to build on a foundation made up of **shared values** and **objectives for change** which correspond to the stages of the process of digital transformation. This foundation then provides **new opportunities throughout the cultural landscape**.

The operations for the digitalisation of individual cultural institutions can become mutually reinforcing in a context of collective action based on a shared vision. Such actions are based on a clear vision shaped by public policies and rules, as they build on opportunities offered by technological innovation.

Values

The founding values of the vision behind the NPD revolve around the key concepts of cultural landscape, digital cultural heritage and relationships. These values create a shared context in which actors are able to operate. They further constitute the preconditions for achieving specific objectives for change within a long-term project. In this framework, the public administration plays a fundamental role in preserving cultural assets and making them accessible to the community.

Objectives

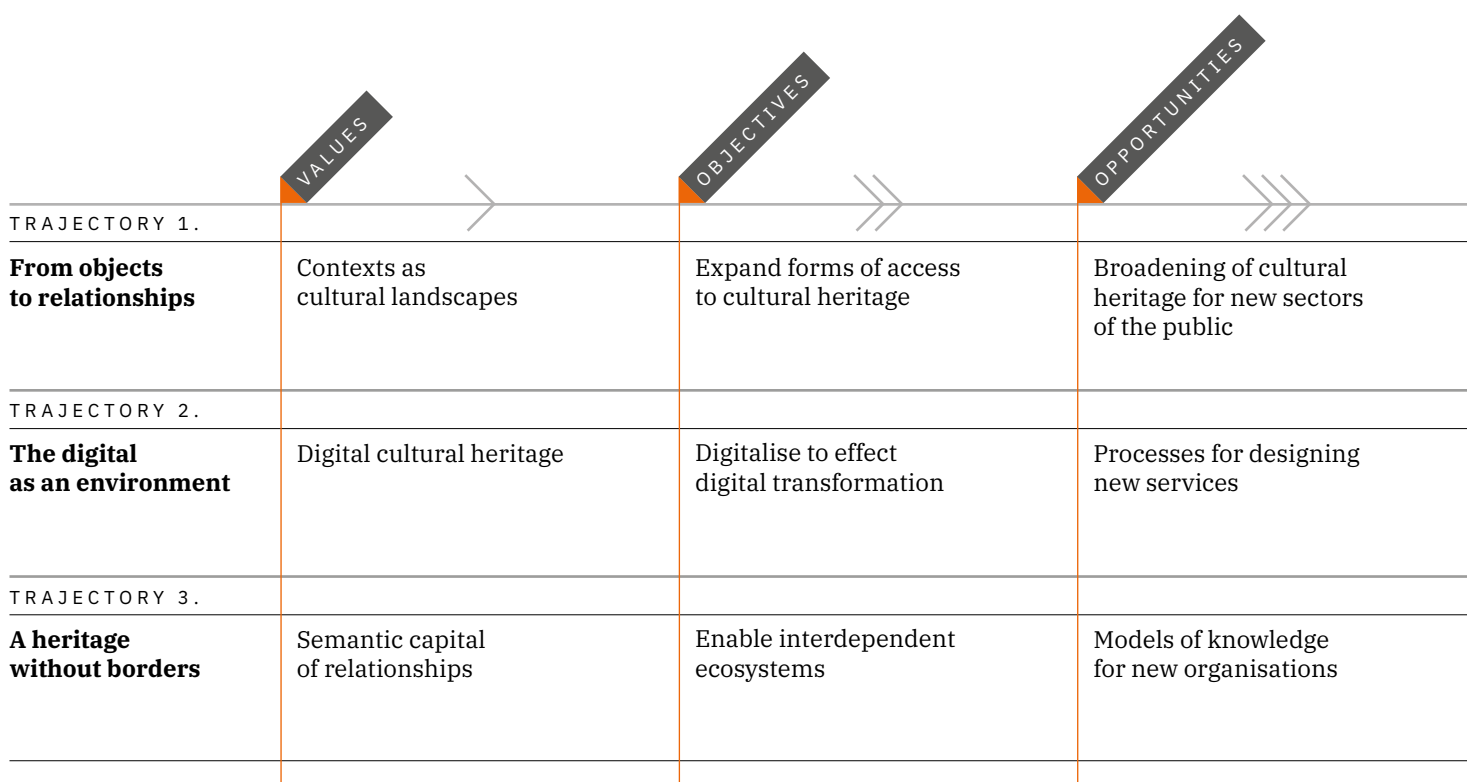
The process of the digital transformation of cultural heritage and institutions has the following objectives:

- expand the forms of access to the digital heritage to improve cultural inclusion;
- expand digitalisation operations to include user services in end-to-end processes, in addition to the cultural assets;
- broaden forms of cooperation and interoperability of data within the ecosystem, in light of the need for exchange between digital platforms for international research which meet the needs of a variety of scientific communities.

