



Mission 1: Digitalisation, innovation, competitiveness and culture

Contents

1	M1C1 - Digitalisation, innovation and security in the PA	3
A	Appendix: Reform of Justice System	64
2	M1C2 - Digitalization, Innovation and Competitiveness of the Production System	68
3	M1C3 - Tourism and Culture	83

Mission's main objectives:



Digitalisation of the public administration

▼

Digital transformation of the public sector, strengthening of the national security perimeter for **cyber**, implementation of data assets **interoperability**



Modernisation of the public administration

▼

Fostering a radical breakthrough of the public administration, promoting innovation, **skills and competencies** and performance-based evaluations.
Structural **simplification of administrative procedures**, reducing their duration and costs



Organisational innovation of the Judicial System

▼

Digitalisation of judicial proceedings and acceleration of the **timing of justice**, within the context of a shared reform framework

Mission's financing snapshot:

M1 - Digitalisation, Innovation, Competitiveness and Culture

	Resources (euro/mld)				
	Existing	New	Total	REACT-EU	TOTAL NGEU
	(a)	(b)	(c) = (a)+(b)	(d)	(e) = (c) + (d)
M1C1 Digitalisation, innovation and security in the PA	5.61	6.14	11.75	-	11.75
M1C2 Digitalization, Innovation and Competitiveness of the Production System	4.20	21.55	25.75	0.80	26.55
M1C3 Tourism and culture	0.30	7.70	8.00	-	8.00
TOTAL	10.11	35.39	45.5	0.80	46.3

Note: (b) includes existing resources under national FSC, to be devoted to specific measures.

1 M1C1 - Digitalisation, innovation and security in the PA

1. Description of the component

Summary box

Policy area: Public administration digitalisation, human resources and organisation. Digital citizenship. Reform of the Judicial System.

Objectives:

The component aims at a radical breakthrough in the Public Administration, fostering innovation and digital transformation through targeted investments and structural reforms. The proposed interventions combine investments in new equipment and services with important interventions in the organisation and in the human capital endowment of the PA, according to a proper complementarity and an articulated reform strategy.

The strategy takes into account both 2019 and 2020 CSR calls for improving the effectiveness of public administration and the efficiency of the judicial system.

The proposed reforms and investments under this component support the European Flagships ‘Modernise’ and “Scale-up” by equipping the public administration with modern, interoperable and safe infrastructures and services. The component also reflects the European Flagship ‘Reskill and upskill’, by providing skills and new digital competencies to civil servants and managers at different administrative levels as well as all citizens, including those segments of the population with lower digital competencies and currently more affected by the digital divide.

More specifically, the objectives and related investments and reforms as follows.

Reforms and investments:

1. Rationalise and consolidate the existing digital infrastructures for the **digitalisation of the Public Administration**, cloud computing and cybersecurity, with particular attention to the harmonisation and interoperability of platforms and data services. In addition, guarantee for all digital public services increasing levels of availability, efficiency and accessibility, improving the level of adoption and the level of citizens / businesses satisfaction (with direct impact on the Digital Public Services DESI Indicator) also thanks to a user centric and open approach in service design. Create a cashless community, encouraging the adoption of new payment technologies between commercial operators and citizens.

Reform 1.1: Simplification measures for the support and spread of digital administration;

Investment 1.1: Digital infrastructures and cybersecurity;

Investment 1.2: Data and interoperability;

Investment 1.3: Digital citizenship, enabling services and platforms;

2. Innovate the Italian public administration by accelerating and strengthening the reforms currently underway by acting in an integrated and systemic way thus moving from a cumbersome, slow and bureaucratic administration into a competent, capable and simple public administration.

Investment 2.1: Capable PA: human capital recruitment;

Investment 2.2: Competent PA: skills empowerment;

Investment 2.3: Simple and connected PA: simplify administrative procedures and digitise processes;

Investment 2.4: Smart PA: establishment of Territorial Hubs for recruitment, training, co-working and remote working.

3. Ameliorate the entire judicial system in order to increase economic competitiveness and spread the culture of legality, thus improving the resilience and recovery process of the country. This reform action will be accompanied by a temporary strengthening of the *Trial Office*.

Reform 3.1: Judicial system reform (see Appendix A);

Investment 3.1: Human capital recruitment to strengthen the «Trial Office» and to overcome disparities among the different courthouses;

Estimated costs:

EUR 11,750 million to be covered by RRF

M1C1 - Digitalisation, innovation and security in the PA

	Resources (euro/mld)				
	Existing	New	Total	REACT-EU	TOTAL NGEU
	(a)	(b)	(c) = (a)+(b)	(d)	(e) = (c) + (d)
Digitalisation of the PA	5.61	2.34	7.95	-	7.95
- <i>Digital infrastructures and cybersecurity</i>	0.05	1.20	1.25	-	1.25
- <i>Data and interoperability</i>	0.79	0.34	1.13	-	1.13
- <i>Digital citizenship, enabling services and platforms</i>	4.77	0.80	5.57	-	5.57
Modernization of the PA	-	1.50	1.50	-	1.50
- <i>Capable PA: human capital recruitment</i>	-	0.21	0.21	-	0.21
- <i>Competent PA: skills empowerment</i>	-	0.72	0.72	-	0.72
- <i>Simple and connected PA: simplify administrative procedures and digitised processes</i>	-	0.48	0.48	-	0.48
- <i>Smart PA: establishment of Territorial Hubs for recruitment, training, co-working and remote working</i>	-	0.10	0.10	-	0.10
Organisational innovation of the Judicial system	-	2.30	2.30	-	2.30
- <i>Human capital recruitment to strengthen the «Trial Office» and to overcome disparities among the different courthouses</i>	-	2.30	2.30	-	2.30
TOTAL	5.61	6.14	11.75	-	11.75

Note: (b) includes FSC existing resources, to be devoted to specific measures.

2. Main challenges and objectives

a) Main challenges

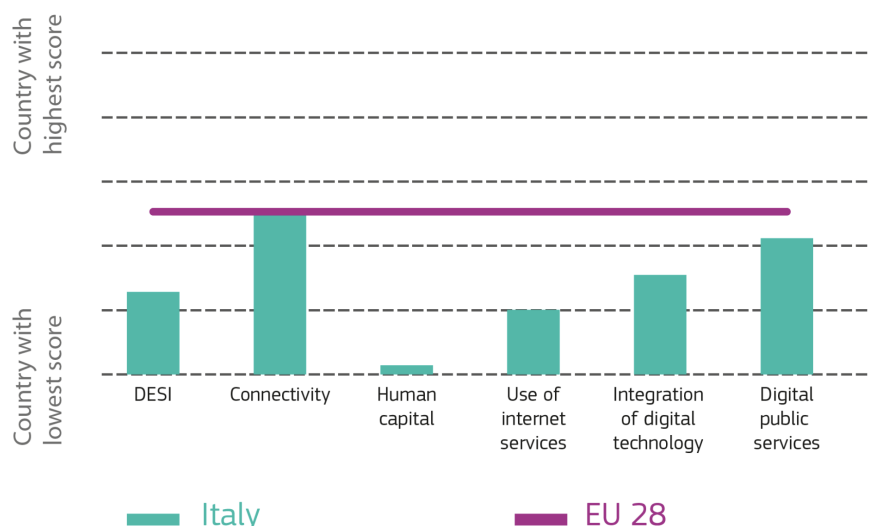
The health emergency crisis severely disrupted public sector service provision, intensifying a series of underlying problems and making even more urgent and compelling a coordinated response to the grand challenges the Italian public administration is facing. Consistently with the European Semester CSR from 2019 and 2020 Italy shall address the root causes of the following three main challenges.

The first challenge addresses the need for the digitalisation of the Italian Public Administration, to enhance its capacity to deliver secure, effective and efficient public services leveraging on enabling platforms and infrastructures and respond to the 2020 EU Semester CSR¹. Namely:

- **Untapped potential of digital services:** Overall, substantial progress has been made in terms of digital transformation at the national level.

¹ EU semester 2020: recommendation #3 and #4.

However, data depict a heterogeneous situation. On the one hand, the five top-level benchmarks considered in the ‘e-Government Benchmark 2020’ rank Italy above EU28 average (except for citizen cross-border mobility, see Figure 1).



Source: European Commission.

On the other hand, Eurostat data from 2019 show that - despite efforts - the promised benefits of digitization to citizens are still far from being achieved. The share of the Italian population actually using digital public services remains low. Indeed, only **23%** of Italian citizens used the internet for interaction with public authorities and only **14%** made full use of an online public service² in 2019 - scoring well below the already low EU average. By the same token, the ‘**DESI Index 2020**’ indicate that, as regards digital public services, Italy ranks 19th among EU MS, in particular being the least performing country in the EU when considering e-Government users (i.e. **32%** internet users needing to submit forms vs **67%** EU average). Italy underperforms the EU also in relation to the amount of data that is pre-filled in Public Services’ online forms (**Pre-filled forms** indicator 48% vs 59% EU Average).

Although the availability of online public services is very high (**92%**)³ there is still a fairly low uptake of digital services by citizens in the country.

To complement the evidence arising from the DESI Index, the Digital Agenda Observatory of the School of Management of the Polytechnic of Milan has replicated the DESI Index at Italian regional level, confirming the same results. A preliminary analysis of granular data from the eGov Benchmark suggests that Italy’s scores, in particular in relation to online availability of

² Eurostat Indicators: Individuals aged 16 to 74 using the Internet for interaction with public authorities (23% in 2019) and Internet use: submitting completed forms (14% in 2019)

³ eGovernment benchmarking 2020

digital services at local level, are negatively affected by the limited implementation of regional and local digital agendas. Moreover, also the highly limited interoperability between different systems and services of the Italian PAs - which hampers the once-only principle as it makes it necessary for citizens to provide their personal details several times - is frequently considered as one of the main causes. The low uptake of digital services among citizens is also due to the low level of digital skills among the Italian population (only 44 % of people aged 16-74 years have basic digital skills vs 57 % in the EU as a whole) as well as broadband connectivity scores below the EU average making it difficult to access to the more advanced digital public services in some areas of the country.

Significant action towards the eGovernment model and delivery of digital public services were carried out with specific policies in 2019. As part of the eIDAS regulatory environment the uptake of the **e-identity system** (Sistema Pubblico di Identità Digitale or SPID) significantly increased to reach 5.5 million citizens in January 2020 (from 3.4 million at the beginning of 2019) and with the impact of the pandemic crisis it reached a peak of 13 million enrolments in November 2020. However, the number of public administrations providing access to digital public services is of around 5.300 against a target of 10.000 public administrations⁴.

- **By developing cloud infrastructures** for the uptake of secure, energy-efficient, affordable and high-quality data processing capacities increasing the efficiency/effectiveness of public services delivery and addressing the twin green and digital transition. Cloud infrastructure will increase technological autonomy, raise security levels and at the same time align the country with the European data strategy⁵. Cloud transition - making available and potentially analysing the digital data of billions of devices on the network - today represents the most important challenge for the digitization of the country, underpinning the development of new technologies such as artificial intelligence. On the one hand, the development of a national cloud cannot be carried out in isolation but needs to take place in parallel and in synergy with the European GAIA-X project, promoted by Germany and France and in which Italy intends to play a leading role. GAIA-X aims to create a European standardisation forum to define the rules of operation of cloud services from the control of data processed and stored on the infrastructure, in line with the principle of "digital strategic autonomy", to the full decentralisation of data thanks to the latest technologies available (multi-edge, multi-cloud or edge-to-cloud). On the other hand, the first step to build up an efficient and

⁴ AGID - Avanzamento trasformazione digitale: <https://avanzamentodigitale.italia.it/it/progetto/spid>

⁵ European Commission - COM(2020) 67 final, Communication: Shaping Europe's digital future

secure cloud system is the rationalisation and consolidation of the existing digital infrastructures. Currently, the public administration digital infrastructures landscape is a significantly fragmented environment and suffers from a strong technological backwardness. In addition, 95% of the public administrations data centres distributed throughout the country inadequately meet minimum requirements for safety, reliability, processing capacity and efficiency⁶. Maintaining such inefficient infrastructure has high maintenance costs estimated at over 7.5 billion per year and exposes a large attackable surface to cybercrime. Another challenge pertains to the Italian public sector market for both demand and supply of cloud services. It is required to access secure, fair and competitive cloud services through the set-up of a procurement marketplace for data processing services and clarify the applicable cloud regulatory framework which in turn would support IT services providers, including innovative start-ups and SME.

- **Address cybersecurity growing challenges by reinforcing national capabilities.** Following the outbreak of the COVID-19 pandemic and the extensive use of digital tools, ensuring internet security and preventing cybercrime, data misuse or fraud became of even greater importance. In Italy the efficacy of measures adopted to protect networks and systems showed a patchy picture, with discrepancies persisting both horizontally — between public and private stakeholders — and vertically, within the same domain⁷. As part of the Cybersecurity Package, the Joint Communication on building a strong cybersecurity for the EU⁸ identified the need for greater resilience and strategic autonomy, boosting capabilities in terms of technology and skills, with the full involvement of all key actors such as the research organisations, laboratories and industry.
- **A fragmented data landscape and limited strategic re-use of data.** The digital infrastructures and the cloud are enabling technologies for the development of a sort of “country’s operating system”, which makes it possible to process large quantities of data and information that are necessary for managing and providing services to citizens and businesses. The increased capacity of archiving, storing and extracting data by the individual administration, however, is not sufficient for a rational and efficient use of this information assets, in the absence of standards and tools that allow full interoperability and sharing of information between PAs. Although Italy scores above EU average in terms of Open

⁶ Censimento del Patrimonio ICT della PA 2018-2019 – Agenzia per l’Italia Digitale

⁷ March 2017 – Piano Nazionale Per la Protezione Cibernetica e la Sicurezza Informatica

⁸ September 2017 – Joint Communication to the European Parliament and the Council - Resilience, Deterrence and Defence: Building strong cybersecurity for the EU

Data offering (77% against the EU average of 66%⁹), the real value of data lies in its use and re-use, and innovation in the field such as artificial intelligence. Data interoperability and quality, as well as its structure, authenticity and integrity - which are key for the exploitation of the data value - are set in a national interoperability framework, which will need further investments to be rolled out to the whole public administration. That stands true for both the use of public sector information by business (G2B) and the use of privately-held data by government authorities (B2G), as well as government to government (G2G) data exchanges which epitomise the long-standing challenge of silos work of the Italian PA. Government data assets are developed vertically and are rarely integrated or interconnected with other government units. Therefore, to effectively implement the once-only principle, it is necessary to make the databases interoperable and make them accessible through an API catalog that allows central and peripheral administrations, according to various authorisation levels, to draw on cloud data, to process them and provide services to citizens and businesses, who will thus be able to provide information "once only" to the Administration.

Moreover, the COVID-19 health emergency and confinement measures, by disrupting many public services magnified the need for **organisational innovation, remote working and public administration's human capital development** promoting agile work to ensure public services are designed, implemented, delivered and monitored according to users' quality expectations.

- **Strengthen human capital and address skills gaps.** As indicated in the CSR 2019 Italy needs to improve public administration effectiveness by investing in public employees' skills development. In Italy, skills shortages, obsolete workforce competencies, digital illiteracy, are more severe than in most other European countries¹⁰. There are significant gaps as regards Human Capital, compared to the EU average. 45% of Italian civil servants are over the age of 54 against 22% of the OECD average Italy scores very low levels of basic and advanced digital skills¹¹. Digital skills are lagging behind, training courses on digitization for public employees included just over 126,000 participants, equal to about 5% of the total¹². Closing a future skills

⁹ Digital Economy and Society Index (DESI) 2020 Italy

¹⁰ Paola Pisano – Declaration from the Minister for Technological Innovation and Digitalization 8 April 2020 - <https://ec.europa.eu/digital-single-market/en/news/italy-launches-its-national-coalition-digital-skills-and-jobs>

¹¹ Ministero dell'Economia e delle Finanze - Dipartimento della Ragioneria Generale dello Stato - Conto annuale <https://www.contoannuale.mef.gov.it/ext/Documents/DISTRIBUZIONE%20PER%20ETA'.pdf>

¹² The Minister for Technological Innovation and Digitalization - National Strategy for Digital Skills (2020), <https://innovazione.gov.it/assets/docs/DTD-1277-A-ALL1.pdf>

gap of this magnitude will require an array of approaches, from improving recruiting practices to upskilling and reskilling. Italy is going in that direction launching a project for strengthening the basic digital skills of civil servants “Digital Competencies for PA”¹³, involving an online platform for assessing the competence gap of civil servants in the digital domain in order to match individual eLearning courses. Yet further actions are needed to intensify and bring together efforts and address the human capital and skill gaps in the public administration. Out of the total public sector workforce 2,9% is under the age of 30, while over 60’s are about 16.9%, which is six times more than young people¹⁴. Considering the aging of the population and the approaching retirement age, the needs are growing steadily calling for an extraordinary plan for the hiring of temporary public employees with specific skills, in particular digital ones.

- **Reform the public work model.** To improve the delivery of public systems we need a public work system, greater motivation and performance management compensation systems. The Department of Public Function has developed guidelines for a new performance measurement and evaluation system framework¹⁵ but further actions are needed for the proper rollout and adoption from public administration.

The last challenge of this component concerns the **justice sector**. EU Semester CSR 2019¹⁶ requested Italy to “*reduce the length of civil trials at all instances by enforcing and streamlining procedural rules, including those under consideration by the legislator. Improve the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials*”. CSR 2020 recalled the “*need to improve the efficiency of the judicial system*” as an effective justice system is key for an attractive investment and business-friendly economy and will be crucial in the recovery process, also by enabling effective rescue and recovery frameworks.

In order to ensure the effectiveness of the Italian justice system reform, it is necessary on the one hand to reduce the backlog of proceedings and on the other hand to make full use of digital technologies. Indeed, despite the actions implemented to date and the provisions taken over the last few years, the Italian justice system continues to be characterised by its slow and cumbersome nature, especially with regards to the excessive length of both civil and criminal proceedings. The performance of the Italian justice system is still far from European averages. Within the field of civil law, in 2019 the total number of pending

¹³Italia 2025’, five-year strategy for innovation and digitalisation launched in 2019 includes ‘Digital Republic’, an initiative promoted and coordinated by the Ministry for Technological Innovation and Digitization. At the end of 2017, the Prime Minister’s Office — Department of Public Administration

¹⁴Forum PA 2020 <https://www.forumpa.it/riforma-pa/ricerca-fpa-sul-lavoro-pubblico-entro-il-2021-più-pensionati-che-dipendenti-smart-working-e-nuovi-concorsi-la-strada-per-innovare/>

¹⁵Presidenza del Consiglio dei Ministri - Dipartimento Funzione pubblica PCM - Linee guida per il Piano della performance Ministeri https://performance.gov.it/system/files/LG-Piano%20della%20performance-giugno%202017_0.pdf

¹⁶EU semester 2019 and 2020: recommendations #4.

cases amounted to 2.348.611 files, denoting a 23% decrease compared to 2014 and a 5% decrease compared to 2018.

Civil law pending cases

OFFICE	2014	2015	2016	2017	2018	2019
Supreme Court of Cassation	100.792	104.561	106.862	106.920	111.353	117.033
Court of Appeal	356.016	327.080	312.316	290.616	269.366	241.673
Ordinary Court	2.596.290	2.381.929	2.294.460	2.201.452	2.088.854	1.989.905
Total	3.053.098	2.813.570	2.713.638	2.598.988	2.469.573	2.348.611

As for pending cases, there has been a reduction in the "pathological backlog" or commonly defined "at Pinto risk". In fact, compared to 2018, in 2019, the number of cases pending for more than two years in the Courts of Appeal has decreased by 8%, while those pending for more than three years in the Ordinary Courts have decreased by 5%.

Within the field of criminal law, in 2019 the total number of pending cases amounted to 1.439.138 files, denoting a 11% decrease compared to 2014 and a 0,5% decrease compared to 2018.