Opportunities

The values at the base of the digital transformation of cultural heritage give rise to objectives and actions that offer opportunities for change. The consolidation of the digital ecosystem indeed allows different sectors of the public to participate in the operations of developing the digital heritage, in their capacity as co-creators of content, services and values in accordance with the principles of universal design. This possibility requires the current organisational paradigm to evolve in the direction of new management models.

FIGURA 2.
CONTENTS OF 'VISION' ELEMENT OF THE NPD, FOREGROUNDING THE RELATIONSHIPS BETWEEN THE SECTIONS



To describe the digital transformation process, three trajectories of change were identified which interpret the dynamics at work in the project. The trajectories establish relationships of reciprocal interdependence between the values, objectives and opportunities of the digital transformation.

TRAJECTORY 1: “From objects to relationships”

This trajectory traces the conceptual path of the digital objects, considered as individual assets, toward the perception and recovery of their contexts. It aims to integrate different aspects – things, environments, immaterial elements – into cultural landscapes. The notion of ‘cultural landscape’ is used here to indicate the objective of expanding different forms of access to cultural heritage. This opportunity for change gives rise to the concrete possibility of disseminating this heritage among sectors of the public who have until now been excluded from ‘traditional’ forms of cultural consumption.

TRAJECTORY 2: “The digital as an environment”

This trajectory treats the digital cultural heritage in the fields of conservation, research and enhancement in its own right, irrespective of the relationship to the original physical objects. The aim is to digitise not only for the purposes of reproduction or cataloguing but to effect digital transformation in a cultural sense, stimulating interest and experimental methodological approaches that aim at original research. Once these experiences take shape, the opportunity for change may lead to the creation of new services.

TRAJECTORY 3: “A heritage without borders”

This trajectory looks to the semantic capital of relationships to identify resources which are relevant to the social space, characterised by the growing interaction and interdependence of individuals, groups and communities, as well as to the space of those organisations which will be increasingly involved in managing the digital cultural heritage. The ecosystem of relationships therefore implies a change of mentality which produces effects in the related field of social participation (the ‘public’ aspect) and administrative models (the ‘management’ aspect), beyond strictly cultural content.

2. STRATEGY

To achieve the objectives of the NPD, an implementation strategy must be identified which is able to take advantage of the opportunities offered by the digital transition process. These opportunities must be translated into concrete actions which blend the cultural with the managerial and technological dimensions.

The 2022-23 NPD therefore outlines the strategic actions to be realised at the national level as a precondition for enabling the development of a digital ecosystem of culture. The plan aims to accelerate the structural changes which technological innovation is making possible in the entire cultural sector.

These lines of action will be gradually set in motion over the next five years by means of the resources of the National Recovery and Resilience Plan (NRRP), with specific reference to the investment M1C3 1.1: “Digital Strategy and Platforms for Cultural Heritage”.