Criminal law pending cases

OFFICE	2014	2015	2016	2017	2018	2019
Supreme Court of Cassation	34.143	35.984	30.354	30.236	24.609	23.579
Court of Appeal	260.748	257.504	268.445	275.596	271.247	263.319
Ordinary Courts	1.302.395	1.313.577	1.187.734	1.165.339	1.157.500	1.152.240
Total	1.597.286	1.607.065	1.486.533	1.471.171	1.453.356	1.439.138

Furthermore, according to the study conducted by the *European Commission for the efficiency of justice*, (CEPEJ 2020), the disposition times of the Italian Justice System are higher than the average of Member States of the Council of Europe.

Disposition time (days) – Civil and criminal law cases – Italy vs. other States of the Council of Europe

	First instance (civil e commercial)	Second instance civil litigious) ^a	First criminal instance	Second criminal instance
Italy	527	863	361	850
UE (median)	201	141	122	104

Source: "European judicial systems CEPEJ Evaluation Report" 2020.

a) Data related to proceedings relating to voluntary jurisdiction (including the activity of the tutelary judge), separations and consensual divorce, special and brief proceedings that include injunctions, executive and insolvency procedures are not included.

The reforms provided by the Stability Law for 2019 are to be considered as a good starting point for making judicial proceedings more efficient, but the latter are still very distant and not comparable to European standards.

b) Objectives

The overall objectives of the component are to catalyse the digital transformation of the public sector. This will be done by strengthening the national security perimeter for cyber and implementing data assets interoperability. The aim is to foster a radical breakthrough of the public administration, promoting innovation, skills and competencies and performance-based evaluations. This will be complemented by a structural simplification of administrative procedures by reducing their duration. In the field of justice, the goal is to digitalise and accelerate the judicial proceedings and the judicial system, within the context of a shared reform framework. Horizontal goals are to enable investments with gender impact and targeting young people. The plan aims at securing the successful implementation of new investments while at the same time taking stock and fully executing selected reforms that were being initiated in the past years. More specifically, the targeted objectives for each area of intervention are the following:

1. Digitalisation of the public administration. The objective is to rationalise and consolidate the existing digital infrastructures of the Public Administration, fostering the uptake of cloud computing and strengthening cybersecurity, with particular attention to the harmonisation and interoperability of platforms and data services. Moreover, this area of intervention also focuses on the strengthening of digital citizenship, both through the improvement of the availability, efficiency and accessibility of all digital public services, and also by increasing the levels of citizens' digital competencies. The actions needed to ensure the uptake of modern and digital infrastructures and services by the PA can be grouped into the following three streams:

- *Digital infrastructures and cybersecurity.* In order to equip the Public Administration with reliable infrastructures and accompany central administrations towards a new logic of conservation and use of data and provision of services, an efficient and secure cloud system will be implemented. This investment will contribute to the European cloud initiative GAIA-X, laying the foundation for potential interoperability between Italy's State Cloud and other State or public entities clouds of other EU Member States. Particular attention will also be paid to the strengthening of the National Security Perimeter for Cyber, considering that the security of the country's digital ecosystem, with specific attention to ICT assets and essential operators, is the cornerstone for community growth and for the strategic development of technologies such as cloud computing and artificial intelligence.

- *Data and interoperability.* Fully leverage the country’s data assets by implementing the once-only principle ensuring interoperability and accessibility of data through a catalog of Application Programming Interfaces (APIs). This aspect is of great importance for companies’ re-use of critical data and their competitiveness at national and international level;
- *Digital citizenship, enabling services and platforms.* Improve digital public services levels of availability, efficiency and accessibility, thus increasing the level of adoption and the level of citizens / businesses satisfaction (with direct impact on the Digital Public Services DESI Indicator). The goal is to develop and disseminate enabling platforms such as digital identity systems. Moreover, this investment aims at tackling the digital divide and strengthening citizens’ digital competencies. To this end, a series of complementary initiatives – such as trainings, digital hubs, etc. – will be launched. Finally, the investment aims at the creation of a cashless community, through the set-up of a cashback scheme to improve product demand and crack down on tax evasion as well as raise the rate of digital payments in Italy to the EU average within three years. In particular, by a) providing incentives to citizens and businesses aimed at reducing the use of cash and spreading digital based payments tools; b) promoting and carrying out communication activities related to such incentives concerning the value of using digital payments.

2. Innovate the Italian public administration by accelerating and strengthening the reforms currently underway and move from a cumbersome, slow and bureaucratic administration into a:

- **Capable PA:** by hiring staff with needed skills and improving the public administration recruitment process matching the evolving needs of the public administration.
- **Competent PA:** investing in new organisational work models aimed at building and enhancing civil servants core competence and motivation with an upskilling and reskilling training program empowering current public administration staff with the necessary skills especially with a view on digital transformation;
- **Simple and connected PA:** Simplification of administrative procedures, digitalisation of processes and speeding up of complex procedures, with direct and measurable impacts on services to citizens and businesses and positive effects on the productivity of the private sector and the attractiveness of the country competent;
- **Smart PA:** through the creation of spaces (Territorial Hubs) equipped for recruitment, training, co-working and remote working.

3. Improve the Judicial System effectiveness to ensure higher legal certainty and citizens’ confidence in the judicial institution. More specifically, the investment aims at reducing the timing of judicial proceedings (civil and criminal) by acting on both internal factors (i.e. the redesign and digitalisation of the process) and external factors (i.e. organisational strengthening and human capital increased capacity).

The proposals included in the RRF are part of a broad national programme of structural reforms and investments that aim to improve the efficiency of the judicial system. More precisely, the programme is an extraordinary plan that involves all the aspects of the production process: human resources (judiciary and administrative personnel), infrastructure and technology, organisation and procedural and legal rules. Specifically, the main points of the strategy can be summarised as follows:

- the introduction of new mechanisms to accelerate the way in which civil proceedings are handled (i.e. by ensuring that there are defined timeframes in place);
- the digitalisation and streamlining of the criminal proceedings, in particular encouraging the recourse to alternative procedures;
- the completion of the digitalisation of the civil proceedings;
- the digitalisation of administrative procedures;
- the enhancement of tools for alternative dispute resolution;
- the increase of human resources in both quantitative and qualitative terms;
- the introduction of innovative personnel management tools to ensure a more flexible use of resources;
- the introduction of organisational tools aimed at ensuring more effective case management (mandatory plans to address backlogs in criminal matters, reorganisation of Prosecution Offices, strengthening of the Trial Office) and higher levels of efficiency in office management;
- refurbishing and rationalisation of workspaces to speed up the so-called “transit of files and workflows”, as well as to improve interactions with qualified users (lawyers) and citizens.

In general, the plan’s objective is to reduce the number of pending cases by 30%-40% in the civil courts, 20%-30% in the civil courts of appeal, 40%-50% in both the criminal courts and the criminal courts of appeal (note that the wide range of values is due to the uncertainty of the Covid-19 health crisis). This can be achieved through:

- the average annual increase of sentences (+4%/6% for civil courts, +3%/4% for civil courts of appeal, +11%/15% for criminal courts and +18%/25% for criminal courts of appeal)
- the reduction of disposition time (-21%/-41% for civil courts, -41%/-55% for civil courts of appeal, -7%/-38% for criminal courts, -18%/-45% for criminal courts of appeal).

c) National strategic context

The investments and reforms of this component are aligned with the core strategic direction for a modern, innovative and digital Public Administration “**Italy 2025. Strategy for technological innovation and digitalisation of the country**”, presented in December 2019 by the Minister for technological innovation and digitization and which is currently being developed. The strategy stresses the major role of a ‘control room’ for

the process of digitalisation of the PA and the strengthening of basic digital skills. The strategy was confirmed and substantiated with the Government the **2020 National Reform Plan** which includes in priority area 4 the innovation and digitization of the public administration, identifying the measures necessary to respond to the Country Specific Recommendations transmitted by the European Council and implement the Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations.

Moreover, in July 2020, the AGID adopted a new “**Three Year Plan for Information Technology in the Public Administration 2020– 2022**¹⁷”. The document provides strategic and economic direction to national public administrations (PAs) by defining the strategic model of the evolution of its information system, operational guidelines for the development of e-government systems, and ICT investments of the public sector. It includes a specific action plan with identified targets, milestones and responsibilities in reference to digital services development, data, infrastructures, interoperability, cybersecurity areas. The objectives of the three-year Plan are based on the indications emerging from the new programming for the EU funds for 2021-2027, on the principles of the 2016-2020 **eGovernment Action Plan** and on the actions envisaged by the Tallinn eGovernment Declaration (2017-2021) and the **European Interoperability Strategy (ISA2)**¹⁸, providing MS with recommendations for the development of interoperable digital public services and the EU data Strategy¹⁹. Investments foreseen in such component will complement and support the implementation of such plan.

At the same time, Consip - the Italian central purchasing body – launched, in December 2019, a massive call for competition (overall amount €225 million) for the digital transformation of public bodies. In response to the COVID-19 pandemic, the Italian government has also further accelerated the transition to digital services. For instance, the recent ‘**Cura Italia**’ Decree introduced measures aimed at speeding up the procedures for technology purchases, thus supporting the launch of new online services for citizens and businesses and the adoption of smart working solutions for PA employees. Likewise, a Fund for Technological Innovation and digitalisation has been established under the ‘Rilancio’ Decree.

Some of the measures indicated in the National Reform Plan were translated concretely into national legislation such as the law decree “**Semplificazioni**” (Decreto Legislativo 76/2020), containing urgent measures for simplification and digital innovation. To provide greater impetus to the simplification of procedures, the Council of Ministers approved, on December 3, 2020, the “**Agenda 2020-2023**”, which is a simplification program to relaunch the economy and employment, moving towards a public administration that is simpler, faster and closer to its citizens.

¹⁷<https://docs.italia.it/italia/piano-triennale-ict/pianotriennale-ict-doc/it/2020-2022/index.html>

¹⁸European Commission (2019), European Interoperability Framework – Implementation Strategy {COM(2017) 134 final}.

¹⁹European Commission (2020), COM/2020/66 final, A European strategy for data

The actions planned as part of the Agenda concern the following areas: a) the simplification and re-engineering of procedures; b) the speeding up of procedures, c) Simplification through digitization d) implementation of targeted interventions to overcome bureaucratic obstacles in the key sectors of the recovery plan (environmental protection and green economy; construction and urban regeneration; ultra-broadband).

Italy also signed the joint Member States Declaration ‘Building the next generation cloud for business and public sector in Europe’ as well as the Berlin Declaration on Digital Society and Value-based Digital Government²⁰ and investments foreseen in this component will be implemented in line with these strategic orientations.

The innovation and digitalization strategy of the Italian public administration is also in line with the guidelines of the European Commission included in the “**Green Deal**” Communication of 11 December 2019 as the EU level is expected to evaluate "measures to improve energy efficiency and performance in terms of circular economy, from broadband networks to data centers and ICT devices". Such indications are also reaffirmed in the EU Communication “**Shaping Europe’s Digital Future**” (19 February 2020) which emphasizes that "data centers and telecommunications will have to improve their energy efficiency, make use of waste energy and use more renewable energy sources. They can and must achieve climate neutrality by 2030".

As far as the justice reform is concerned, the planned interventions fall within the scope of past measures undertaken to achieve a greater level of efficiency of the Italian justice system, with the goal of speeding up the length of proceedings, reducing the backlog and allowing our Country to adapt to the standards of other European countries.

The overall reform plan fits into a broader context of reorganisation of the justice system, with interventions aimed at acquiring additional human and capital resources and introducing innovative organisational measures to systemically address the causes of inefficiency.

In this direction, some measures already adopted with the law n. 145 of December 30, 2018 (“2019 Budget Law”) are worth mentioning. Among these, in particular, investments meant to increase the magistracy staff (followed by ministerial decrees for the redetermination of staff schemes for judiciary offices), as well as, with regards to administrative staff, the authorisation to temporarily hire 2,903 units in the three-year period 2019-2021. Furthermore, the Law n.160 of December 27, 2019 established flexible staff schemes to limit shortcomings within judiciary offices deriving from the absence of magistrates and to allow, for a limited time span, to appoint judges to those offices characterised by a considerable backlog of court proceedings, an extensive number of contingencies, and operating within socio-economic contexts with a widespread presence and infiltration capacity of organised crime.

²⁰Ministerial Berlin Declaration on Digital Society and Value-based Digital Government (8 December 2020)

3. Description of the reforms and investments of the component

1) Digitalisation of the public administration (1 reform & 3 investments).

Reform 1.1: Simplification measures for the support and spread of the digital administration (*Linked to Investment 1.1 Digital infrastructures and cybersecurity, Investment 1.2 Data and interoperability, Investment 1.3 Digital citizenship, enabling services and platforms*).

Challenges: The crisis generated by the pandemic has made the digitalisation of services aimed at citizens and businesses more urgent and the simplification of their relations with public administrations of fundamental importance in order to contribute to the economic revitalization of the country.

Objectives: The Reform contributes to boost the country's digitalization with the following specific objectives:

- **increase the spread of online public services**, facilitating and simplifying their access for citizens and businesses. In particular, the decree provides:
 - an extension of the scope of application of the digital domicile; the obligation for administrations to render all their services available in digital format (Article 24);
 - the obligation to cease all the online identification systems that differ from SPID digital identity and from the CIE (the electronic identity card) in order to build a single interface for citizens to access their digital services;
 - the simplification of electronic notifications and communications of documents related to civil, criminal, administrative, accounting and extrajudicial matters (Article 28)
 - provisions aimed at facilitating access to online services for people with disabilities (Article 29);
 - measures to promote the creation of a national *cloud* to protect Italy's technological autonomy with specific requirements set by the Agency for Digital Italy, to secure the digital infrastructures of Public Administrations and to guarantee the quality and security of data and digital services (Article 35);
- **simplify procedures**, improve efficiency and reduce the high costs for Public Administrations. In particular, the decree envisages:
 - the simplification of procedures for storing electronic documents (art. 25);
 - the introduction of a single digital platform for the notification of documents and communications from PAs to citizens and businesses (Article 26);
 - measures for the simplification and spread of the advanced electronic signature and digital identity for access to banking services (Article 27); the facilitation

of actions regarding personal data, specifically clarifying that the electronic certification of personal data is ensured by the Ministry of the Interior through the ANPR; the obligation for all Public Administrations to develop their own systems in order to allow remote access to employees (Article 31); the introduction of a technological code of conduct that governs the method of designing, developing and implementing digital projects, systems and services for public administrations, in compliance with regulations on national cyber security (Article 32); the possibility for public administrations to temporarily hire professionally qualified experts for developing and managing complex digital transformation processes (Article 32); simplification measures for managing, developing and operating the national digital data platform (Article 34);

- **the right to innovate for companies** that will benefit from simplified procedures for experimenting with innovative projects. In particular, simplification measures have been envisaged in order to grant companies, universities, research centres and university start-ups the authorisation to launch innovative projects (Article 36).

Implementation: The Reform has been adopted with the “Simplifications” decree, the law-decree n. 76 of 16 July 2020, which was converted into law n. 120 on 11 September 2020.

The Reform will be implemented through Investment 1.1 Digital infrastructures and cybersecurity, Investment 1.2 Data and interoperability, Investment 1.3 Digital citizenship, enabling services and platforms

Additionally, to support the legislative intervention, specific actions will be carried out to strengthen the administrative capacity for IT spending and overcome some impediments that could further slow down its implementation. More specifically these are:

- IT technical assistance / task force - Strengthening the public administrations, with the support of sectoral technical expertise (engineers, computer scientists ...) and / or real task forces, starting from the choice of the IT solutions. But also, in the stages of supplier selection (award procedure), it is needed to maintain a supervision to ensure the absence of conflicts of interest of the staff involved in technical support assistance;
- IT catalog / construction site initiatives - Launch initiatives that can be quickly carried out, also through the definition of a national catalog of IT services, which includes all the administrative tools necessary for prompt activation. The goal would be to target solutions that can contribute to achieving the objectives by reducing design times as much as possible as well as guarantee user-centric service design and provision;
- National IT network - Create a "National IT Network", as an institutional place for direct participatory involvement over operational and technical issues of all institutional stakeholders (central administrations, representation of Regions and Local Authorities) but also of all economic partnerships. The National Network,

enabling a continuous administrative and technical interaction between appointed members, will constitute a regular meeting place to implement IT initiatives, to identify and overcome challenges, exchange good practices and to address upcoming needs, including legislative ones, for simplification in the field of IT;

- Simplified costs - Simplify spending phases, activating standard methods for defining the cost of IT solutions (standard unit costs). Therefore, accelerating the financial reporting processes for all EU funds co-financed initiatives (e.g. RRF, Structural Funds, etc.).

Stakeholder involvement: The MID (Ministry of technological Innovation and Digitalisation) and the Agency for Digital Italy (AgID) as well as public administrations at all levels.

Timeline: 48 months.

Investment 1.1: Digital infrastructures and cybersecurity.

Challenges: Digital infrastructures and public administration services are significantly fragmented and suffer from a strong technological backwardness. In addition, the majority of data centres distributed throughout the Italian territory do not adequately meet requirements for safety, reliability, processing capacity and efficiency. Such a fragmentation translates into a limited supply and demand of new technologies, such as cloud-based services in the Italian public administration marketplace. It is therefore necessary to both support the creation of new cloud services for the PA, and also to facilitate the migration of the PA hardware and software towards the cloud, as to enable the provision of high-quality services to the citizens.

In addition, the upkeep of such an inefficient infrastructure is highly expensive and exposes a large attackable surface to cybercrime. The security of the national digital ecosystem, including especially the ICT infrastructure that supports the essential public functions and services, is a necessary requirement for the functioning of the entire national community. The capacity to respond rapidly and to prevent attacks and incidents is a key prerequisite for the development of the system competitiveness, the attraction of investments and ultimately the creation of occupation. In an international context of ever increasing number and typology of attacks, as highlighted by the 2020 report by the national association for ICT security, the creation of a system of cyber defence and internal and external intervention is therefore essential to ensure the secure digitalisation of both public administrations and businesses services.

However, current technical and operational structures suffer from a shortage of competencies, due to recurring difficulties in the hiring of highly trained human capital.

Objectives: The objective of the investment is the development of a reliable, secure,

energy-efficient and economically viable infrastructure to host the systems and data of the public administration, enabling a new logic of public services provision and data usage based on the cloud paradigm. The new infrastructure will increase the technological autonomy of the country and contribute to the European cloud GAIA – X laying the foundation for potential interoperability targets between Italy’s State Cloud and other State or public entities’ clouds of other EU Member States. In addition, the rationalisation of the existing digital infrastructure will generate significant savings in terms of maintenance and update costs within the first 3-4 years. Indeed, when fully operational, it is estimated that it will allow to cut such costs by approximately 40 to 50%.

In particular, the strengthening of Type A Data Centers - eligible for the “Poli Strategici Nazionali” as defined by the AgID census - will be a key goal of the effort to rationalise and consolidate energy efficient data centers and host the most strategic services of the Central PA. In this framework, the consolidation of the overall infrastructure supporting legal proceedings will be of particular importance.

Moreover, the investment will also aim at fostering the supply of cloud services to the public administration by IT providers, including especially innovative start-ups and SMEs, and also the provision of cloud services by the public administration to its citizens, supporting PAs at central, regional and local level in the migration of their current hardware and software systems to the cloud. The new infrastructure will be developed based on the highest standards of energy efficiency and environmental protection.

As far as cybersecurity is concerned, the investment aims at strengthening the national National Security Perimeter for Cyber (PSNC) through interventions on technology, processes, governance and awareness-raising to increase cyber defences and country resilience.