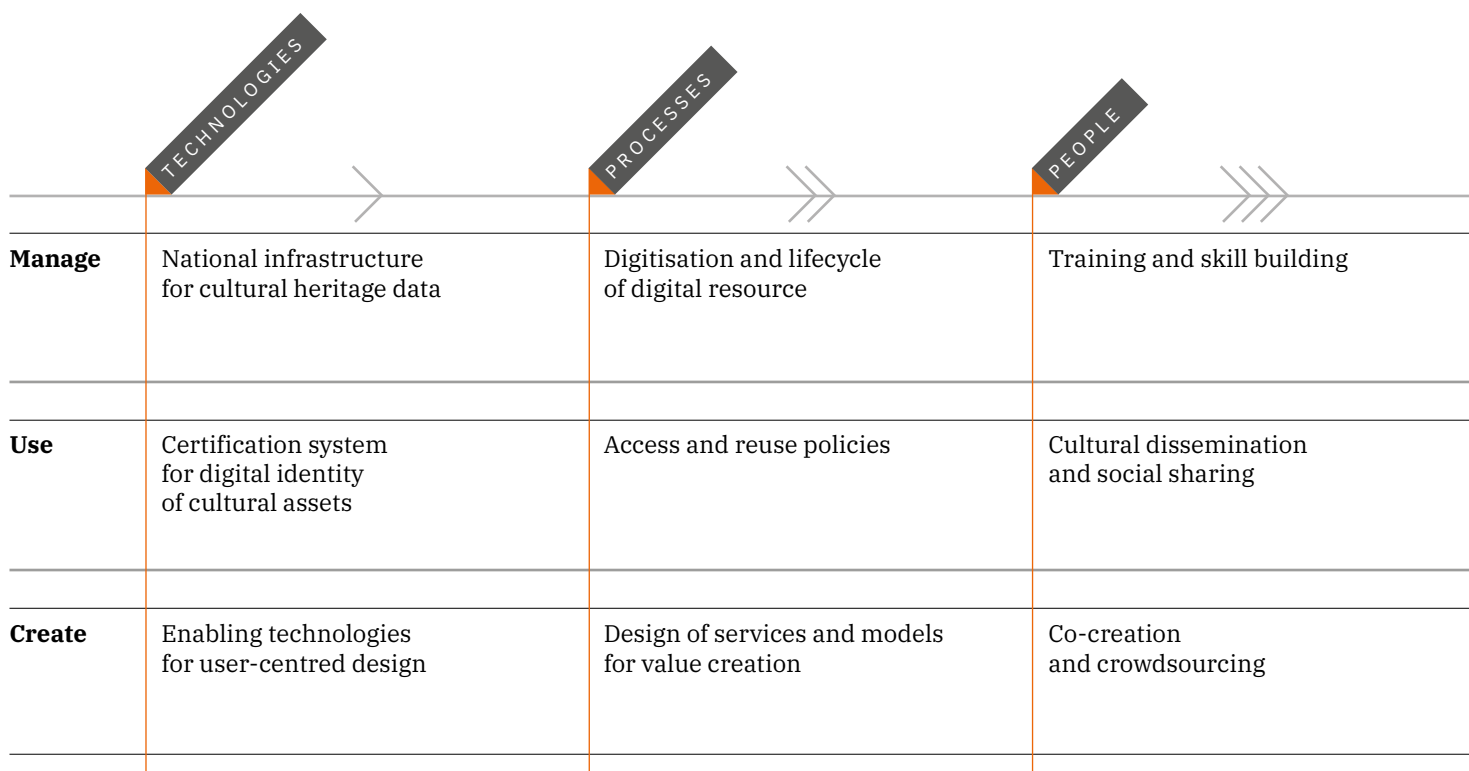
The project envisions long-term cooperation that will be extended to all elements of the ecosystem. The aim is to initiate a process that fosters the renewal of cultural institutes, which will be asked to reassess their social roles in relation to the possibilities offered by the digital field. The strategic objectives are clear: to prevent the dispersal of the digital cultural heritage, to allow it to be freely used by everyone, and to maintain it over time. Through NRRP investments, the Italian state is therefore committed to ensuring that each cultural institute that wishes to participate receives the necessary support for the long-term preservation of the cultural data already in its possession as well as those which it plans to produce and make available. Such support regards processes of digital identity, conservation and reuse which are not alternative to but rather in addition to existing ones.

The strategic lines of action in the NPD are subdivided and described in three areas: **enabling technologies**, **processes** and **people**. Technologies enable the processes, which are overseen by people, in such a way that people can benefit from these processes. These parameters can serve as a way to measure the digital maturity of an organisation.

Short-, medium- and long-term objectives are indicated for each of these fields. Performance indicators are identified, as are the evaluation criteria of the achieved results and the monitoring of the programmed actions.