Implementation: The investment consists of the following key projects:

An infrastructure of excellence: Investments for the development of a highly reliable infrastructure on the national territory, also to enhance national defense infrastructures

The project will consist of the development and implementation of a reliable, secure, energy-efficient and economically viable network of data centers on the national territory, aimed at hosting the key strategic services of the PA. It is planned to develop 4 datacenters. It will be conducted by the Department of Digital Transformation (Dipartimento per la Trasformazione Digitale) of the Minister for technological innovation and digitalisation (Ministro per l’Innovazione tecnologica e la Digitalizzazione, MID) and other public administrations involved. It will include the following operational steps:

- The definition of tendering procedures (e.g. procurement strategy, technical criteria, administrative documentation). In particular, it is planned to publish two parallel EU-level public calls for competition for the development of the infrastructure;
- The development of the infrastructure on the national territory with a focus on

high reliability, in a view to rationalise and consolidate information management data centers and host the key strategic services of the Central PA;

- The gradual hosting of Central Public Administration data centers in the new infrastructure, so to enable the provision of the cloud services.

Strengthening the technological infrastructure to support the jurisdiction

In coherence with the development of the above-mentioned network of data centers, the investment will also encompass the rollout of the enabling infrastructures and secure IT systems for the justice system. More specifically:

- digitalisation of the archives relating to all civil proceedings and those of the Supreme Court of the last ten years in order to facilitate the digital processing of proceedings and, therefore, speed up judicial proceedings;
- digitalisation of proceedings due to unreasonable trial length (so-called “Pinto Law”);
- the construction of a Single National Justice Data Centre in which to concentrate all the IT services of the administration, so to ensure greater effectiveness in the overall functioning of the system;
- the creation of a proprietary geographic connectivity network, which is cheaper, safer and more efficient, allowing the administration to be independent from market trends, while increasing its level of security;
- the enhancement of connectivity, even remotely, in compliance with safety parameters in order to encourage delocalised work and the use of new technologies through:
 - the adaptation of a network infrastructure of some buildings, in order to acquire equipment suitable for new security measures;
 - the access control to the network, with authentication at various levels;
 - the updating of the system for managing access logs;
 - the acquisition of laptops and related accessories for justice personnel;
 - the adoption of a series of systems for securing notebooks;
- enhancement of digital tools available to juvenile justice professionals and communities operating locally.

These interventions fall within a framework that is already strongly focused on innovation, including especially the gradual and uniform digitalisation through the continuous development of both civil and criminal telematic proceedings.

The project will aim at the increase of cloud services in the public administration, through a coordinated support both on the supply side (i.e. supporting companies to develop new cloud services for the PA) and on the demand side (i.e. helping the PA adopt new cloud services in the framework of their digital transformation efforts). It will be conducted jointly by the Department of Digital Transformation (Dipartimento per la Trasformazione Digitale) of the Minister for technological innovation and digitalisation (Ministro per l’Innovazione tecnologica e la Digitalizzazione, MID) and the Agency for Digital Italy (Agenzia per l’Italia Digitale, AgID), with the participation of all involved PAs. The

project will be implemented through the following operational steps:

- First of all, a survey will explore the needs of public administrations for cloud services, building upon previous surveys that allowed to gauge the current use of cloud services and the key categories of services to be developed (i.e. municipal services for citizens, municipal services for enterprises, internal management tools for municipalities, school services, healthcare services);
- Cloud services will then be identified and suppliers engaged through 5 periodical calls for competition for innovative start-ups and SMEs, which will be centrally managed by the Control Unit;
- Finally, support to PAs will be provided in order to increase cloud-based services available and address their needs. In particular, support will be provided for the purchasing phase, in which 3 calls (1 for municipalities, 1 for healthcare authorities, 1 for schools) will be published, with the aim of selecting the public administrations that will receive funding for cloud services purchase.

Cloud enablement programme

In parallel and as a complement of the Cloud first line of action, this project will focus on the migration of the public administration hardware and software legacy systems to the cloud. It will provide support to public administrations to migrate (from assessment to execution) the services currently hosted on obsolete data centers to secure infrastructures of the PA and also to cloud services offered by the market (qualified and available in the Cloud Marketplace). It will be conducted by the Department of Digital Transformation (Dipartimento per la Trasformazione Digitale) of the Minister for technological innovation and digitalisation (Ministro per l'Innovazione tecnologica e la Digitalizzazione, MID) and all the involved PAs and it will include:

- The definition of the monitoring modalities;
- The publication of 7 calls (4 for municipalities based on demographic dimensional criteria, 1 for healthcare authorities, 1 for schools, 1 for universities and central public administrations) aimed at selecting the public administrations that will receive funding for the cloud migration
- The collection through a Project Portfolio Management Software of the migration plans submitted by public administrations
- The actual implementation of the approved migration plans, which will be subject to central monitoring by the Control Unit, with different targets and funds depending on the typology and size of the PA.

It is planned to have approximately 5.365 public administrations involved in the cloud enablement program.

Strengthening the National Security Perimeter for Cyber (PSNC) through interventions on technology, processes, governance and awareness-raising to increase cyber defences and country resilience

The project will be implemented through a joint effort of the Department of information for security (Dipartimento delle informazioni per la sicurezza, DIS), the Department of Digital Transformation (Dipartimento per la Trasformazione Digitale) of the Minister for technological innovation and digitalisation (Ministro per l'Innovazione tecnologica e la Digitalizzazione, MID), the Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR) and the Ministry of Economic Development (Ministero dello Sviluppo Economico, MISE), under responsibility of the Presidency of the Council of Ministers. It will include the following lines of action:

- Hyper SOC, namely the implementation of a hyper monitoring system centered at the National CSIRT collecting and processing (in near real time) suspicious event patterns occurring on ICT assets hosting essential functions or services of the country belonging to the National Security Perimeter for Cyber (PSNC) organisations in order to early detect complex attack patterns. A high-performance-computing infrastructure will be used as computational setting. The output of the services implemented by the Hyper SOC will be available to EU and national authorities to build a EU Cyber Shield,
- Simulation tools based on AI / ML for assessing and forecasting effects of large-scale cyber crisis supporting the National Cyber Security Management Board (Nucleo Sicurezza Cibernetica Nazionale) and the EU Cyclone network members, to understand the physical impact on other critical infrastructures with potential crossborder effects. Once again, a high-performance-computing infrastructure will be used as computational setting.
- Maintenance of the Ontology and Taxonomies on which the contents exchanged with the perimeter subjects are based.
- Creation of a system for the modelling and tracking of the supply chain of software / hardware devices employed within ICT assets belonging to the PSNC, including the software tools. The target of the system is to minimise the risk that the supply chain will be an attack vector.
- Support to the upgrade of security structures within selected public administrations, in line with the security measures of the PSNC.
- Creation of cybersecurity labs network established by the "legge sul Perimetro di Sicurezza Nazionale Cibernetica (PSNC law, DL 105/2019)". The labs, accredited by the national Evaluation and Certification Centre (CVCN), will support the process of technology checking IT products employed within ICT assets running essential functions of the country. Funding priority will be given to those laboratories that will also support the activities related to European cybersecurity certification by ENISA working on certification schema and on verification of compliance to EU cybersecurity certification.
- Support for strengthening the capacities of the CVCN and of the Evaluation Centers (CVs) of the Ministry of Defense and the Ministry of the Interior, for the strengthening of the technological screening and the qualified procurement of products to

be used in the ICT assets of the PSNC.

- Support to the for the strengthening of the capabilities of cyber defense against internal and external threats to the PSNC, for the cyber defense system, aimed at the creation of innovative technological services and tools for cyber defense, cyber reaction, law enforcement and for the enhancement of the capabilities of the Intelligence Sector, of the Ministry of the Interior and of the Ministry of Defence.
- Upgrade of selected Operators of Essential Services (OES) according to guidelines set by Italian NIS authorities.
- Creation of Computer Emergency Response Teams (CERT) for each sector identified by the NIS Directive ensuring their interconnection with the Italian Computer Security Incident Response Team (CSIRT). Funding priority will be given to sectorial CERTs that will implement also ISAC functions in order to further develop ISACs network both at EU level and at national level.
- Creation of a high-performance-computing infrastructure to support the CSIRTs' AI and ML workloads and the ISAC Analysis activities.
- Creation of a government ISAC (Information Sharing Analysis Center) for for the analysis of large amounts of data, provided by the PSNC SOC, relating to cyber attacks to support the activities of the CSIRT, of the Cyber Security Management Board (Nucleo Sicurezza Cibernetica), of the National Cyber Security Development and Research Center and of the European Authorities in this sector, further developing ISAC's network both at EU level and at national level. The high-performance-computing infrastructure will be used for this purpose.
- Creation of a central Central Audit Unit (Nucleo centrale ispettivo) for the PSNC law.
- Strengthening of the Central Audit Unit (Nucleo centrale ispettivo) for the NIS provisions at each national authority. Strengthening of the governance and coordination infrastructures necessary for the functioning of the POC NIS.
- Creation of a central audit control unit (Nucleo centrale ispettivo) for the "essential cyber security measures" (Misure minime di Cyber sicurezza AGiD) to be applied to all the central and local Public Administrations not included in the PSNC.

Rationalization and consolidation of the digital infrastructure for the Defense Sector, based on open-source technological solutions for digitising processes related to personnel management

This implementation mean will be implemented by the Ministry of Defence, in cooperation with the Agency for Digital Italy (Agenzia per l'Italia Digitale, AgID), the Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR) and the Ministry of Economic Development (Ministero dello Sviluppo Economico, MISE). It will consist of three main lines of action:

- the Private Cloud Project for the creation of a so-called *infostructure* the provision of services in private cloud mode

- The SCIPIO initiative for the creation of a laboratory for software evaluation, staff training, infostructure migration service provision
- the Digital Platform for Defense Personnel, aimed at the digitalisation of procedures and information relating to Defense personnel in compliance with security requirements imposed by the evolution of cyber threats

Strengthening of the connectivity network of operational structures, Digital telephone exchanges, Digitalisation of paper archives, Platform for the enablement of remote working, and Tracking system for personal protective equipment for the Department of Fire Corps, Public Rescue and Civil Defence of the Ministry of Interior [*PROJECT UNDER DISCUSSION*]

Ostia Green data center infrastructural works

Impediments: As far as the cloud services demand side is concerned, the personnel of the public administration is currently affected by a widespread lack of the necessary competencies for the management of these initiatives (technical skills and standards on new technologies, procurement procedures and requirements, etc.). Therefore, it will be necessary to complement the investment with trainings of the PAs personnel.

The cybersecurity public sector suffers from a lack of highly skilled personnel. For this reason, the investment will need to focus on training of required competencies and also on encouraging the return within the national boundaries of experts.

Target population: The primary beneficiaries of the investment will be the citizens, who will benefit from enhanced digital public services based on the cloud paradigm. In addition, the investment will also improve the functioning of PAs. Finally, the Cloud first line of action will also directly support private companies, including especially innovative start-ups and SMEs.

Citizens and businesses will also benefit from a justice system capable of guaranteeing the continuity of services and operators of the justice system who can use IT solutions and tools that facilitate electronic civil and criminal proceedings.

Regarding the strengthening of the PSNC, the security of the national digital ecosystem is an essential prerequisite for the functioning of the public administration and, more broadly, the entire national community, including also businesses and citizens.

Timeline: The implementation period is estimated to be 60 months, until December 2025.

Investment 1.2 Data and interoperability,

Challenges: The development of a new network of cloud data centers will enable the processing of large quantities of data for the provision of services to businesses and citi-

zens. However, the increased capacity in terms of storing and elaborating data will not be sufficient in order to shift to a new paradigm of data-driven services in the absence of full interoperability and information sharing between PAs.

Indeed, while in recent years substantial progress has been made in terms of digital transformation of the PA at the national level, the e-Government Benchmark 2020 and Eurostat data still highlight that Italy is struggling in the uptake of e-government services. Similarly, the DESI Index 2020 suggests that, as regards digital public services, Italy ranks poorly among EU MS, in particular when considering e-government users (i.e. online interaction between public authorities and internet users). The Italian delay in terms of usage of digital public services compared to other EU countries has been attributed in particular to the highly limited interoperability between different systems and services of the Italian PAs - which hampers the once-only principle as it makes necessary for citizens to provide their personal details several times.

Objectives: In order to effectively complete the implementation of the once-only principle, the main objective of this investment is to make PA databases interoperable and accessible through a catalog of Application Programming Interfaces (APIs). This will allow central and peripheral public administrations - based on different levels of authorisation - to access data, process them and provide end-to-end services to citizens and businesses, who will provide information to the PA “once-only”. In particular, through the implementation of the Single Digital Gateway citizens and businesses - including especially those from other EU countries - will be able to access information and a variety of digital public services.

Implementation: The investment will consist of the following key projects:

Leverage information assets of the country

The project will aim at mapping and analysing the country’s information assets, identifying datasets owners, use cases and useful best practices to foster dataspace. In addition, it will aim at ensuring the interoperability of shared data models, ontologies and core vocabularies, in a view to ease the creation of semantically and syntactically consistent cross-domain and cross border services, while their publication via a central catalogue will make them easily reusable for designing and supporting the deployment of services.

In particular, a working group including local and national administrations, universities, national agencies and category associations will be created in order to analyse and rank an extended set of relevant registries with respect to their ability to enable digital public services. The project will also focus on the existing dataset gaps with respect to European best practices. The information will be published on existing platforms to enrich the available knowledge about relevant datasets useful for the digitalisation of the country. The goals of the working group will be:

- to publish a report including findings of datasets specifications and their related

gaps;

- to publish an exhaustive documentation of the analysed datasets on a national platform.

Secondly, the project will entail the creation and implementation of a central catalogue for data schemes, ontologies and core vocabularies. Currently, this information is provided by different agencies in an uncoordinated and sometimes inconsistent way, moreover they are not directly usable for delivering digital services.

Finally, the project will include the enrichment of the catalogue, which will involve a collaboration between different agencies (including as an example the Ministry of Interior, INPS, ISTAT, Agenzia delle Entrate, AgID, and the Department of Digital Transformation).

Development of the interoperable national data platform and support to public administrations for the adoption of the interoperability model and integration of their APIs in the platform

The development of interoperable national data platform will completely digitise all administrative procedures and organisational interactions to exchange data between two entities. It will therefore enable a more efficient and consistent re-use of public data. In particular, it will include the following operational steps:

- Wide-ranging stakeholder engagement in order to analyse the requirements of the interoperability system;
- Design of technical features and launch of the interoperable national data platform with API catalogue, and integration of databases of national interest. The Platform will be developed following the openness and reusability principles of the European Interoperability Framework;
- Stabilisation of the platform, gradually increasing its size of PAs involved. A targeted effort will be made to integrate the Platform with a wide selection of APIs and agencies from central administrations, regions, top universities, metropolitan cities and local healthcare agencies, and to stimulate the creation and the reuse of tools and open source software in order to benefit also the entities not directly involved in the project.

After the development of the platform, public administrations for the adoption of the interoperability model and integration of their APIs in the platform will be identified and will receive support through the following:

- Provision of training and specialised support to help public administrations adopt the interoperability model and adapt their APIs. PAs will apply for funding for the integration of datasets and registries with the Interoperability Platforms deploying interoperable APIs. The selected agencies will be guided to co-design and co-invest in the integration com-

ponents, to reuse and publish open source software and to deploy secure APIs;

- Support for the necessary developments to integrate public administrations platforms with the national data platform, enabling the possibility for authorised subjects to access data and provide new data-driven services. The various targets will follow an iterative approach: first core registries and then progressively extending the range of included services to the more complex or decentralized ones.

Single Digital Gateway

The Single Digital Gateway aims at providing access to information, procedures, assistance and problem-solving services in accordance with Regulation 2018/1724/EC. It is expected to facilitate the digital transformation process in Italy as it requires to provide online access to the information, administrative procedures and assistance services that citizens and businesses need to get active in another EU country.

The Single Digital Gateway will have to guide citizens and companies to information on national and EU rules, rights and procedures and the websites where they can carry out these procedures online. Users looking for assistance will have to be guided towards problem-solving services.

The Regulation that brings the gateway into effect also requires that more administrative procedures can be performed online than currently, by users in their own country and cross-border users.

The ‘once-only principle’ (i.e. users should not have to submit to authorities documents or data already held by other authorities) will have to be applied to cross-border exchanges of evidence for a range of procedures in compliance with the implementing act and the technical specifications defined at European level as it specified in the Regulation itself. For these procedures, users will be given the option to request the direct exchange of evidence between authorities in different member states.

In order to be compliant with the Regulation and provide the expected value to citizens and business, a relevant effort needs to be delivered at national level, in order to overcome a few significant barriers:

- The list information and the procedures included in the scope implies the engagement of a large number of Public Administrations (approximately 9.000)
- A preliminary gap analysis has shown that the level of the quality of the information that are currently online is quite far from the target of the Regulation and most of the procedures in scope of the Regulation are not fully digitalised
- As highlighted by the eGovernment Benchmark 2018, prepared by the European Commission, Italy is characterized by a low level of Penetration and a medium-low level of digitization. Therefore, Italy is part of the non-consolidated eGov scenario,

a scenario where countries are not fully exploiting ICT opportunities. Italy is characterized by the lowest Penetration level in Europe: only 19% of individuals that submit official forms to administrative authorities used online forms.

The Single Digital Gateway Implementation is also quite complex as it requires the coordination with other actions already ongoing to be compliant with other key policies.²¹

The project will engage approximately 10.000 Public Administrations. A preliminary gap analysis has shown that the quality of the information that is currently online is quite far from the target of the Regulation and most of the required procedures are not fully digitalized. Due to the high number of involved Public Administration, the implementation is expected to be performed through different means:

- Strong Governance involving central Public Administration and aggregators
- Legislation simplification and adaptation to overlap obstacles to the Single Digital Gateway
- Implementation of national infrastructure/hubs to facilitate national and European interoperability
- Support to Public Administration for implementing the new procedure and information services
- Monitoring and fine tuning of the published information and services

Impediments: In order to allow public administrations to map their data assets, adopt the interoperability system, develop their APIs, integrate their data in the national data platform and make use of the search engine, significant technical competencies will be required.

Target population: The creation of a national data platform with an adequate technological infrastructure and common mechanisms between all actors involved (e.g. interoperability standards, security criteria, personal data protection requirements, etc.) will allow to build a nation-wide trusted federation of data providers and data users. For this reason, the targeted population is expected to be particularly wide. The primary targets of the investments will be citizens and businesses, which will benefit from a wider range of improved digital services in terms of efficiency, quality and usability. In particular, businesses will benefit from the opportunity of developing new data-driven solutions. In

²¹I.e. (i) Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market; (ii) Directive (EU) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies; (iii) National Legislation to transpose the above Directives; (iv) Regulation (EU) N°910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation) adopted on 23 July 2014; (v) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation); (vi) Legislative Decree 07/03/2005 n° 82 (Digital Public Administration Code) and related modification.

addition, the national data platform will allow PA employees to benefit from streamlined and more efficient work processes. Finally, the investment is expected to generate savings for public finances, once again producing benefits for the country as a whole.

Timeline: The implementation period is estimated to be 48 months, up to December 2024.

Investment 1.3 Digital citizenship, enabling services and platforms.

Challenges: The e-Government Benchmark 2020 highlights that Italy has been making stable progress in recent years in the digitalisation of public services, and in this respect, it is now just below the EU average. At the same time, however, Italy is characterised by the lowest level in the EU in terms of penetration of digital public services. Indeed, only 25% of Italian citizens had online interactions with the public administrations, down from 28% in 2019 and significantly below the EU average of 60%. For instance, the Sistema Pubblico di Identità Digitale (SPID), namely the Italian digital solution for electronic identity, still requires support, as approximately just above 20% of the population has currently activated it.

The causes behind such a delay in the usage of digital public services can be grouped into three key families:

- The scarce quality and user-friendliness of digital public services at local level
- The limited availability of broadband connectivity across the territory, especially in rural areas and small municipalities
- The limited digital competencies of citizens

Indeed, the lack of digital skills is a significant obstacle for the socio-economic development of the country and for the recovery from the current crisis. According to the latest edition of the DESI index on human capital, Italy ranks 28th out of the 28 countries under consideration (27 Member States and the UK), losing two positions from the previous year.