↔ see figure 3

FIGURE 3.
 CONTENTS OF 'STRATEGY' ELEMENT OF THE NPD, FOREGROUNDING THE RELATIONSHIPS BETWEEN THE SECTIONS



Technologies

To carry out the digital transformation process, the first line of action is to create an enabling technological context which includes:

- software infrastructure of the national cultural heritage to manage, preserve and enhance data;
- a national system of digital identity certification of cultural assets;
- enabling technologies to connect cultural heritage with creative persons and industries by means of a 'Platform of digital services for developers and businesses'.

Processes

The key processes of the digital transformation are:

- digitisation and lifecycle of the digital resource, consistent with the so-called FAIR principles (Findability, Accessibility, Interoperability, and Reuse of digital assets);
- updated policies for access, enhancement and reuse of digital reproductions of cultural assets;
- design of services and models for cultural, social and economic value creation, in which it is possible to distinguish between basic digital services, digital products and services with added value, and digital services for management.

People

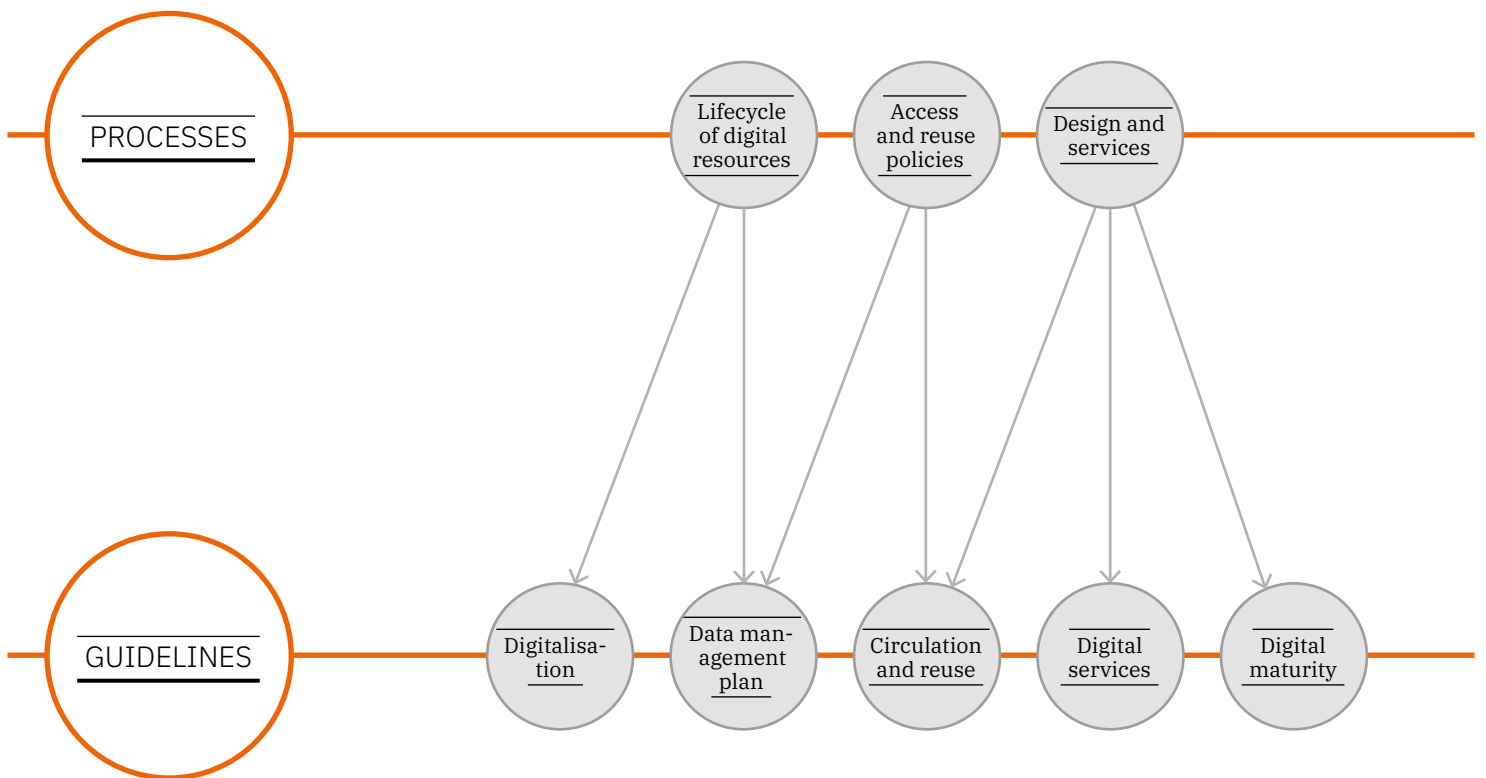
For the digital transition of the national heritage to produce cultural and social value, people must be placed at the centre of the process of change. This is possible by means of:

- training and updating of skills through lifelong learning programmes;
- dissemination of culture and social sharing through a platform for integrated access to cultural heritage;
- construction of a network of exchange around cultural heritage which is able to stimulate the reuse of digital resources and generate mechanisms of co-creation and value production from below through a co-creation and crowdsourcing platform.

3. GUIDELINES

The National Plan for the Digitalisation of Cultural Heritage is accompanied by five guidelines which indicate and suggest methodologies and procedures to implement the processes identified in the section **Strategy** section (➡ page 7).

FIGURE 4.
RELATIONSHIP BETWEEN GUIDELINES AND PROCESSES IDENTIFIED IN THE NPD



These guidelines are not prescriptive; they provide a technical and methodological framework with a relevant bibliography as an aid for planning and implementing activities related to the digitalisation of cultural heritage.

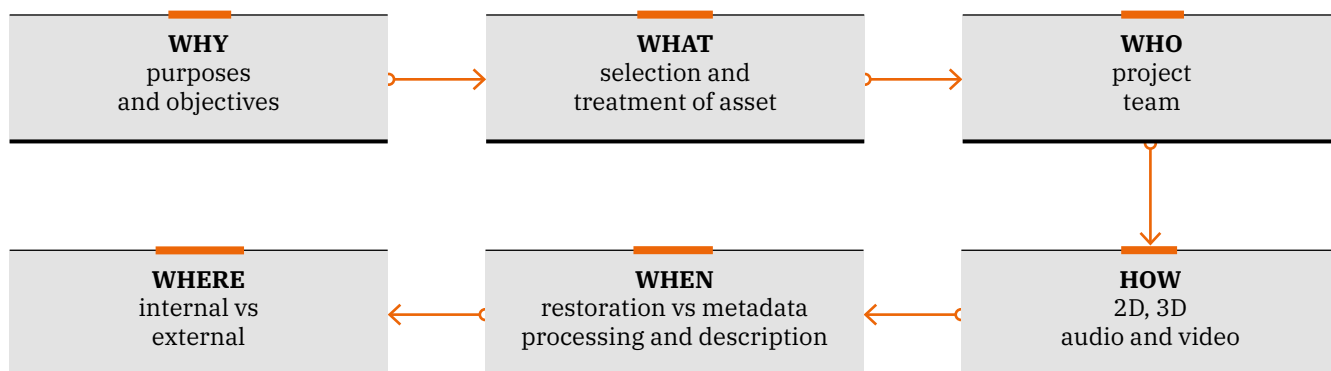
Each document treats a different aspect of digitalisation practices. They will be updated as technology progresses and as norms, methods and standards develop.

The guidelines are directed to personnel of cultural institutes who are involved in processes of the digital transformation of cultural heritage in various capacities.

Guidelines for the digitalisation of cultural heritage

The objective of these guidelines is to define approaches and procedures for the creation, metadata processing and archiving of digital objects of the analogue cultural heritage. They offer procedural schemes and operational models useful for configuring a digitalisation project with quality data which are in line with the most up-to-date national and international standards, such that their interoperability and preservation can be guaranteed over time.