Just 42% of the population aged between 16 and 74 possess basic digital competencies (significantly below the EU average of 58%), and just 22% has above-basic digital skills (once again, well below the 33% EU average). Similarly, Italy ranks poorly also in the DESI index on the use of internet and online activity (26th out of 28), with just 74% of the population making use of the internet at least once a week (against a EU average of 85%).

Objectives: This investment aims at the creation of a digital community, fostering the supply and demand of digital public services and encouraging a digital cultural shift.

First of all, the investment will improve and harmonise the supply of digital public services

towards all citizens through the support to: (i) the development of existing key enabling platforms and of new digital public services, (ii) the adoption of key enabling platforms by public administrations, and (iii) the creation - thanks to the functionalities offered by key enabling platforms - of more efficient, user-friendly and secure digital public services.

Moreover, the investment will aim at tackling the digital divide and strengthening citizens' digital competencies. Through the combination of a range of complementary actions - including the provision of trainings, the creation of digital hubs, the involvement of young volunteers as digital facilitators, etc. - the investment aims at reversing the country's downward trend, bringing it in line with or even above the average of relevant DESI indicators by 2025.

Finally, the investment aims at supporting a digital cultural shift through the creation of a cashless community, encouraging the adoption of new payment technologies between commercial operators and citizens. Through the provision of incentives to citizens and businesses aimed at reducing the use of cash and spreading digital based payments tools, the investment is part of a wider national strategy towards the creation of a cashless community with a complete digitalisation of transactions for all operators involved (citizens, businesses, public administration).

The expected impact is to support the reduction of tax evasion, especially in the form of omitted invoicing as requested by 2019 CSR Recommendation 1, and to normalise the use of digital means to carry out day-to-day transactions and operations. In this respect, it is to be noted that incentives are not foreseen for online electronic payments, in order to stimulate consumers to make purchases in small businesses undertakings (neighbourhood shops, bar, restaurants), supermarkets, large retailers, artisans and professionals, which were severely affected by the economic crisis due to COVID 19.

Implementation: The investment consists of the following key projects:

Improvement of the quality, efficiency, and usability of digital public services

The Department of Digital Transformation of the MID and the Agency for Digital Italy will define a detailed set of actions aimed at improving digital services for any selected Public Administration by following a standard model, a so-called "adjustment project", tailored to different kinds of public administrations, including municipalities, schools and museums. Public administrations and their providers will be encouraged to submit an investment proposal following the "adjustment project" for the improvement of their design and development phases through the adoption of standardised models for websites, services and platforms onboarding. These models will make services accessible, usable, compliant with PagoPA, SPID and CIE platforms, by using open data and source code that can also be reused by others. Any "adjustment project" proposal will have to adhere to specifications in terms of interoperability, use of design thinking, agile methodologies and results.

The Department of Digital Transformation and the Agency for Digital Italy will also be in charge of validating and monitoring funding.

Adjustment projects will be carried out by in-house and private providers and will cover the following public administrations:

- 8.043 Municipalities and 14 metropolitan cities,
- 8.618 schools of various orders and grades,
- approximately 500 public museums.

Improvement of accessibility of digital public services

A public sector information available in a transparent, effective and non-discriminatory manner is a source of potential growth of digitized public services: Italian citizens would benefit from broader access to public services through websites and mobile applications. Moreover, they would receive services and information that facilitate their daily lives and the enjoyment of their rights.

Public sector bodies have to gradually increase the level of their websites accessibility, adopting measures to raise awareness among stakeholders and promoting extensive training programs on accessibility.

The project aims to help public sector bodies to reach targets indicated in criteria, requirements and lines of action that can be taken from guidance documents issued at the national level.²²

In order to achieve the targets set by the project it will be necessary to perform the following tasks:

- Support local administrations in terms of training, expertise and possible budget transfer with the provisions of the European Directive 2016/2102
- Assess the accessibility and quality of digital public services, throw accessibility tests and monitor the quality of digital public services.
- Provide technical support for the accessibility of digital public services, developing reusable tools and accessible template and web kits
- Improve the skills of public employees on the subject of accessibility and IT tools developing training and awareness-raising events, communication and dissemination of the accessibility culture and digital services implemented.

The project will be managed by AgID.

²²Including in particular: (i) Three-year Plan for Information Technology in Public Administration 2020 - 2022 (AGID - July 2020); (ii) Guidelines on the accessibility of IT tools (AGID - January 2020); (iii) 4th National Action Plan for Open Government 2019 - 2021 (Department of Public Function - June 2019); (iv) National Strategy for Digital Competencies (MID - July 2020); (v) 2025 Strategy for technological innovation and digitalization of the country (MID - April 2020).

Widespread adoption of the PagoPA platform and of the IO app by public administrations

First of all, this line of action will entail the gradual adoption of the PagoPA platform by public administrations. Upon completion of the adoption process, public administrations will therefore be able to receive digital payments both directly and/or through dedicated intermediaries. The initiative is part of a wider effort to create a cashless community on the public administration side.

Similarly, public administrations will incrementally make their services available through the IO app, so to enable a single gateway to easily access public services through one's smartphone.

PagoPA SpA, the state-owned company which was created purposely to foster the adoption of digital payment systems throughout the country, will support the implementation of this line of action, under responsibility of the MID.

The project therefore aims to:

- promote and technologically evolve central digital infrastructures that facilitate dialogue with the digital components adopted by the Public Administrations;
- define integration processes to the enabling platforms envisaged by the three-year plan.
- integrate and provide client software components, libraries, SDKs (software development kits) to individual Public Administrations, which can be easily integrated with central infrastructures, significantly contributing to the adoption of enabling platforms.

Main benefits will be:

- Re-engineering of digital based processes and the consequent strong simplification of obligations, supervision and management;
- Optimization of service delivery processes, also thanks to the digital release of related documents (certificates, attestations, receipts, etc.);
- Automation of the issuing, notification and accounting of income and expenses processes;
- Economic savings within the Public Administrations resulting from cashless and freed resources and skills, to be allocated to higher value-added services;

The project guarantees the dissemination among all Public Administrations of digital payments through the PagoPA platform; the development of a new relationship between citizens and the Public Administration through the dissemination and implementation of the IO App, which aims to become an access point to all public services for citizens; the integration of downstream services of an electronic payment through the development of services based on the central point ("Centro Stella") of the payments.

The project is based on the awareness of the relevance of the payment market to public administrations, both in terms of the number of transactions (about 500 million) for a value of (about € 700 billion), and of the savings resulting from the adoption of a single digital facilitate and simplify collection services on the Public Administration side, the importance of spreading electronic payments to the detriment of cash, as well as the importance of encouraging the spread of a single access point to public administration services and a single interface to which the individual administrations can communicate and share data and APIs in a free and open way.

The distribution of clients (or front end tools) is a fundamental step to ensure a fast and economical integration, for all the platforms served, with a UX developed with modern technologies and approaches that achieves the dual objective of presenting the same functions and methods of delivery with respect to different channels and a simple and intuitive user experience.

As far as PagoPA is concerned, the main activities will consist of the following:

- Completion of the adoption of the PagoPA digital payments platform to simplify the citizen's interaction with the Public Administration in relation to the collection of taxes and duties.
- Continuous technological implementation of the PagoPA product in order to make it more effective and technologically more efficient.
- Expansion of the digital payments market and with the aim of a strong reduction in cash in transactions between citizens and public administrations.
- Promote the speed of payment and collection by PAs also in the perspective of contrasting tax evasion.
- Automatic reconciliation of receipts through the SIOPE + system and near real time updating of public accounting.

Concerning the IO App:

- Spreading the integration of services on the IO app by creating a single "digital counter" for the citizen to centralize the contact point between citizen and PA, avoiding the citizen having to look for the correct interlocutor
- Provide tools to facilitate the adoption of the IO app in the provision of services Significantly reduce the communication costs of administrative, tax and collection documents by eliminating printing costs and reducing notification costs
- Census of the services offered by each entity in order to activate the delivery through the single IO channel;
- Constant updating of references and contact details of each institution and service, to be displayed to the citizen for requests for further information and assistance;
- Monitoring of the use of digital services by citizens, in order to identify any problems and opportunities for improvement;
- Creation of a shared standard for the organization of services on digital channels

and their nomenclature, in order to facilitate the orientation of the citizen and the consistency of services throughout the territory.

Widespread adoption of SPID, CIE and ANPR by public administrations

Building trust in the online environment is essential for a successful transition to a digital society. The National Identity platforms SPID (Sistema Pubblico di Identità Digitale) and CIE (Carta d'Identità Elettronica) are at the core of the National Digital Strategy in Italy. These platforms help citizens to manage their digital identity for accessing online services and support the public administrations to manage access to their online digital services in a secure and cost-effective way, while developing new digital services that require secure access.

- The Public System of Digital Identity (Sistema Pubblico di Identità Digitale - SPID) is the digital solution for electronic identity, which already allows citizens to easily access various digital public services.
- The Electronic ID (Carta d'Identità Elettronica - CIE) is the national identification document and card-based, which combines both physical and digital security systems, allowing to securely guarantee one's identity and also to access a number of online digital public services.

SPID and CIE are compliant to eIDAS Regulation and notified to the EU. Therefore, SPID and CIE contribute to the EU framework for Digital Identity as requested by the Single Digital EU Market.

ANPR (National Register of the Resident Population) is an integrated system that allows municipalities to carry out registry services, consult or extract data, monitor activities and generate statistics. With ANPR, the administrations and service providers will be able to have a single, reliable source for citizens' data. An onboarding phase for any municipality is still ongoing, on track to be completed. ANPR, by aligning place name data, allows implementation of the National register of street numbers and urban streets (ANNCSU), which is necessary to complete the Land Registry reform. Amendments to Art. 62 of the Digital Administration Code envisaged that ANPR will contain, in addition to registry data, the national digital archive of the civil status registers and the data of the military service lists.

The integration of SPID and CIE within the PA has already started. At the end of December 2020, approximately 5.000 administrations have already integrated SPID and approximately 200 have integrated CIE, both central and local Administrations. In September 2019, the "Decreto Semplificazioni" was enacted. It requires that all the PAs integrate their Digital Services into SPID and CIE as the way to access digital services targeting citizens in Italy.

During 2020 the MID, in collaboration with AGiD and Istituto Poligrafico Zecca dello Stato, have conducted an integrated plan directed to all the Public Administrations to

accelerate the integration of SPID and CIE. The key components of the plan are:

- a national tender to assign economic resources to the local PAs to be used for integrating the central platforms
- an integrated communication plan targeting local PAs, via webinars, social, web
- support functions to help PAs during the integration period

The plan is still ongoing and funded under the “Fondo Innovazione” assigned to the MID. Thanks to this plan, 14% of the PAs will be integrated to SPID and CIE at the end of 2021. Further resources are needed to complete adoption by all the PAs, with special focus on the PAs with limited skills in IT and Digital.

ANPR status is encouraging. At the time of writing, about 89% of the municipalities and metropolitan cities already joined the program and integrated their system within the central systems.

We will progress and extend the plan already in place to reach the objective of 100% of PAs integrated to SPID and CIE.

To this purpose:

- we will extend the national tender to assign economic resources to the local PAs to be used for integrating the central platforms SPID and CIE.
- we will continue the integrated communication plan targeting local PAs, via webinars, social, web
- we will maintain the support functions to help PAs for integration

With regards to point 1, we will proceed and extend the plan by type of PA (central, local, hospitals, etc.), so that we can smoothen the integration process and optimise the economic effort for the integration.

Creation of “Presidi digitali”

The line of action will aim at supporting the creation of digital services access points (i.e. “Presidi digitali”) in those areas of the country that - due to their geographical location - are at risk of suffering from a lack of connectivity. In addition, it will include the mapping of isolated households and the identification of possible connectivity solutions for mountain lodges in the Alps and the Apennines.

Digital Notification Platform

The Digital Notifications Platform is regulated by the 2020 budget law and by the decree-law n. 162 of 2019, containing the extension of terms and other provisions, in which various measures have been envisaged to promote and enhance the computerization of the public administration. The diffusion of the digital administration continued with the decree-law n. 76/2020 containing urgent measures for simplification and digital innovation, that governs the platform for digital notifications of public administration documents

and details the methods of operation.

The functional analysis and the analysis of the requirements preparatory to the development of the Platform has been carried out during 2020.

The proposal aims to promote the digital notification platform in order to make the legal notification of acts, provisions, notices and communications of the public administration easier, more efficient, secure and cheaper, with savings for public spending and minors. charges for citizens.

Through the Digital Notifications Platform, public administrations will be able to make notifications with legal value of acts, measures, notices and communications to recipients (natural persons, legal persons, entities, associations and any other public or private entity, residents or having their registered office in Italy or abroad if they have a tax code). In essence, the paper registered letter is replaced by a digital communication, resulting in simplification for the administration and saving time for citizens, who will be able to have the deed also available on their device, in real time.

The objectives of the National Digital Notifications Platform are:

- Make the notification with legal value of deeds, provisions, notices and communications of the public administration easier, more efficient, secure and cheaper
- Reduction of out-of-pocket expenses (paper printing and shipping) certainty of the notification date in real time and consequent reduction of a large part of the dispute as well as of the relative management costs.
- Reduction of the complexity of notifications; Reduction of timing and legal certainty - the acts of the PA reach the recipient's attention in real time, immediately after uploading the document to the platform.
- Simplified and more efficient procedures: the act immediately begins to produce its effects by favouring the planning of administrative activities
- Greater environmental sustainability, resulting from less waste of resources (paper, toner, etc.)
- Reduction of the risk of non-delivery of a notification by an Entity
- Quick response times from the PA: an advantage, in particular, for companies that need to plan their activities and for citizens waiting to know the outcome of important practices
- Greater accessibility: the recipient can access the document at any place and time from their device, also favouring people with disabilities

Self-assessment and learning environment

The development of the self-assessment and learning environment ACCEDI for the citizens strongly contributes to bridge the digital literacy gap of the population. The project supports the improvement of citizens' basic and advanced digital skills in order to facilitate their participation in the economic and social life, and to increase their chances

to find a job. By offering digital skills' self-development tools for the citizens, sharing materials realised thanks to the different initiatives, ACCEDI will provide the needed tools to support the development of digital skills.

The project strengthens the usability and fruition of the results of the initiatives of Repubblica Digitale and of the National Coalition of Digital Skills and Jobs. Furthermore, the Operative Plan of the National Strategy for Digital Skills includes among its actions focused on the citizens, a specific project on ACCEDI. The realisation of self-assessment and learning environment ACCEDI is thus instrumental for the achievement of the goals envisioned by the National Strategy.

A preliminary step for the development of the self-assessment and learning environment ACCEDI has already started thanks to national funds. For the first semester of 2021 is planned the release of a first working prototype of the platform that will be developed according to this 1.5 investment plan.

In the future the self-assessment and learning environment ACCEDI could be interacting with the platform of the Digital Skills and Jobs Coalition of the European Commission, as requested by the European coalition itself. In order to provide this additional service, extra funds specific for this action may be provided by the Commission following a Call on CEF Telecom 2020 on European Platform for Digital Skills and Jobs, which will be confirmed in the following months. The activities related to this development are not included in the investment plan.

The development plan provides for the breakdown of activities on three main lines:

- Line 1: implementation of the platform and operational management,
- Line 2: organization and implementation of the contents of the "Self-assessment and learning environment ACCEDI"
- Line 3: promotion of the development of citizens' digital skills with the contents of ACCEDI (e.g. through webinars, meetings in the area, etc.) and from a community perspective

And on a progression according to the following phases:

- Phase 1 - Implementation and commissioning of the first version of the self-assessment and learning environment ACCEDI", without profiling and with coverage of two levels of DigComp framework, with all the features provided (including agenda of events, community forum, interaction tools with the National Coalition), activation of synergies with the CPIAs for use in training courses, and with other proposed projects such as the digital facilitation network and the Houses of innovation and digital culture
- Phase 2 - Extension of the "Self-assessment and learning environment ACCEDI" to all levels of DigComp mastery, with profiling and issuing of certificates
- Phase 3 - Extension of the "Self-assessment and learning environment ACCEDI"

with more paths with respect to the different targets and expansion with specific self-assessment kits and relative certification.

Network of digital facilitation services

The goal is to create or strengthen so-called ‘nodes’ of digital facilitation, namely public centres where digital facilitators support citizens to assess their digital needs and provide one-to-one dedicated support.

The project plan has a gradual approach linked to the definition of specific agreement for activity coordination, at regional level, that take into account the different starting situations of each context and therefore the different needs of support and project definition, on the basis of an operative model already consolidated that can be applied in several realities, as well as being an effective tool for sharing experiences and data on the service.

The digital facilitation services will cover the entire national territory and will be realised by the support and coordination of Regions. In particular, agreements will be stipulated for the digital facilitation services with every Region, binding them to cover homogeneously the territory of their competence.

Concerning the involved structures, the digital facilitation services are launched also strengthening pre-existent structures (i.e. libraries). This is why every action aimed at realising or strengthening the structures for the community planned in Mission 5 will ensure a faster and wider spread of the service.

The initiative of the digital facilitation services aims to achieve the objective of promoting the strengthening or the activation of nodes/hubs of digital facilitation located at public entities and third sector associations through regional coordination. This initiative, therefore, contributes to the realisation of a systemic action with a homogeneous development at national level that on the basis of the current best practices (regional projects such as “Punti Pane e Internet” in Emilia Romagna, “DigiPass” in Umbria and local projects in municipalities such as Roma, Cagliari), ensuring a widespread distribution of the service.

The development of the initiative is also focused on the empowerment of the projects, spaces and infrastructures already present on the territory (firstly in libraries and schools, secondary in juvenile and social centers). The services will be carried out also in the tax assistance centers, elderly centers, and could also occur dynamically on the territory in the field of assistance services or ISTAT census activity.

The investments will be related to the amount of population for each region that do not possess basic digital skills. The monitoring of the efficiency will be directly related to the reduction of this quota of the population in each single Region.

At local level the single initiatives will pursue multiple objectives:

- the development of citizens' digital skills, through education or strengthening of digital facilitation services in public hubs (i.e. townhalls, libraries, schools, etc.) and private structures (associations);
- the development of digital skills in a public administration (including schools) or in a third sector association in order to enable the evolution of the service according to the needs of the population;
- digital inclusion as integral part of an assistance service for disadvantaged categories.

The gradual progression of the development plan is linked to the definition of specific regional agreements for the coordination of activities. Considering the different starting points and, thus, the different support and management needs, the agreements are defined also on the basis of a consolidated working model, which could be implemented rapidly and is also an efficient hub for sharing experiences and data.

Digital Civilian Service

The project will focus on the development of civilian service projects targeted at the improvement of digital skills, including in particular:

- the development/improvement of citizens' digital skills, through digital facilitation services provided in public (e.g., in municipalities, libraries, schools, senior centers, etc.) and private (e.g., associations, third place) spaces, with particular attention to the elderly population;
- the development/improvement of digital skills in public administrations (including schools) or third sector entities;
- digital inclusion as part of assistance services for disadvantaged groups, such as the elderly.

The project will be based on the experience and the results obtained after the pilot phase launched in 2021.

The young volunteers, who will be selected and trained to carry out the digital civil service, will contribute with their support to the development of digital skills, the promotion of conscious and responsible use of new technologies, and the promotion of full enjoyment of active citizenship rights.

From an operational perspective, the activity of each volunteer, mainly consists of:

- first contact with users to identify the type of request and set up an appointment;
- one-to-one meeting for practical support;
- administration of a questionnaire for service monitoring.

The detailed project plan presented by each entity shall provide the completion of training activities and the inclusion of young volunteers in the service activities within two months. Thus, they will be able to begin from the third month the activities related to

the knowledge of the phenomenon of the digital divide, and, therefore the preparation and the administration of questionnaires, with at least quarterly internal meetings to evaluate service performance.