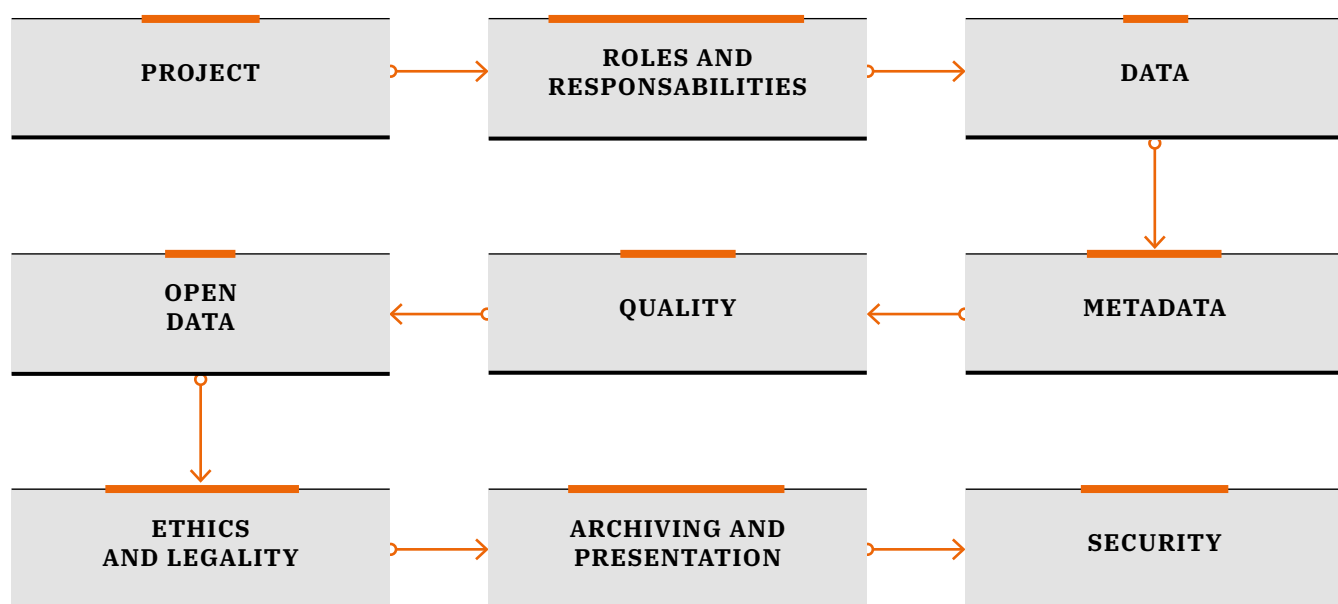
FIGURE 5.
SYNTHESIS OF STAGES OF DIGITALISATION OPERATIONS TREATED IN ANNEX 1



Guidelines for drafting the data management plan

These guidelines aim to define the process for realising data management plans, which describe and analyse the procedures for archiving, sharing and conserving data from projects for cultural heritage digitalisation and from existing databases. They are accompanied by FAQs on open data which can be used to structure the publication of such data.

FIGURE 6.
SYNTHESIS OF SECTIONS CONSTITUTING DATA MANAGEMENT PLAN



Guidelines for acquiring, circulating and reusing reproductions of cultural assets in a digital environment

These guidelines clarify the norms which regulate the acquisition, circulation and reuse of reproductions of cultural assets in a digital environment.

The document focuses on the norms of the relevant regulatory framework, providing operational tools (such as flow charts and summary tables) which allow participants to identify the correct legislative context according to the cultural good. It discusses ways of reproducing and acquiring images and audio-visual materials in relation to the various aims of their utilisation as well as to copyright laws to which the goods and reproductions may be subject.

The aim is to provide institutions and users with the ability to unambiguously understand both the limits and possibilities for reuse of reproductions made available online by institutes.

FIGURE 7.
SYNTHESIS OF AREAS TREATED IN ANNEX 3

REPRODUCTIONS	USE	LICENCES
Realised autonomously	Personal use or for study purposes	Public domain
Requests to administration	Editorial uses	Creative Commons
Online acquisitions	Commercial uses	Standard cultural assets

Guidelines for classifying digital products and services, processes and management models

These guidelines identify and describe the various categorisations and mappings of the processes and services mentioned in the National Plan for the Digitalisation of Cultural Heritage (NPD). They aim to organise the different concepts by general type as well as to orient the reader. The document indicates three main areas, which are interrelated: identifying realisable products and deliverable services; defining end-to-end processes; and analysing applicable management models for the creation of cultural, social and economic value.