Houses of innovation and digital culture for citizens and youth

The project aims to create houses of innovation and digital culture for citizens and youth, experiential training places on emerging technologies, to speed up the overcoming of the digital cultural gap and the enhancement of advanced skills, especially in areas with high housing density, basic elements for making the potential growth produced by digital transformation effective. Main services offered by the Houses of innovation and digital culture for citizens and youth contribute to strengthening the digital skills of the citizens and youth in order to facilitate their participation in the economic and social life, and to increase their chances to find a job:

- Educational training with structured path for basic and advanced digital skills;
- Innovative and technological methodological testing, in connection with the development of intelligent cities in order to approach applied emerging technologies with free and gaming formats;
- Interest group meetings related to digital culture, facilitating the development of communities and territorial projects;
- Co-working spaces to allow citizens and young students to overcome the difficulties generated by the digital divide;
- Shaping the offered services in flexible formats adapting to the evolution of the users' needs and thus supporting adequately the national system of permanent learning;
- Paths of experiences' exchange and tutorship, acting as reference, support and motivation for the other municipalities, developing a strong synergy with local administrations, libraries, associations, thanks to a close collaboration between the different Houses of innovation and digital culture for citizens and youth;
- Use the Houses of innovation and digital culture for citizens and youth as hubs for digital transition providing co-working spaces available to youth providing supporting services such as:
 - educational lectures;
 - incubators for start-ups;
 - specialised and technical training paths on cybersecurity and STEM subjects;
 - orienteering and placement services on the digital transformation of traditional businesses;
 - consulting and support for young entrepreneurs and start-ups;
 - consulting for the digital transition of traditional enterprises.

The houses of innovation and digital culture for citizens and youth will cover the entire national territory and will be realised by the support and coordination of cities. The cities will be selected based on geographical criteria to ensure a complete coverage.

The implementation will be activated under responsibility of the Presidency of the Council of Ministers and the Minister of youth policies and sport.

Cashback

The Cashback initiative consists of rewarding consumers who make use of digital payments by giving them back a share of their purchases. In particular, it includes the following features:

- Minimum number of transactions: 50 per semester (10 transactions during the trial phase)
- Amount of cashback: 10% of the payment
- Transaction ceiling: €150 for each transaction; in other words, if the payment is above €150, the cashback is capped at €15.
- Total ceiling: €1,500 for each semester; in other words, if the total amount spent is above €1500, the cashback is capped at €150.
- Supercashback: €1,500 for each semester for first 100.000 participants in terms of number of transactions, disregarding the amounts spent. The cashback is directly credited on the account of the participants at the end of each semester (in February 2021 for the trial phase).

During the first day of the registration process (8 December 2020), there were 5 million registration requests, and traffic topped 8.000 operations per second. After a trial period between 8 and 31 December 2020, the cashback will last for 18 months, from 1 January 2021 to June 2022.

Tax receipts lottery

Transactions regulated with electronic payments entitle customers to participate in weekly, monthly and annual draws, with prizes of up to €5 million for consumers (and up to €1 million for merchants). The registration process is already under way.

Tax credit for fees paid by merchants

As from 1 July 2020, merchants with a turnover of less than €400.000 are entitled to a 30% tax credit on fees paid. The tax credit can be used on a monthly basis.

Communication plan of the cashless plan

The range of initiatives will be fostered by a dedicated communication plan, with the aim of raising the awareness of the different actions undertaken and also facilitating the understanding of the operational modalities for participation.

These lines of action are part of wider set of measures aimed at modernising the country's payment habits, including:

- Cash limits: As from 1 July 2020 to 31 December 2021, the use of cash is

not allowed for transactions above €2.000. This threshold will be further reduced to €1.000 starting 1 January 2022.

- Individuals' tax credits: As from 2020, tax credits related to certain expenses incurred by individuals are granted only if paid by electronic means.
- Basic bank accounts: Low-income citizens can activate a simplified bank account with no or low cost at a flat rate.
- Bank fees: In order to support the initiative, several players have voluntarily eliminated fees related to payments below certain amounts (€ 5 or 10 depending on the intermediary).

Application of Blockchain in the national digital transformation process

The project aims at the creation of a national blockchain infrastructure in order to provide both internal and citizen-oriented services, always paying attention to privacy and security. The infrastructure will allow all public administrations to exploit the technological opportunities offered by blockchain. The project stems from the need to develop technological independence and manage a national infrastructure to provide a constantly up-to-date catalogue of innovative services for all interested PAs.

The first phase of the project will focus on the definition of the governance model and on the set-up of the infrastructure, while the second phase will aim at the gradual release of services and their uptake by public administrations.

Stakeholders: The project will be managed by the Ministry of Defence, with the cooperation of the Ministry of University (Ministero dell'Università e della Ricerca, MUR), the Ministry of Economic Development (Ministero dello Sviluppo Economico, MISE), and the National Social Security Institute (Istituto Nazionale di Previdenza Sociale, INPS).

Impediments: Apart from the above-mentioned challenges that are hampering the uptake of digital public services, Italy's situation may also be attributable to the heterogeneous governance model. In order to improve it, the MID has launched a dedicated reorganisation project, funded by the Structural Reform Support Programme.

Moreover, the investment is largely aimed at those population segments with low digital skills and low education, so there is a risk of low engagement towards the initiatives. For this reason, implementation means envisage the creation and involvement of pilot groups in the definition and prototyping phase. The low level of digital skills among citizens, including especially the elderly, may also hamper the uptake of the cashback initiatives and have negative effects on the adoption of e-payments. In order to mitigate this risk, a dedicated communication and awareness-raising campaign will be implemented.

Certain activities are also based on the active involvement of regions and metropolitan cities. While some of these have already implemented successful initiatives in the field of digital competencies, there is a risk that those that currently do not have a consolidated

expertise in digital facilitation may not have the required skills to activate the action on the territory, resulting in a lack of homogeneity and effectiveness. For this reason, a central support and capacity building effort for the various entities involved is envisaged.

Target population: The improvement of enabling services and platforms will directly benefit public administrations, including local, regional and central ones. In addition, businesses - including especially start-ups and SMEs - will also benefit from the investment as they will be called upon for the provision of a number of digital services to the PA. Moreover, all activities towards the strengthening of digital citizenship and digital culture will be beneficial for all citizens, including in particular those segments of the population with lower digital competencies and currently more affected by the digital divide. At the same time, specific initiatives, such as dedicated training modules in the self-assessment and learning platform, will be aimed even at users that already have advanced digital competencies. The set of measures of the Cashless Plan are envisaged to target the entire population of both citizens and economic operators, as all consumers and businesses can benefit from the cashless community range of initiatives.

Timeline: The implementation period is estimated to be 66 months, up to the second half of 2026.

2) Modernisation of the public administration.

Investment 2.1: Capable PA: human capital recruitment

Challenges: The Italian public administration staff hiring is frozen due to the need to reduce its capacity, and for more than a decade the natural generational turnover has suffered a significant setback. As a result, 45% of Italian public employees are over 54 years old against the 22% from OECD countries (MID, 2020).

This led to a progressive impoverishment of the operational capabilities of the public sector which creates a gap both in terms of quantity, the number of staff, as well as quality, their skills. The current average length of the open competitions - which is about 18/24 months - poses great obstacles to an effective recruitment of civil servants in the Italian public administration. In fact, such an untimely recruitment process does not solve the competence gaps as soon as those arise creating a substantial challenge for the evolution of the PA.

Objectives: The objective is to foster the public sector recruitment capacity and hire staff with professional skills, relevant for the digitalisation of the PA and the effective implementation of the interventions foreseen under the RRF. The goal is to centralise the recruitment procedures by setting up both online and physical facilities, allowing for significant time and cost savings, thus addressing the labour market inefficiencies which

are due to the fragmentation of the recruitment procedures across the country.

Implementation: The stream of action carried out for this investment in human capital recruitment for the public administration is the following:

Centralisation and digitalisation of recruitment processes

- Bottom-up rethinking of models and procedural standards for the analysis of public administration current and expected skill needs (“skill-matrix”), the identification of personnel and training needs according to both the evolving working landscape and the needs related to the implementation of the Plan.
- Creation of the "National Portal for Recruitment" (in continuity with a similar initiative currently supported by the ESF under PON Governance 2014-2020) according to the EPSO model. It will enable to streamline and simplify public recruitment procedures, through vacancies assessment and coverage. The portal will have a unique interface for the public administration to centrally manage the recruitment processes; the citizen’s interface will ensure a single one-stop-shop access to all open competitions according to specific professional profiles with integrated geo-referencing system.
- The selection procedures by candidates through the “National Portal for recruitment” allows the creation of an "online candidate file" for personnel selection according to models already adopted by the European institutions (e.g. EPSO model). The implementation of the model requires the development of IT applications and their operation, the purchase of equipment and IT support to carry out open competitions in a territorially decentralised manner. In a second phase, the portal will also allow for the timely recognition of the needs of the PA and the mobility of employees.

Implementation of an extraordinary recruitment plan

- As a result of an in-depth analysis of needs implemented by all administrations with the support of the Department of Public Function (to be finalised by May 2021), a structured plan will be developed to hire 1.500 fixed-term (3-year contract) professionals with technical and/or highly specialised expertise (e.g. public procurement, Business Process Re-engineering (BPR), functional analysis, Application Lifecycle Management (ALM), customer experience, etc.) working for public administrations to support with the implementation of the interventions financed under the NRRP. Particular attention will be devoted to hiring staff with professional skills relevant for the goals of PA innovation, digitalisation and modernisation. The selection process will be centrally managed by the Department of Public Function. Selected candidates will be assigned to the administrations concerned, which will be responsible for the recruitment process, including remuneration aspects. At the end of the contractual period, an ad-hoc intervention for permanent recruitment will be foreseen, through a specific regulatory intervention, to value the expertise acquired

over the three years.

- Carry out centralised open competitions for recruiting new staff according to the hiring plan. Candidates' selection process will be carried out according to the EPSO model already adopted by European Institutions and will also aim at evaluating candidates' relational, motivational, aptitude and problem-solving skills (so-called "soft skills").
- Strengthen the network between PA, universities and businesses to support the hiring of qualified young people (with strong technical competencies) in public administrations.

Impediments The high number of individuals targeted entails the redefinition of the whole selection and recruitment process, also in consideration of possible future healthy emergencies (e.g. COVID-19 pandemic) that could result in gathering restrictions.

Target population: The creation of a centralised recruitment system will mainly benefit all individuals interested in going through the recruitment process and work for the Italian public administration. More specifically, that will target the population with specific technical background seeking for public sector job opportunities.

Timeline: The implementation period is estimated to be 66 Months, from January 2021 to June 2026.

Investment 2.2: Competent PA: skills empowerment

Challenges: The Italian public administration is severely affected by skills shortages, obsolete workforce competencies and digital illiteracy. The need of upskilling and reskilling and closing the competencies gap, is also included in the European Semester Country Specific Recommendations 2020 for Italy.

The need to recruit new professional figures (Investment 2.1 Capable PA: human capital recruitment) is accompanied by that of strengthening the skills of the staff already employed by the PA, returning to invest significantly in training. Due to the spending review, the expenditure for internal staff training suffered from heavy cuts during the first decade of the 2000s. This led to the impoverishment of civil servants' technical skills, and to the failure to match the skills with the new needs that arose from the changes in the management of public policies. According to the ISTAT, in 2017 training on digitalisation was delivered to just over 126,000 participants, equal to about 5% of the total. In 2018, ICT training involved only 7.3% of the employees of the local PA, with a decrease of 0.4% from 2015.

Finally, the argument for the definition of new organisational instruments and models of public work applies differently to the new needs that arose during the COVID-19 pandemic. Remote working played an important role as a "catalyst for innovation": in

addition to ensuring the continuity of administrative activity through remote work by the majority of public employees dispelled mistrust and clichés ("impossibility of performing work remotely"), it accelerated the digitalisation and strengthening of IT equipment and digital skills of employees and laid the foundations for a radical change in the public work model.

Objectives: The objective of the investment - which will be accompanied by structural regulatory interventions - is to empower the public administration staff with the knowledge and competencies - especially technical and digital - needed to perform their mission in the digital revolution currently in place. To this end, it is necessary to strengthen human capital by upskilling and reskilling staff currently in service.

This also entails the identification of new and more effective forms of valorisation of high-skilled personnel in service, with the aim of motivating and incentivising them and consequently improve the efficiency of administrations (for instance, by increasing retention).

In addition, the empowerment of civil servants' skills shall be based on high-quality training criteria for public employees, also through the establishment of a national system of certification and accreditation of training bodies.

Skills empowerment represents the other tenant of a comprehensive strategy to fill the competency gap of the public administration. Such an empowering approach has an enabling and synergic role with the digitalisation of processes and services.

It is worth noting that skills empowerment (e.g. digital) of civil servants will complement, but not overlap with, skill-strengthening initiatives foreseen under other missions. Indeed, the target populations of the latter are different (e.g. students, citizens, etc.) and do not include PA employees.

Finally, with the aim of promoting a competent PA, a new model for public work will be defined and implemented. This entails a results-based evaluation of performance and remuneration as well as the promotion of remote working.

Implementation:

Introduction of empowering mechanisms to strength managers' role and skills

- Systemic re-design of lifelong training - leveraging on the results of a personalised skills and competencies assessment - to ensure upskilling and reskilling of central PA executives on leadership, management, technical domains, digital skills and soft skills. This entails the introduction of mechanisms for strengthening the role and skills of public managers, with particular attention to the issue of women's access to management positions.
- Design, development and deployment of a software to support executives in their managerial role. The HR management application will enable executives to manage

resources, plan and coordinate activities of activities and fulfil regulatory obligations of public sector executives (the so-called "manager's dashboard"), also to oversight the correct functioning of remote working.

Training of civil servants

- Definition and set-up of a new service portfolio.
- For the identified services, carry out an assessment of competence needs (according to skill-matrix developed under *Investment 2.1 Capable PA: human capital recruitment*).
- Undertake a gap assessment of expected civil servant's skills needs based on currently employed workforce and expected turnover.
- Design and implementation of a training system (e.g. skills assessment, continuous training, etc.) for public employees (including public buyers) to introduce compulsory training modules in the Public Administration careers. The training must be specifically designed on the results of the employees' skills assessment. In addition, training will focus on: i) role-based competencies; ii) transversal competencies - also through the definition of basic digital skills - to leverage on for the upskilling in the field of digitisation.
- Training on the job for upskilling and reskilling targeting 232.000 central PA employees lacking relevant skills and competencies. It will contribute to the strengthening of the role, competencies and motivation of targeted civil servants, allowing for the valorisation of the acquired expertise and results achieved.
- Set-up of a quality certification system of training for public employees through the creation of a national accreditation system for training bodies.

Remote working and new forms of work organisation

The main actions foreseen for the investment are:

- Definition and implementation of a new "public work model" for all employees, with evaluation and compensation schemes based on "results" and not on "working time". This measure involves the rethinking of the performance measurement and evaluation systems - to be also linked to the citizen satisfaction - currently in use. The approach will leverage on both regulatory and contractual instruments.
- Provision of *ad-hoc* support to PAs (organisational, technological and tools investments) for the carrying out of remote working - expected to favour an increase in the individual productivity and a better reconciliation of life and work times - and the full implementation of the POLA²³. The support actions envisaged include:
 - interventions for the development of enablers for administrative capacity (e.g.

²³The Agile Work Organisational Plans (so-called "POLA" in Italian) identify the methods of implementing agile work by providing, for activities that can be carried out remotely, that at least 60% of public employees can make use of them, ensuring that they are not penalised in terms of work recognition and career progression.

- models, guidelines, operational tools, etc.);
- technical assistance in the preparation of the POLA and support for the re-organisation of the operating procedures for the provision of services to users according to remote working;
- wide spreading of collaboration and knowledge sharing platforms and applications for the effective implementation of remote working.

Impediments: The sheer numbers of training activities for the target population entail a complex implementation process in terms of organisation and infrastructure. Moreover, as far as the adoption of remote working and new work models is concerned, civil servants' resistance to change, deeply rooted mind-set and old routines are general behavioural impediments to the effective implementation of the new approaches. Instruments and tools designed to progressively change such behaviours are included in the plan to mitigate the risks.

Target population: The investment will target individuals at central public administration level according to skills requirement needs and training strategy. In order to make the investment effective at all PA levels, a two-fold approach will be adopted. Specifically, at a central level, actions will be carried out by focusing on the specific ecosystem (e.g. finance, health, etc.) while considering the entire sector. Instead, at a regional/local level, except for transversal competencies, activities will be implemented by following a "best practice" and benchmarking logic.

Specifically, the target population of the initiative to support remote working and introduce new forms of work organisation will be public administrations at all levels, ranging from small municipalities with less than 5.000 inhabitants to Central PAs serving the entire national population (i.e. micro, small, medium and big municipalities, provinces and autonomous provinces, regions, metropolitan cities).

Timeline: The implementation period is estimated to be 66 Months, from January 2021 to June 2026.

Investment 2.3: Simple and connected PA: simplify administrative procedures and digitise processes

Challenges: Administrative simplification has been on the Italian political agenda for more than thirty years. Yet, despite the numerous simplification interventions adopted in recent years, the results achieved have not proved to be up to the expectations and political commitments undertaken. In fact, simplification still seems today, especially in some sectors, an ambition that is difficult to implement, or a result of a challenging process posing new administrative burdens to users or greater regulatory complexity. The analysis is confirmed by international indicators that highlight the considerable costs for citizens and businesses of complying with administrative procedures (Source: Doing

Business Index, World Bank), the low confidence of citizens in the PA (Source: Eurobarometer), or the inadequate administrative compliance with transparency standards (Source: Corruption Perception Index, Transparency International, 2019).

The main issues hindering the implementation of the simplification policy in Italy are all too known. The excess, volatility and disorder of policy making; the current status of the public administration and the way in which responsibilities are shared between political and administrative bodies complicates the decision-making process by unnecessarily lengthening the time; making more complex organizational and institutional arrangements (see Parliamentary Commission for Simplification, Concluding Document of the fact-finding survey on legislative and administrative simplification, in Parliamentary Acts, XVII Legislature, Bulletin of Councils and Parliamentary Commissions, 31 March 2014).

On the operational level, however, the lack of effectiveness (if not the failure) of the simplification policies is mainly due to the absence of support and monitoring activities for the implementation of the measures adopted.

The challenges are mirrored in the European Commission country-specific Recommendations (CSR 20.5.2020 COM (2020) 512 final) where Italy is called to launch "an integrated strategy to strengthen administrative capacity" (recital 24). Also the European Investment Bank (EIB) during the hearing of 1 September 2020 on the Recovery Fund at the EU Budget and Policy Commissions of the Chamber and Senate, highlighted the need for a strengthening of the public administration and a streamlining of procedures through investments "in the human capital of the public administration and a review of spending procedures with a clear allocation of responsibilities between central government and local administrations" and the activation of "structures that operate discontinuously with respect to the past and endowed with adequate power and skills".

Objectives: The objective of the investment is to transform the Italian public administration into a simple, lean and connected organisation, capable of offering services designed - in a user-centric approach - on the real needs of citizens and businesses. The investment measures aim to create an "administration at the service of citizens and businesses", which reduces the time and costs of procedures, provides services according to new methods of service delivery and quality standards, and makes the most of the potential offered by digital technologies.

To this end, the investment foresees the systematic mapping of all administrative procedures affecting businesses and citizens, with priority for those necessary for the rapid implementation of the Recovery Plan projects. It also entails ad-hoc consultation of the interested categories. The aforementioned mapping is functional to the modification, on the regulatory level (if necessary, with a specific delegation law), of the digital re-engineering of the discipline of those procedures.

Implementation:

Map, simplify and re-engineer the procedures to facilitate economic activities, in line with

the implementation of the EU principles of liberalisation and digitalisation through:

- the creation of a "catalogue of procedures" under standardised and simplified regimes
- the elimination of unnecessary obligations and authorisations
- the definition of a system for monitoring the adoption of simplified procedures

Reduce time needed for carrying out complex procedures, through:

- the set-up of a multi-disciplinary expert's pool for supporting central, regional and local administrations in the management of complex procedures (e.g. infrastructures, public works, digital transition, etc.)
- implement an IT management system and operating units within central and regional administrations for publishing and monitoring advancement of complex procedures

Digitalise procedures for the construction and productive activities, contributing to the effective implementation of the "once only" principle, enabling access to databases, self-certification and ex post controls by:

- the digitalisation of both front and back office of these procedures for the construction and productive activities (e.g. One-Stop Shop for Productive Activities, so-called "SUAP",²⁴ Telematic Conference of Services, etc.)
- the digitalisation of the SUE (One-Stop Shop for Construction) services and their integration with the SUAP services
- the definition of technical specifications to ensure the interoperability of IT systems, within the framework of the new interoperability model of Italian PAs defined by the Three-Year Plan for IT in the Public Administration 2020-2022

To ensure a smooth implementation of these interventions, the following transversal activities will be carried out:

- *ex-post* verification, monitoring and measurement of procedures burdens and timings
- *ad-hoc* training of employees that will implement the digitised and simplified procedures institutional communication on the simplified procedures, also through the web and social media presence, both to inform citizens and businesses and to increase "Country reputation", according to the principles of "Country branding".

Impediments: Impediments are related to change management challenges. The goal is not only to move from paper-based documentation to electronic documentation but rather overcome resistance to change by leveraging on the transformational potential of emerging digital technologies.

²⁴The SUAP is an administrative simplification tool that aims to coordinate all the requirements needed for the creation of businesses, in order to streamline and simplify relations between the Italian PA and citizens.

Target population: The investment target will be public administrations at regional and central levels. In addition, the other indirect beneficiary of the investment can be private companies, including innovative start-ups and SMEs as well as citizens.

Timeline: The implementation period is estimated to be 66 Months, from January 2021 to June 2026.

Investment 2.4: Smart PA: establishment of Territorial Hubs for recruitment, training, co-working and remote working

Challenges: Currently, each single public administration must provide itself with adequate facilities for the implementation of the recruitment process and training activities as well as with equipped spaces for co-working and remote working. This results in cost inefficiency and thus in an increase of the public expenditure.

Objectives: The key objective is the set-up of 15 "Territorial Hubs" for the centralised implementation of recruitment, training, co-working and remote working. These hubs will be equipped with i) technological/organisational infrastructures necessary to open competitive exams, ii) co-working and remote working spaces, and iii) training and public service delivery centers. Overall, this will foster productivity, social inclusion and environmental sustainability.

Implementation:

Establishment of Territorial Hubs for recruitment, training and co-working and remote working, through:

- Identification of adequate spaces and facilities as well as planning of renovation
- Conduct of renovation work and technological adaptation for the actual implementation of the Hubs

In general, the buildings will be recovered from abandoned and confiscated properties from the mafia in agreement with the Italian Public Property Agency (so-called "Agenzia del Demanio") and with the National Agency for the management and use of the assets seized and confiscated to the organized crime (so-called "Agenzia nazionale per l'amministrazione e la destinazione dei beni sequestrati e confiscati alla criminalità organizzata"). More specifically, the Territorial Hubs will be made of:

- Technological/organisational infrastructures for open competitive exams;
- Training and public service delivery centers, which can be used, for instance, to organise meetings, co-design sessions and training for all staff of the public administration, both central and local, as well as citizens;
- Implementation of spaces equipped for co-working and smart working within the Territorial Hubs. This will contribute to reduce operating and facilities costs of

the Territorial Hubs when open competitions and training activities are not held and create places to socialize and knowledge-sharing between employees of different administrations.

Impediments: The effective usage of the Territorial Hubs physical spaces will be impacted by the uncertain evolution of the COVID-19 emergency.

Target population: The key target group will consist of all public administrations, including local, regional and central ones, that would benefit from the use of these Hubs.

Timeline: The implementation period is estimated to be 66 Months, from January 2021 to June 2026.

3) Organisational innovation of the Judicial System.

Reform 3.1: see Appendix A

Investment 3.1:

Challenges: The overall reform plan fits into a broader context of reorganisation of the justice system, with interventions aimed at acquiring additional human and capital resources and innovative organisational measures to systematically address the causes of inefficiency. The mere adoption of the above-mentioned reforms, in fact, cannot lead to the improvement of the justice system, as they are embedded in a system that is heavily burdened and compromised by the considerable backlog weighing on most judges. Therefore, even with the simplification of legal procedures, the excessive number of lawsuits yet to be judged would not allow the rapid disposal of such backlog. This problem is even more evident in the Supreme Court where this backlog, in the civil sector, is particularly significant.

Objectives: The goal of the investment is to support the reform action of the organisational module of the magistrate's work, enhancing the Office's tool for proceedings and facilitating the digitalisation of procedures. The provisional insertion of additional human resources would allow the management and disposal, in a defined period of time, of the backlog that currently weighs on the Ordinary courts, on the Courts of Appeal and on the Supreme Court of Cassation, thus reducing the overall workload assigned to individual magistrates and allowing the quick resolution of new proceedings. Therefore, the investment includes:

- the strengthening of the trial office, through an integrated collaboration between judge and qualified
- staff that would allow the former to focus on the most typical and pertinent issues;

- the disposal - until zeroing - of the considerable workload that weighs on the judicial offices, using temporary administrative staff with specific ad-hoc skills;
- the increase in digitalisation (recovery of non-digitised documents and support for the digitalisation of criminal proceedings);
- the reduction in the administration's response time to regulatory changes;
- the improvement of coordination functions of the management of the courts;
- the overcoming of functional disparities between ordinary courts.

Implementation: The investment entails the definition of need requirements and a hiring plan for supporting the modernisation of the Judicial system and the reduction of decision backlog which are currently slowing down the Italian Judicial system. More specifically:

- recruitment plan to hire staff in the "Process Office" to support the definition of pending proceedings for first and second instance courts for a period of three years (extendable for another three years).
- hiring plan for "non-permanent or honorary judges" in first instance civil courts suffering from the most significant backlogs. Their goal will be to support the judges in making the legal decision and in drafting the sentences. The contract will be for three years (extendable for another three years).
- hiring of full-time fixed term three years contracts for administrative staff (on top of the current staff and in addition to the hiring plan already underway) with specific skills (currently not covered by existing staff) to sustain the substantial (and extraordinary) workload effort of judicial offices. The hired staff will be allocated to specific mission units to strengthen judicial offices' administrative capacity and cope with the additional needs as a result of the strengthening of the "Process Office". The plan foresees the hiring of administrative and judicial staff as well as IT professionals and data entry operators. The resources will be distributed over the territories on the basis of existing work backlog thus contributing to reduce disparities between judicial offices across the country.
- targeted hiring of professional profiles to support the implementation of the reforms and extraordinary measures. This includes architects, engineers, surveyors, accountants, organization analysts, statisticians that will support the offices in essential organizational activities (accounting management, IT, statistical activities, technical building management needed to respond to the increased activities related to the RRF).

More specifically, the plan foresees the recruitment of temporary assistants to be allocated to the ordinary Tribunals and to the civil and criminal Courts of Appeal as well as the recruitment of honorary magistrates to be temporarily allocated to ordinary civil Tribunals. The goal of the recruitment will be to swiftly reduce the number of pending cases and introduce a structural change to the system. This temporary staff shall be placed in the Trial Office. This organisational model is inspired by previous experiences

that have yielded excellent results in terms of increasing efficiency in judicial activity and it will support judges throughout all stages of their work.

The clerks shall assist judges by carrying out all preparatory tasks necessary for the judicial function. In particular, they shall study the files, investigate the relevant jurisdictional and doctrinal background, and prepare the minutes of the decisions.

On the other hand, the honorary magistrates shall collect relevant legislative, jurisprudential and doctrinal documentation in order to study the issues submitted to the judge. More specifically, they shall prepare outlines for jurisdictional measures that have a simple and standardised nature. Furthermore, the administrative staff shall include resources with different skills (e.g. technical-scientific, legal-administrative, operational) and with different educational and professional backgrounds (e.g. university graduates, specialised diploma holders, non-specialised diploma holders), in order to offer the widest possible range of skills in the fields of:

- construction (engineers/architects and surveyors/experts, etc.);
- digitalisation (IT graduates and specialised IT graduates, etc.);
- procedural and legal reforms (graduates with a legal/administrative specialisation, etc.); and
- clearing the backlog (IT graduates, statisticians and management engineers/organisation analysts, data entry operators).

Finally, the implementation of specific digital competencies will be achieved through a specific training plan, that will leverage:

- about 50 trainers already available on the territory;
- decentralised offices spread across the entire national territory;
- use of an e-learning platform;
- collaboration with the “Scuola per la Pubblica Amministrazione”;
- collaboration with the “Scuola Superiore della Magistratura”.

Impediments: The investment may be hindered by delays and possible appeals during the completion of the recruitment procedures for administrative staff and honorary magistrates.

Stakeholder involvement: The investment involves all the judicial offices (i.e. Ordinary Courts, Courts of Appeal and Supreme Court of Cassation).

Target population: Citizens and businesses benefitting from a quicker timing in the resolution of civil proceedings pending before Ordinary Courts, Courts of Appeal and the Supreme Court.

Timeline: The investment begins in the second half of 2021 and ends in the second half of 2026.

4. Green and digital dimensions of the component

a) Green Transition:

The investments and reforms of this component, even if they do not directly contribute to the green transition (as it emerges from table 1 below), are in part conceived to reach, among the other objectives, efficiency and sustainability gains. For instance, the investments in digital assets (including data centres infrastructures) and in digitalization of public services will be done with a view to energy efficiency.

In particular, Investment 1.1 Digital infrastructures aims at building up a reliable, secure but also energy-efficient viable infrastructure to host the data and systems of the public administration in line with the CSR 2020 Recommendation 3 requesting “efficient production and use of energy” by “reinforcing digital infrastructure to ensure the provision of essential services”. Furthermore, it is also in line with the EU data strategy COMM (2020) 66 looking for reduction of the current environmental footprint of the ICT sector mainly connected to emissions due to data centres, cloud services and connectivity.

This objective is also in line with the guidelines of the European Commission expressed in the *Green Deal* Communication of 11 December 2019 where it was announced that, even at EU level, the Commission would evaluate “measures to improve energy efficiency and performance in terms of circular economy of the sector itself, from broadband networks to data centers and ICT devices”. Objective also reaffirmed in the Strategy *Shaping the digital future of Europe* of 19 February 2020 which highlights that the current environmental footprint of the ICT sector mainly connected to emissions due to data centres, cloud services and connectivity and emphasizes that “data centers and telecommunications will have to improve their energy efficiency, use the energy recovery of waste and use more sources of energy renewables. They can and must achieve climate neutrality by 2030.”

Furthermore, the digitalization of a number of public services and the elimination of paper-based processes by reducing the waste of resources (paper, toner, etc.) has a significant impact on sustainability. Furthermore, it is expected that the digitalisation of public services will reduce the need for physical interaction within public sector facilities and limit the need for mobility with a positive effect on CO₂ emission reduction.

Finally, all reforms and investment are in line with the no significant harm principle, as defined in the Regulation 2020/852.

b) Digital Transition:

This component directly contributes to the digital transition through its reforms and in-

vestments. In particular, the following DESI areas are addressed: Digital Public Services; Human Capital/Digital Skills and Use of Internet Services by citizens.

Table 1 Green and Digital Tagging

	Green objectives		Digital objectives		Tagged RRF contribution	
Short title	Field of Intervention Green	Climate tag	Environmental tag	Field of Intervention Digital	Digital tag	Climate Digital
<i>Digitalisation of the public administration</i>						
<i>Investment 1.1: Digital infrastructures and cybersecurity</i>	055 ICT: Other types of ICT infrastructure (including large-scale computer resources/equipment, data centres, sensors and other wireless equipment)	0%	0%	055 ICT: Other types of ICT infrastructure (including large-scale computer resources/equipment, data centres, sensors and other wireless equipment)	100%	
<i>Investment 1.2: Data and interoperability</i>	011 Government ICT solutions, e-services, applications	0%	0%	011 Government ICT solutions, e-services, applications	100%	
<i>Investment 1.3: Digital citizenship, enabling services and platforms</i>	011 Government ICT solutions, e-services, applications	0%	0%	011 Government ICT solutions, e-services, applications	100%	
<i>Modernisation of the public administration</i>						
<i>Investment 2.1: Capable PA: human capital recruitment</i>	011 Government ICT solutions, e-services, applications	0%	0%	011 Government ICT solutions, e-services, applications	100%	
<i>Investment 2.2: Competent PA: skills empowerment</i>	012 IT services and applications for digital skills and digital inclusion	0%	0%	012 IT services and applications for digital skills and digital inclusion	100%	
<i>Investment 2.3: Simple and connected PA: simplify administrative procedures and digitalise processes</i>	011 Government ICT solutions, e-services, applications	0%	0%	011 Government ICT solutions, e-services, applications	100%	
<i>Investment 2.4: Smart PA: establishment of Territorial Hubs for recruitment, training, co-working and remote working</i>	012 IT services and applications for digital skills and digital inclusion	0%	0%	012 IT services and applications for digital skills and digital inclusion	100%	
<i>Organisational innovation of the Judicial System</i>						
<i>Investment 3.1: Human capital recruitment to strengthen the «Trial Offices» and to overcome disparities among the different court-houses</i>	n.a.	0%	0%	n.a.	0%	

5. Milestones, targets and timeline

[All milestones and targets are under review in line with the new budget]

Investment 1.1 Digital Transformation of the public administration: Digital infrastructures

An infrastructure of excellence, investments for the development of a highly reliable infrastructure on the national territory

- M1 Tendering procedure, Q4 2021
- M2 Development of a national infrastructure to provide cloud services to PAs, Q2 2022
- T1 The gradual hosting of identified data centers for migration in the infrastructure, so to enable the provision of the cloud services, 100% of target PAs by Q2 2025

Strengthening the technological infrastructure to support the jurisdiction

- M1 Project 1 - (DAG01) Digitization of procedures for the Pinto Law: Identification of digitalisation needs, Q4 2022
- T1 Project 1 - (DAG01) Digitization of procedures for the Pinto Law: Digitised files, 100% of target identified Q2 2026
- M2 Project 2 - (DOG14) Realization of the Single National Justice Data Centre: Identification of digitalisation needs, Q4 2022
- T2 Project 2 - (DOG14) Realization of the Single National Justice Data Centre: Realised data centres, 100% of target identified Q2 2026
- M3 Project 3 - (DOG15) Proprietary geographic connectivity network: Identification of digitalisation needs, Q4 2022
- T3 Project 3 - (DOG15) Proprietary geographic connectivity network: Nodes connected to the proprietary network, 100% of target identified Q2 2026
- M4 Project 4 - (DOG16) Perimeter and workstation security: Identification of perimeter and workstation security, Q4 2022
- T4 Project 4 - (DOG16) Perimeter and workstation security: Purchased workstations, 100% of target identified Q2 2026
- M5 Project 5 - (DOG27) digitalisation of archives: Identification of digitalisation needs, Q4 2022
- T5 Project 5 - (DOG27) digitalisation of archives: Digitised files, Q2 2026

Cloud First

- M1 Increase of cloud services in the public administration, Q4 2024
- T1 Adoption of new cloud services by the PA, 100% of pre-identified number of cloud services by Q4 2024

Cloud Enablement

- M1 Control Unit, Q1 2022
- T1 Assessment of migration plans of PAs, 100% of migration plans assessed by Q4 2024
- T2 Migration to cloud of PAs, 100% of identified migration plans by Q4 2025

Strengthening the National Security Perimeter for Cyber (PSNC) through interventions on technology, processes, governance and awareness-raising to increase cyber defences and country resilience

- T1 Support to the upgrade of security structures within selected public administrations and private companies, in line with the guidelines of the NIS authorities, 100% by Q4 2024
- T2 Creation of cybersecurity labs for sectors identified by the NIS Directive and the "legge sul Perimetro di Sicurezza Nazionale Cibernetica (DL 105/2019)", followed by their accreditation with the national Evaluation and Certification Centre (CVCN), 100% of identified labs by Q4 2024
- T3 Upgrade of selected Operators of Essential Services (OES) according guidelines set by NIS authorities, 100% by Q4 2024
- T4 Creation of Computer Emergency Response Teams (CERT) for each sector identified by the NIS Directive and for the different regions, ensuring their interconnection with the Italian Computer Security Incident Response Team (CSIRT), 100% of identified sectorial CERTs by Q4 2022 and 100% of selected regional CERTs by Q4 2024
- M1 Creation of a central control unit (Nucleo centrale ispettivo), Q4 2021

Investment 1.2 Digital Transformation of the public administration: Data and interoperability

Leverage information assets of the country

- M1 Mapping and promotion of public and private data assets, Q3 2022
- M2 Search engine for all available datasets, Q1 2023
- M3 Interoperability update of base registries, Q4 2023

Development of the interoperable national data platform and support to public administrations for the adoption of the interoperability model and integration of their APIs in the platform

- M1 Development of the platform and onboarding of databases of national interest, Q4 2024
- T1 Increase of the number of public administrations that provide their data through the API catalog, 100% by Q4 2024
- T2 Increase of the number of public administrations that make use of data through the API catalog, 100% by Q4 2024

Single Digital Gateway

- M1 Definition of implementation modalities of the once-only principle, Q2 2021
- T1 Accessibility analysis of involved PAs, 100% by Q3 2022
- T2 Quality monitoring of identified PAs procedures, 100% by Q4 2023

Investment 1.3 Digital Transformation of the public administration: Services and Platforms

Improvement of the quality, efficiency, and usability of digital public services

- M1 "Adjustment projects" (Progetti di adeguamento), Q1 2023
- T1 Adoption of standard model for websites, 100% of selected PAs adopting the standard model by Q4 2025

Improvement of accessibility of digital public services

- T1 Accessibility tests and quality monitoring, 100% of selected websites and apps monitored for accessibility by Q2 2024
- T2 Training, communication and dissemination of the accessibility culture, 100% of planned training outputs on accessibility of digital services implemented by Q2 2022
- T3 Development of reusable accessibility webkits for PAs, 100% of strategic PAs supported by Q2 2024
- T4 Meetings with strategic administration (i.e. regions and metropolitan cities) to advise and provide technical support on the implementation of AgID's guidelines on accessibility, 100% of strategic PAs supported by Q2 2024

Widespread adoption of the PagoPA platform and of the IO app by public administrations

- T1 Adoption of PagoPA, 100% of PAs out of those that have not adopted PagoPA yet by Q1 2026
- T2 Adoption of IO App, 100% of PAs out of those that have not adopted IO app yet by Q1 2026

Widespread adoption of SPID, CIE and ANPR by public administrations

- T1 Adoption of SPID, CIE, 100% of PAs by Q4 2024
- T2 Adoption of SPID by PA, 100% of PAs by Q1 2026
- T3 Uptake of eID (SPID + CIE) by citizens, 100% of eligible population by Q1 2026
- T4 Adoption of ANPR, 100% of eligible PAs by Q1 2026

Creation of "Presidi digitali"

- T1 Creation of "Presidi digitali" in areas suffering from a lack of connectivity, 100% of planned municipalities by Q1 2024

Digital Notification Platform

- T1 Adoption by public administrations of the platform for digital notices, 100% of identified PAs by Q1 2026

Self-assessment and learning environment

- M1 Creation of a self-assessment and learning environment for citizens and interventions for basic and advanced digital literacy, Q2 2022
- M2 Extension of the "Self-assessment and learning environment", Q1 2023
- M3 Extension of the "Self-assessment and learning environment" with more training courses, Q2 2024
- T1 Involvement of citizens, 100% of target population by Q2 2024
- T2 Development of learning modules, 100% of planned learning modules by 2024