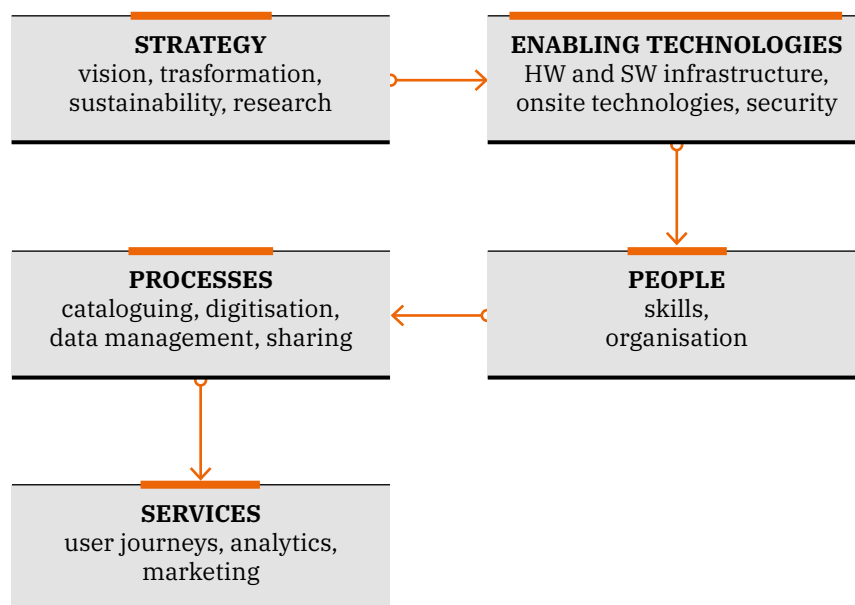
FIGURE 8.
SUMMARY SCHEME OF CLASSIFICATION OF DIGITAL SERVICES, UNDERLYING PROCESSES AND RELATED MANAGEMENT MODELS

	PROCESSES	PRODUCTS AND SERVICES	MANAGEMENT MODELS
PROCESS 1	Sharing of digital content for consultation	Digital services for consumption (research, visualisation, sharing)	Public use
PROCESS 2	Sharing of digital content to create new content	Digital services for the creation of new content (creation, referencing, enrichment)	Cultural enhancement
PROCESS 3	Use of digital content to create products and services	Products and services with added value (exhibitive, educational, editorial, commercial)	Cultural and commercial valorisation
PROCESS 4	Management of users (pre-visit, during visit, post-visit)	Management services (front-end and back-end)	Management forms (internalised, externalised, partnered)

Introduction to methodology for assessing digital maturity of cultural institutes

This document illustrates digital maturity models relevant to cultural institutes, highlighting the opportunities for application to public heritage assets. It further proposes the use of the most appropriate assessment methodologies at the national level to allow institutions to clearly understand their own initial level and more effectively control digital transition processes.

FIGURE 9.
SYNTHESIS OF AREAS INVESTIGATED IN ANNEX 5
ASSESSMENT OF DIGITAL MATURITY LEVEL



Credits

The present document was drafted by the Central Institute for the Digitalisation of Cultural Heritage – Digital Library in the context of technical panels made up of representatives of institutes and of central and branch offices of the Ministry of Culture of Italy. In particular, the following persons contributed to its realisation:

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Coordinator: Laura Moro

During the public consultation phase, the following associations and organisations contributed with open notes, comments and observations:

AIB – Associazione Italiana Biblioteche
AIUCD – Associazione per l’Informatica Umanistica e la Cultura Digitale
Alma Mater Studiorum Università di Bologna (BUB – Biblioteca Universitaria di Bologna; Archivio storico dell’Università, SMA – Sistema Museale di Ateneo, SBA – Sistema Bibliotecario di Ateneo, DHDK – Dipartimento di Digital Humanities)
ANAI – Associazione Nazionale Archivistica Italiana
Commissione cultura della Conferenza delle Regioni e delle Province Autonome
Consiglio Superiore Beni culturali e paesaggistici
Coordinamento istituti culturali del Piemonte
Digital Knowledge, DHARC – Digital Humanities Advanced Research Center
FCdA – Federazione delle Consulte Universitarie di Archeologia
ICOM – International Council of Museums, Italia
Rete Ecomusei di Lombardia
Wikimedia Italia

In addition, we wish to thank all those who participated in the public consultation by responding to the anonymous questionnaire.

The National Plan for the Digitalisation of Cultural Heritage is available online at:

- the public documents portal Docs Italia, ICDP project (<https://docs.italia.it/italia/icdp/>);
- the Digital Library website (<https://digitallibrary.cultura.gov.it/il-piano/>).

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