Network of digital facilitation services

- T1 Activation of regional agreements, 100% by Q2 2023
- M1 Completion of projects, Q2 2024
- T2 Activation or strengthening of 'nodes', 100% of planned 'nodes' by Q2 2024

Digital Civilian Service

- M1 Completion of projects for the first year, Q2 2023
- M2 - Completion of projects for the second year, Q2 2024
- M3 Completion of projects for the third year, Q2 2025
- T1 Increase of volunteers, 100% of planned increase by Q2 2025
- T2 Participation of entities, 100% of pre-defined target entities by Q2 2025

Houses of innovation and digital culture for citizens and youth

- M1 Definition of general projects and terms and conditions of the agreements for pilot group, Q4 2021
- M2 Definition of general projects and terms and conditions of the agreements for second group, Q2 2023
- M3 Opening of Houses in the cities of the pilot group, Q4 2023
- M4 Opening of remaining Houses, Q4 2024
- T2 Involvement of citizens, 100% of planned citizen involvement by Q4 2024
- M5 Creation of public-private partnerships, Q4 2021
- M6 Trial and adjustment, Q4 2022
- M7 Consolidation and scale-up of initiatives, Q4 2023
- T3 Opening of Houses for the youth, 100% of planned Houses by Q4 2023
- T4 Provision of training paths, 100% of planned training paths by Q4 2023

Cashless Plan: Incentives

- T: at least 90% of foreseen incentives granted, Q4 2023
- M1: completion of the "cashback", Q2 2022
- M2: completion of the "tax receipts lottery" initiative, Q4 2023
- M3: completion of the "tax credit for fees paid by merchants" initiative, Q4 2023

Cashless Plan: Communication activities

- T: at least 90% of foreseen actions implemented, Q4 2023
- M1: communication plan, Q1 2021
- M2: completion of actions, Q4 2023

Investment 2.1 Capable PA: human capital recruitment

Centralisation and digitalisation of recruitment processes

- T: Reduction in costs and time for employee recruitment, - 15% by Q2 2022, - 25% by Q2 2026
- M1: Models and procedural standards for the analysis of needs and identified competences ("skill-matrix"), Q4 2022
- M2: Realisation of the "National Portal for Recruitment", Q2 2023

Implementation of an extraordinary recruitment plan

- T: Implementation of the Recruitment Plan, Q4 2022: 100%
- M1: Publication of the call for applications, Q1 2022
- M2: Selection procedures call for applications, Q4 2022

Investment 2.2 Competent PA: skills empowerment

Introduction of empowering mechanisms to strength managers' role and skills

- T1: Managers benefiting from skills development actions, Interim Q4 2022: 30%, Final Q2 2026: 100%
- T2: Central and regional PAs benefiting from an innovative management software supporting managerial functions ("manager dashboard"), Interim Q4 2023: 20%, Final Q2 2026: 50%
- M1: Introduction of new systems for competence assessment and carrying out of the assessment, Q1 2023
- M2: Training activities, Q2 2025

- M3: Implementation of a management software supporting managerial functions ("manager dashboard"), Q3 2023

Training of civil servants

- T: PA employees benefiting from upskilling and reskilling, Interim Q4 2023: 25%, Final Q2 2026: 75%
- M1: Training plan, Q2 2022
- M2: Training provision, Q2 2026
- M3: Implementation of a national system for certifying the quality of training, Q4 2025

Remote working and new forms of work organisation

- T1: PAs having implemented the Agile Work Organisational Plan (so-called "POLA") through measurable initiatives, Interim Q2 2023: 75%, Final Q2 2026: 95%
- T2: Managers and employees in remote working implementing activities suitable to be carried out remotely, Interim Q3 2023: 60%, Final Q2 2026: 75%
- M1: Redefinition and implementation of a new model of public work, Q4 2022
- M2: Provision of support to PAs for the enhancement of administrative capacity and technological investments, Q2 2026

Investment 2.3 Simple and connected PA: simplify administrative procedures and digitise processes

Mapping, simplification and re-engineering of procedures

- T1: Procedures mapped and standardised, Q2 2026: 100%
- T2: Re-engineered procedures and digital forms, Q2 2026: 100%
- M1: Preparation of a "catalogue of procedures" under standardised and simplified regimes, Q4 2023
- M2: Elimination of unnecessary obligations and authorisations, Q4 2023
- M3: Simplification of a set of critical procedures with stakeholders, Q4 2023

Speeding up of complex procedures

- T: Time reduction of complex procedures, Interim Q4 2023: 20%, Final Q2 2026: 30%
- M1: Set-up of a pool of multidisciplinary experts on specific topics, Q3 2021
- M2: Establishment of operating units within central and regional administrations for monitoring advancement of complex procedures, Q2 2022

Digitalisation of procedures for the construction and productive activities

- T: PAs fully managing procedures electronically, Q2 2026: 100%
- M1: Digitalisation of both front and back office for the construction and productive activities, Q2 2026
- M2: Definition of technical specifications to ensure the interoperability of IT systems, Q2 2026

Investment 2.4 Smart PA: establishment of Territorial Hubs for recruitment, training, co-working and remote working

Establishment of Territorial Hubs for recruitment, training, co-working and remote working

- T: Identified Territorial Hubs in operation, Interim Q4 2023: 40%, Final Q2 2026: 100%
- M1: Identification of spaces and planning of renovation, Q2 2022
- M2: Renovation work and technological adaptation carried out and implementation of the Hubs, Q2 2025

Investment 3.1 Human capital recruitment to strengthen the «Trial Office» and to overcome disparities among the different courthouses

Project 1 - (GAB01) Monitoring, Innovation, Task force, Organization, Research: a methodological and systematic approach for the recovery and resilience of justice (monitoring of the recovery progress of the backlog of judicial proceedings)

- M1. Reference legislation approval, Q2 2021

Project 2 - (DOG18) Human capital for administrative staff

- M2. Completion of recruitment procedures for administrative staff, Location assignments (1st quota) by Q2 2021, Location assignments (2nd quota) by Q4 2024
- T1. Entry into service/hiring, 30% Q4 2021, 30% Q2 2022, 40% Q4 2024

Project 3 - (DOG19) Trial Office (TO)

- M3. Completion of recruitment procedures of administrative staff, TO staff and TO judges Location assignments (1st quota) by Q2 2021, Location assignments (2nd quota) by Q4 2024
- T2. Entry into service/hiring, 1) 50% (staff) + 100% (MOA - Auxiliar Honorary Judges), Q4 2021, 2) 50% (staff) Q1 2024
- T3. Supporting magistrates, > 4,000 Q2 2022
- T4. Number of measures filed by judicial bodies (single and collegial, civil and criminal), Increase between 2% and 8% above annual average, Q4 2024, Q4 2026

6. Financing and costs

See Table 2 work in progress

A Appendix: Reform of Justice System

The main objective of the reform is to ensure the reasonable length of the process and it is accompanied by the investment in technology, in human resources, in the (*temporary*) staffing of the Offices of Proceedings (“*Ufficio del Processo*”) of the courts most burdened by arrears in the civil sector to accelerate the treatment of ongoing proceedings, in the organisation of the offices.

A specific intervention is provided for the disposal of tax litigation pending before the Court of Cassation. As documented in the last inauguration report of the judicial year, the tax section alone has a gradient, as of 2019, of 52,540 cases, while all the other ordinary civil sections together have a gradient of 51,583 proceedings (excluding immigration). In order to address this continuing criticality, it is expected that auxiliary honorary magistrates may be assigned, on an extraordinary basis, temporarily and contingently to the tributary sections of the Court, and for two cycles, in order to break down the endemic backlog weighed on these sections, negatively affecting the disposal performance of the entire Supreme Court.

In this context, strengthening the security and innovation of digital software and infrastructures is of primary importance. Combined with the completion of the digitalisation of the civil and criminal proceedings and the planned regulatory reforms, staff measures will ensure long-term performance up to European standards. The expectation of success of the measures described above is based on the high rate of disposal of business by the Italian magistrates (so called Clearance Rate), i.e. the constant increase in the percentage of definitions compared to annual occurrences (1,6 in 2019). This suggests that the absorption of the backlog through the extraordinary measures indicated will allow decision-making times in line with European standards.

The *reform projects* are aimed at the objectives of efficiency of justice, the protection of rights of action and defence, and the enhancement of the professionalism and independence of the judiciary.

Reform of the civil process

A draft law is pending in Parliament for the reform of the civil process aimed at simplifying and streamlining the process, both first-degree and appeal, through the reduction of rites and their simplification. Broadly speaking, the measure provides for:

- the introduction of a simplified civil rite: from three rites (court of peace, ordinary monocratic and monocratic summary) we move to a single rite;
- the reduction of the cases in which jurisdiction is conferred on the tribunal in collegiate composition;
- the review of the appeal judgment, with the provision that the institute of the judgment is the appeal; provided, moreover, that the time limit for the first hearing will not exceed 90 days;
- anticipation of the time limits for filing statements of clarification or modification of applications, exceptions and submissions with the aim of defining the decision making theme before the first appearance of the parties;
- the elimination of the hearing specifying the outcomes;
- the revision of the framework for alternative dispute resolution instruments with the exclusion of mandatory use of mediation in matters of health liability, financial, banking and insurance contracts. In the context of assisted negotiation, lawyers are given the opportunity to anticipate, where possible and with defined procedures, part of the investigative activity in order to facilitate the detection of the facts before the start of the trial, to allow the parties to better assess the fairness of judgment and to encourage transactive solutions. The examination of such activity in any subsequent judgment shall be returned to the judge’s assessment;
- a special mediation procedure is introduced with regard to the dissolution of communions of goods;
- the implementation of the telematic process, with the provision that, in proceedings before the justice of the peace, the tribunal and the Court of Appeal and Cassation, the filing of the documents and the acts of the party will take place exclusively by telematic means. Notifications may also be made electronically if the recipient holds a PEC address or a digital domicile;
- the definitive overcoming of the so-called ‘*Rito Fornero*’;
- the introduction, in the field of real estate expropriation of rules aimed at speeding up the course of the enforcement procedure and to contain the costs through the collaboration of the debtor, who may be authorised by the judge to sell directly the property foreclosed.

Regulatory intervention will necessarily have to be part of a broader context of overall re-organisation of the justice system. In addition, other measures are under consideration and are being developed for possible inclusion in a forthcoming decree law that contains the accompanying and functional measures for the realisation of the projects in the time horizon given by the European regulation establishing the Recovery and resilience fund.

The need to implement the reforms set out in draft delegation Law (*Senate Act no. 1662*) also comes out from the need to further strengthen the set-up already contained in the draft law pending in Parliament, ensuring that the overall objective of greater efficiency of civil justice is achieved. These are, in summary, the further measures being defined:

- in order to increase the use of alternative dispute resolution procedures and to facilitate the definition of disputes through judicial conciliation or out-of-court settlements, specific measures are being prepared, both implementing and simplifying the implementation of existing ones and introducing new ones;
- with regard to the civil process, further measures are being defined to improve the efficiency of the process with reference to the central issues of procedural foreclosures, re-establishing the temporal cadences for the definition of the decision-making theme, so that at the first hearing the positions of the parties are complete and the judge can assess the procedural choices functional to the speediest definition of the judgment;
- the operational entry into force of the system of the principle of clarity and summary of the acts of the parties and of the judge is also being developed;
- interventions are also being done on further rules to speed up and streamline appeal judgments;
- some amendments relating to arbitration judgment are being studied in order to give arbitrators the power to grant seizures and other protective measures if provided for in the arbitration agreement or other separate written act drawn up prior to the establishment of the arbitration judgment;
- finally, a number of measures are being drawn up in the field of justice expenditure, which introduce reward mechanisms where the parties, in specific cases, contribute to streamlining the decision-making phase in the Supreme Court, and on the digitisation of payments of the allowances referred to in Law No 89 of 24 March 2001 in order to speed up the winding-up proceedings.

Reform of the judicial system.

The reform of the judicial system, which is also pending in Parliament, does not only have effects on the legal profile, but also on the efficiency of the administration of justice. In fact, the rules governing the organisation of the activities of offices with a direct impact on the efficient management of the justice sector are primarily taken into account:

- the assignment to the executive of the office to verify that the distribution of the roles and workloads ensures the functional and efficient objectives of the office and ensures that all the magistrates of the office, sections and colleges are consistently fair;
- the specific provision that it is the responsibility of the manager (both of the office and of the individual section) to monitor the occurrence of delays by one or more magistrates of the office in order to ascertain the causes and to take any appropriate initiative to eliminate them, through the preparation of targeted disposal plans, to be verified in the practical operation every three months;
- the introduction of specific disciplinary offences in the event of non-compliance with the obligations set out in the preceding paragraph;
- the overall reorganisation of the Public Prosecutor's Offices, due to the need to require all the offices to have an organisational form based on criteria of efficiency and valorisation of the competences of individuals;

In relation to the rules of the judiciary which have effects of efficiency in the overall management of human resources, the following should be noted:

- the reduction of access to the career of a magistrate that allows graduates to participate directly in the competition, reducing the average age of access to the judiciary and making it attractive also for those particularly gifted young people who, instead, for long periods of time, embark on different careers;
- the reduction of the organic plant of the office of the maxillary of the Court of Cassation resulting from the restoration of the functions of supporting the *nomophilachia* of that office, so as to contain the number of magistrates removed from the ordinary exercise of jurisdiction;
- the extension also to magistrates who hold apical functions of the obligation to remain in the offices for at least four years, which is a timeframe necessary to allow adequate planning and organisation of the office they direct;
- preclude participation in the competition for the coverage of all senior posts (other than those of first President and Attorney General at the Court of Cassation) to magistrates who, by reason of their age, cannot guarantee their stay for at least four years which, as mentioned above, represent the timeframe necessary to allow adequate planning and organisation of the office they direct;
- reduce the number of passages of functions from judges to requirers;
- simplify the procedures for approving tables and plans for the organisation of offices;
- simplify the work of judicial councils.

Reform of the criminal process

The draft law pending in Parliament relates above all to the necessary realisation of the progressive digitisation of the criminal process: with rules relating to the electronic filing of documents and documents and a regulation of communications and notifications focused on the use of the PEC and also of technological solutions other than the PEC. A number of provisions are envisaged with the sole aim of eliminating the “dead time” of the criminal process, of drastically reducing cases where the proceedings lead to debate, of streamlining the discipline of a number of institutions with a prospect of acceleration and simplification. Special attention is paid to the appeal judgment, a real bottleneck of the criminal trial.

The principles underlying the reform action are summarised as follows:

The duration of the preliminary investigations is rescheduled according to the seriousness of the offences carried out. In order to make the maximum period of time more difficult to circumvent, a mechanism for judicial verification of the timeliness of the registration of criminal offences by the public prosecutor is introduced and an obligation is introduced for the public prosecutor to file the documents of the investigation at the end of the maximum period of time, with the additional obligation to file a request for dismissal or the prosecution within thirty days from the submission of the relevant request by the lawyer of the suspect or the offended person.

The guiding criterion of the decision of the Public Prosecutor and the Judge for the preliminary hearing is redefined, to make a request for the dismissal of the proceedings and the issue of the judgment not to proceed, replacing the parameter of the inadequacy of the elements acquired to support the accusation with that of the inability of the same to allow a reasonable forecast of acceptance of the accusation in the trial.

The rules on alternative rites are amended to encourage their adoption, except in cases where very serious offences are carried out.

With regard to the debated judgment, the reform contains a number of directives specifically geared to the objective of accelerating the procedure, including:

- the elimination of the need for the consent of the other procedural parties in order to revoke the admission of evidence to which the requesting party has renounced;
- the provision that the processing of technical advice and expert advice must be filed within a period prior to the hearing set for the examination of the consultant or expert;
- the obligation for the court to determine and communicate to the parties, at the beginning of the debate, the timing of the trial.

With regard to proceedings before the tribunal in monocratic composition, a “filter” hearing is introduced, always with a view to strong deflation, only in cases of direct litigation, in which the judge (other than the one before which, where appropriate, the judgment will have to be celebrated) assesses, on the basis of the documents in the prosecutor’s file, whether the debate is to be held or whether, on the contrary, a judgment of no place to proceed must be given.

The interventions related to the appeal judgment are numerous and significant:

The lawyer may appeal the judgment of first instance only if he has a specific mandate to appeal, issued after the delivery of the judgment, with the aim of avoiding a large number of appeals lodged in the interest of persons who have become irretrievable.

The possibility of bringing an appeal at the Registry of a judicial office other than that which issued the measure to be challenged shall be deleted, subject to the rules governing the electronic filing of the appeal.

The monocratic appellate judge is introduced, with jurisdiction to judge the judgments of first instance delivered by the monocratic judge, accompanying this innovation with adequate guarantees for the parties.

In order to ensure greater speed, deadlines for the maximum duration of the different phases and grades of the criminal proceedings are also introduced, hence the obligation for individual judges to take organisational measures to ensure that criminal proceedings are defined in accordance with the deadlines; failure to adopt such measures (and not non-compliance with deadlines), if attributable to inexcusable negligence, may constitute disciplinary liability; in the judgments of appeal against convictions, at the end of the period of time for the trial set in the reform, the procedural parties may request that the judgment of appeal against the judgment of conviction at first instance be dealt with. After the submission of the application, the process will have to be defined within six months. It will be up to the heads of the judicial offices and individual magistrates to ensure that these deadlines are met, by dictating the necessary organisational measures.

In short, the aim of the reform is to streamline and simplify the process and, without confusing the

fundamental rights of action and defence, speed up their conclusion in order to meet the dual need to avoid consuming prescriptions (in every state and degree) and, at the same time, that the processes have an unreasonable duration.

2 M1C2 - Digitalization, Innovation and Competitiveness of the Production System

1. Description of the component

Summary box

Policy area: Innovative technologies, digitalisation of the production system, internationalisation of Italian enterprises, ultra-fast connections, reduction of the digital divide

Objectives: the goals of this component are:

- a) Support the digital transition and the innovation of the production system through incentives to investments in cutting-edge and 4.0 technologies, research, development and innovation;
- b) Create ultra-fast optical fibre, 5G and satellite connections, for the modernization and completion of very high-capacity networks, connected to the white and gray areas and to strategic public facilities of the Country. Integration of satellite technologies to offer advanced services for the production sector and security;
- c) Promote the development of production chains, in particular innovative ones, as well as Made in Italy productions and increase the competitiveness of Italian companies on international markets, also using innovative financial instruments for this purpose.

Reforms and investments:

Investment 1: Transition 4.0: incentives for businesses, to facilitate the digital and green transition.

Investment 2: Innovation and technology of microprocessors: the project aims to support the high-tech sector of microelectronics, through a mix of tools for financial support for investments in machinery, equipment and production plants.

Investment 3: SMEs digitalization and Guarantee Fund : re-financing of guarantee fund to facilitate SME's access to credit and business liquidity (financed by ReactEU).

Investment 4: Investments for Ultra Broadband, 5G and Satellite connections:
 4a) Fast Internet connection (Ultra-broadband and 5G);
 4b) Space economy, development of a Constellation of Satellites and the National Institute of Earth Observation.

Investment 5: Supply chain industrial policies and internationalization: support industrial supply chains, in particular the most innovative ones, those of “made in Italy” and those that have been most affected by the effects of the pandemic.

Estimated costs:

EUR 25,750 million to be covered by RRF

M1C2 - Digitalization, Innovation and Competitiveness of the Production System

	Resources(euro/ml)				
	Existing	New	Total	REACT-EU	TOTAL NGEU
	(a)	(b)	(c) = (a)+(b)	(d)	(e) = (c) + (d)
Transition 4.0	3.10	15.70	18.80	-	18.80
Innovation and technology of microprocessors	-	0.75	0.75	-	0.75
SMEs digitalization and Guarantee Fund*	-	-	-	0.80	0.80
Ultra Broadband, 5G and Satellite connections	1.10	3.10	4.20	-	4.20
- <i>Fast Internet connection (Ultra-broadband and 5G)</i>	<i>1.10</i>	<i>2.20</i>	<i>3.30</i>	-	<i>3.30</i>
- <i>Development of a Constellation of Satellites and the National Institute of Earth Observation</i>	-	<i>0.90</i>	<i>0.90</i>	-	<i>0.90</i>
Supply chain’s industrial policies and internationalisation*	-	2.00	2.00	-	2.00
TOTAL	4.20	21.55	25.75	0.80	26.55

Note: (b) includes FSC existing resources, to be devoted to specific measures.

* Includes lines of intervention with leverage effect.

2. Main challenges and objectives

a) Main challenges

The competitiveness of the national production system is inextricably linked to its capacity for technological innovation and therefore, for investment in R&D. Likewise, innovation today more than ever is based on the adoption of digital technologies that are creating a real revolution in production systems and processes, making them increasingly interconnected, automated and intelligent.

The challenge of the digital transition of the Italian industrial and entrepreneurial system, therefore, must be addressed with massive and structured efforts in order to overcome barriers and persistent delays, despite the achieved improvements in recent years. More than half of Italian companies are still characterised by a low level of investment in digital technologies and a limited digitalisation, which contributes to the loss of labour productivity growth.

Three main factors limit the enterprises' demand for digital services: economic constraints, technical difficulties (for example, restricted access to the connection network) and low levels of digital education and skills (for both workers and individual users). The Italian demographic makeup, the low coverage of broadband in some areas and the lack of incentives to adopt technologies contribute to these critical issues.

A second challenge concerns the widespread diffusion of optical fibre throughout the territory, by interventions both for the creation of ultra-fast networks and for the reduction of the digital divide in some areas of the Country and priority public realities. As a matter of fact, the Country ranks 17th out of 28 in the DESI Connectivity sub-index, showing a rather modest performance. In addition to the restrained connectivity offer, there is also a delay in the demand for ultra-fast fixed connection services from Italian users, which is partly explained by the Italian social and demographic makeup (lower incidence of the youngsters, low willingness to pay for faster connections and marked territorial development disparities) and partly the lack of appropriate incentives for the adoption of new technologies. Lastly, the implementation of the modern infrastructure of ultra-fast and 5G connections will also integrate with the development of satellite and Earth observation technologies. The integration of these technologies will allow a comprehensive and modern supply of services for the benefit of enterprises, institutions and citizens.

A third additional challenge concerns the competitiveness of the Italian production chains, their integration into global value chains and their internationalisation and export capacity. The fragmentation and small size of Italian companies (SMEs represent the 80% of the workforce) cause competitiveness problems, especially in sectors where scale economies and investment capacity are crucial. Furthermore, the economic impacts of the crisis have led to serious financial problems in many companies. Therefore, it is essential to envisage new financing systems and to facilitate SMEs access to funding, as well as to promote mergers. As for export, it has always had a strong role in the Italian economy: export value has grown steadily in the last 10 years, reaching 585 billion euros in 2019, 31.7% of the national GDP. Its fall in 2020 due to the Covid-19 pandemic has significantly contributed to weakening overall growth. Hence, it is timely to support the recovery also by stimulating export since it could play a pivotal role in the reconstruction of the entire economic system. To that scope, it is necessary to act on both the deficit of managerial culture in terms of internationalisation and on the delay in digitalisation. Such constraints often restrict SMEs from accessing, for instance, e-commerce and teleworking

tools and from exploiting the enormous growth potential resulting from the capacity to penetrate rapidly developing markets such as China and India.

b) Objectives The component intends to achieve the following goals:

1. Support the digital transition of the production system with incentives to private investments in technologically advanced capital goods (tangible and intangible) as well as in Research, Development and Innovation. In particular, this objective has two main focuses:
 - boost the ability to innovate of firms, especially SMEs, also fostering the process of integration into global value chains;
 - stimulate investments for the development and application of frontier technologies which are essential to the compete in the global markets (such as the Internet of Things, robotics, Artificial Intelligence, blockchain, cloud computing, edge computing, high-performance computing) maintaining a particular attention to cybersecurity aspects.
2. Increase investment in hi-tech sectors to support the competitiveness of strategic industrial sectors and safeguard skilled employment.
3. Complete the national optical fibre and 5G telecommunications network throughout the national territory and at priority public entities (schools, healthcare facilities, museums, archaeological sites, national parks, extra-urban communication routes), primarily to reduce the digital divide.
4. Develop satellite technologies aimed at strengthening Earth Observation systems for monitoring territories and extra-atmospheric space.
5. Strengthen Italian productions chains facilitating SMEs access to funding, through financial systems and tools such as a Guarantee Fund and a Fund of Funds.
6. Promote the internationalisation of enterprises, as an instrument of recovery and resilience of the productive system, given the traditional Italian orientation to export and the strategic role played by exporting enterprises.

The 6 goals are closely in line with the following Italian CSR (Country Specific Recommendations) 2019-2020:

- CSR3 2019 - Focus investment-related economic policy on research and innovation, and the quality of infrastructure, considering regional disparities. Improve the effectiveness of public administration, including by investing in the skills of public employees, by accelerating digitalisation, and by increasing the efficiency and quality of local public services. Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law
- CSR2 2020 - Provide adequate income replacement and access to social protection, notably for atypical workers. Mitigate the employment impact of the crisis, including through flexible working arrangements and active support to employment. Strengthen distance learning and skills, including digital ones
- CSR3 2020 - Ensure effective implementation of measures to provide liquidity to the

real economy, including to small and medium-sized enterprises, innovative firms and the self-employed, and avoid late payments. Front-load mature public investment projects and promote private investment to foster the economic recovery. Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy, research and innovation, sustainable public transport, waste and water management as well as reinforced digital infrastructure to ensure the provision of essential services

3. Description of the reforms and investments of the component

Investment 1: Transition 4.0.

Challenges: Innovation, Research and Development are the basis for a competitive production system, an attractive business environment and a modern management of several socio-economic and environmental challenges. The current Covid-19 emergency has further highlighted the urgency to put at the centre of the Country priorities these issues, ensuring structural interventions beyond a temporary fix.

International benchmarking shows that in most OECD countries automatic tax instruments are the backbone of the support system for enterprises investment in R&D&I. With the 2017 “Industry 4.0 Plan”, consistent with this approach, Italy introduced a set of automatic fiscal measures to support R&D investments and technologically advanced capital goods purchase. The program has gradually been enriched and strengthened over the years through the extension of the beneficiaries (Enterprise 4.0 Plan) and the review and strengthening of the available measures for enterprises (Transition 4.0 Plan).

Since its inception, over one million companies have had access to at least one measure of the Plan, generating a positive impact on employment, despite extensive investments in 4.0 technologies (which are usually associated with adverse effects on hiring).

The 4.0 Plan has been an experience with positive outputs. Hence the PNRR will give it further impulse and continuity, through multi-year programming to offer stability and certainties to the enterprises. What is more, to increase the effectiveness of the fiscal measures of 4.0 Plan, targeted interventions will be introduced to effectively meet the investment needs of specific fields. For instance, the new challenges related to cybersecurity has become increasingly crucial for enterprises also due to pandemic-related restrictions and the consequent need to reorganise both distribution processes (e-commerce) and working method (teleworking). Thus, it is necessary to ensure investments in ICT infrastructure and services face current and future IT security threats.

Objectives: The new Transition 4.0 Plan, for the digitization of the Italian production system envisages a set of fiscal measures aimed at two main goals:

1. Increase enterprises investment in new technologically advanced capital goods (tangible 4.0 and intangible).
2. Increase private expenditure on Research, Development and Innovation.

Below is a description of the project's fiscal measures:

Tax credit for capital goods: fiscal benefit for investments in tangible 4.0 capital goods and intangible capital goods (both 4.0. and traditional ones). In comparison with the previous program, the intervention foresees increased tax concession rates and ceilings.

For tangible 4.0 capital goods, the following increases are foreseen:

- For expenses of less than 2,5 million euro: the new rate at 50% in 2021 and 40% in 2022.
- For expenses exceeding 2,5 million euro and up to 10 million euro: the new rate at 30% in 2021 and 20% in 2022.
- For expenses exceeding 10 million euro and up to 20 million euro, a new ceiling was introduced: a rate of 10% in 2021 and 2022.

Regarding intangible 4.0 capital goods, the following is foreseen:

- The rate increases from 15% to 20%.
- The increase of the ceiling on eligible expenses from 700.000 euro to 1 million euro.

Tax credits are also extended to traditional intangible goods, with 10% for investments made in 2021 and 6% for investments made in 2022.

Tax credit for R&D&I (fiscal benefit): Tax credit for R&D&I investments as well as for activities related to innovation 4.0, green economy and design. The new plan envisages the following increased tax concession rates and ceilings:

- R&D: the tax concession rate increases from 12% to 20% with a ceiling of 4 million euro (previously 3 million euro).
- Technological innovation: rate increases from 6% to 10% with a ceiling of 2 million (previously 1,5 million).
- Green and digital innovation: rate increases from 10% to 15% with a ceiling of 2 million (previously 1,5 million).
- Design and aesthetic conception: rate increase from 6% to 10% with a ceiling of 2 million (previously 1,5 million).

The expected *milestones* are:

- commitment of 100% of the resources allocated by 2024

A technical-scientific committee will be set-up for the assessment, monitoring and evaluation of measures implementation (by Q3 2021).

Targets for 2026:

- 1) Number of enterprises that purchase hi-tech capital goods: 60.000 per year, representing a +20% increase (baseline: 50.000 per year)
- 2) Number of enterprises that invest in R&D&I: 25.000 per year.

Implementation: The Ministry of Economic Development is responsible for the measures.

Target population: Firms investing in 4.0 and digital technologies and in R&D&I.

Timeline: 2021-2026 (see table 2 for details).

Investment 2: Innovation and technology of microprocessors.

Challenges: The hi-tech industrial supply chains are the most valuable component of every national industrial system, as they are a crucial source of R&D investments, skilled labour, and technological knowledge sharing and transfer that support other production compartments along with the whole territory. For example, one could consider the spillovers from different sectors, such as aerospace, advanced machinery, fine chemicals, and microelectronics, that benefit the entire industrial system. Italy performs well in these sectors, in terms of players and competencies of excellence, however its position is still weaker compared with its main trade partners. As a matter of fact, Italy ranks 15th among world major exporters of hi-tech products, with a market share of about 2%, much lower than the one of Germany, which amounts to almost 10%.

Therefore, it is crucial to undertake strategic investments that benefit the Italian hi-tech supply chains, supporting and concentrating the efforts in favour of those territories with a strong technological specialisation, hosting innovation ecosystems based on valuable partnerships between large companies, SMEs system, universities and R&D centres, investments in the south of Italy will be considered as priority.

Such challenge needs to be addressed through a European view, with the goal of making Italy a fundamental player in contributing to the EU positioning as a world leader in the development of cutting-edge technologies and in the most advanced and green manufacturing production.

Objectives: The Microprocessors innovation and technology project is a concessionary measure aimed at supporting industrial investments with high technological content and positive effects on employment and satellite activities so that it can have a strong impact on innovation, and on social and territorial cohesion. The measure, in particular, is characterised by a focus on the microelectronics industry as, among the hi-tech supply chains, it plays a highly strategic role on the national as well as European level.

As a matter of fact, microprocessors constitute the material basis for the development of most of the cutting-edge sectors and applications, such as artificial intelligence, au-

tomation, 5G, aerospace and defence system, electric mobility. Thus, microelectronics represents a fundamental compartment for the development and the competitiveness of the entire industrial system.

Moreover, at the global level, the sector is characterised by a strong concentration of players and territorial clusters with a very high technological innovation capacity. Italy contributes to the European semiconductors industry with technology hubs that stand out for their excellent industrial and research competences. Therefore, the goal of the project is to support the growth of this national supply chain and to underpin the development of the last technological frontiers, such as the one of microchips made of silicon carbide (SiC) which will play a fundamental role in the next revolution of the electric mobility.

The measure – which envisages calls for tenders or upon request scheme - offers financial support to investments in machinery, plants and production equipment with contributions equal to 40% of the eligible expenses. The allocated resources amount to a total of 750 mln euro (250 mln euro per year for a period of three years) that will then produce overall direct investments in the hi-tech supply chains of 1.875 mln euro, to which further investments, stemming from positive impacts on satellite activities, will be added.

The expected milestones are:

- 1) Activation of the one-stop shop (by Q2 2021)
- 2) Selection of the projects and start up of the investments (by Q4 2023)
- 3) Production of a report by the Managing Authority on the progress of the measure activities (Q2 and Q4 of every year from 2021 to 2026)

The target set for 2026 is constituted by the direct investments activated in the hi-tech supply chains equal to 1.875 mln euro.

Implementation: The Ministry of Economy and Finance, is responsible for the programme.

Target population: Hi-tech companies.

Timeline: 2021-2026 (see Table 2 for the details).

Investment 3: SMEs digitalization and Guarantee Fund

The estimated cost on REACT EU amounts to 0.8 billion euro

The liquidity crisis caused by the health emergency brings out, for large segments of the production system and regardless of the size of the company, the need to access sources of financing other than cash flow, compromised by the decline in turnover. The banking system and the support measures undertaken by the government have played a prominent role. For this reason, the PNRR - thanks to a synergy between several European programs - provides various tools for strengthening the production system, in particular tools to

promote access to credit and the liquidity of companies, such as the refinancing of the Guarantee Fund.

4) Investments for Ultra Broadband, 5G and Satellite Connections.

Investment 4a: Fast Internet connections (Ultra-broadband and 5G)

Challenges: The National strategy for the ultra-broadband, in line with the objectives of the Digital Agenda for Europe and the Communication from the European Commission COM (2016) 587, aims at reaching 85% of the population with services at a speed equal or superior to 100Mbit/s and the remaining 15% with services at a minimum of 30 Mbit/s by 2025.

The current infrastructure, at NGA ultra-broadband on FTTC or FWA networks, can guarantee speed equal at least to 30 Mbit/s in download and 15 Mbit/s in upload and therefore results inappropriate to grant the achievement of connectivity goals set for 2025. Therefore, it is necessary an intervention that allows for a breakthrough, from connectivity “over 30” to the connectivity “over 100” (speed of at least 100Mbit/s in download and 50 Mbit/s in upload) and able to deliver services up to 1 Gbit/s.

The implementation of the National strategy for the ultra-broadband started with an intervention plan reserved only to the areas of “market failure” (the so-called ‘white areas’), authorised by the European Commission Decision SA. 41647 (2016/N) of June 30, 2016.

To complete the coverage of white areas, there is a commitment to connecting the real estate units that still do not have access to ultra-broadband services (so-called ‘residual white areas’), as they are located in remote areas, hard to aggregate, and isolated from urban centres.

To complete the National strategy for the ultra-broadband, a second phase of the project will be started, in line with the European recommendations on the defined target for the gigabit society, carrying out infrastructural interventions focused on the connectivity of grey areas, in which only one operator is active and it is unlikely that another network will be installed.

The project has been approved by the Ultra-Broadband Committee, estimating a financial requirement of 5,3 billion euro to identify in the next European planning. The access to the fund of the National Recovery and Resilience Plan (PNRR) would ensure the realisation of the project, in its entirety and in short times.

Objectives: The proposal consists of a set of complementary measures aimed at extending the ultra-broadband coverage up to 1 Gbit/s to support the realisation of networks in strategic areas.

1. Piano Italia 1 Gbit/s. For larger dissemination of the new fibre networks on the national territory, thanks to the Recovery Fund resources about 30% of the 8,6mln residential units still in the digital divide with respect to the gigabit society will be reached. The remaining 70% of the necessary resources will be collected from other funding sources.
2. Completion of the School Plan (Piano Scuole). The goal is to provide all the Italian school facilities with connectivity services of broadband up to 1 Gbit/s in download, to support the connectivity needs for the delivery and fruition of the teaching system for students and teachers, in particular for the requirements that will emerge at the start of the academic year 2020-2021 (see mission 4 on education and research).
3. Health facilities plan. The goal of the project is to interconnect over 12.000 health facilities , healthcare personnel and patients, to strengthen the resilience and the capacity of the Healthcare System (see mission 6 on Healthcare). Particular emphasis is going to be provided for the development of the following services:
 - Telemedicine and remote assistance;
 - Medical records and electronic platforms for data collection and exchange between doctors and patients;
 - Empowerment platforms to raise the awareness as well as the health education of patients
4. Fibre plan for natural parks.
5. Fibre plan for museums and archeological sites. The goal of project is to provide all the museums and archeological sites on the Italian territory with a free wi-fi network, free-of-charge and widely distributed (see Component on Tourism and Culture). The costs will cover also the connectivity expenses of the museum facilities. Besides this infrastructural intervention, it is expected that support will be provided for the test of new technologies aimed at developing new multimedia content that could enrich the cultural offer of museums and archeological sites.
6. Spread of 5G network in public sports facilities.
7. Fibre for 5G along the extra-urban communication routes. Fibre optic backbones will be realised, by integrating existing backbones and installing new infrastructures on provincial roads, to favour the diffusion of 5G networks and services in support of road safety, mobility, logistics, and tourism in extra-urban areas. (see Mission 3 Component 1)

The targets set for 2026 aim at the connection to the network (with a speed of at least 100Mbits/s and up to 1 Gbit/s) of:

1. 2,5 mln residential units
2. 9.000 school facilities
3. No. 12.300 healthcare facilities
4. o. 100 natural parks
5. No. 200 museums and archeological sites
6. No. 1.000 sports centers

7. 30.000 km of extra-urban roads

Implementation: The Ministry of Economic Development (MISE) is responsible for the measures.

Target population: The national territory that is not reached by the ultra-broadband: school facilities, health facilities, natural parks, museums and archeological sites, sports facilities, extra-urban communication routes.

Timeline: 2021-2026 (see Table 2 for details).

Investment 4b: Development of a Constellation of Satellites and the National Institute of Earth Observation

Challenges: Space and Aerospace are two strategic sectors for the interest of the Country for all the services and applications that can be offered to national users and foreign markets, as well as for the large impulse to scientific research, technological progress and capabilities of development and production of the national industry.

In particular, a robust system of Earth Observation (Osservazione della Terra, OT) can provide accurate and timely measurements of physical, chemical, geological and biological parameters of the territory.

This information allows individuals and organisation to take more informed decisions, which promote the economy and guarantee public safety. Moreover, considering the aging of the national space infrastructure, the increasing crowding of the different orbital regimes with the related risk of in-orbit collisions, it is essential to ensure the security of the project in question and more generally of the entire national space infrastructure of interest (assets, data and services) from intentional and unintentional threats, developing a space-based SSA capability to safeguard and protect them. The national industry has shown competence and competitiveness at the global level in the development and realisation of products and services for the segment in orbit “upstream” (launch services, production and development of satellites, infrastructure, payload, sensors, habitation modules, robotics), the earth segment “midstream” (operations, security, terminals) and the supply chain of “downstream” services and applications.

Italy will support an industrial and supporting policy of new technological supply chains of the space sector that can set the priorities for the specific associated programmes, enhancing the acquired competencies from the national productive compartment and supporting the competitiveness on the international market. Such sector development, specifically of the Earth Observation (OT) and Space Situational Awareness (SSA) systems, is going to be of fundamental importance for supporting the realisation of new infrastructures, control and monitoring of existing infrastructures, prevention of the hydrogeological risk, maritime safety, emergencies management, precision agriculture, cultural heritage safe-

guard, safety and security of space and ground-based infrastructures of national interest.

To respond to the increasing request of satellite data of Earth Observation (OT) and of Space Situational Awareness (SSA) from Institutions and citizens as well as to the improvement of the capacity of environmental risk prevention, it is necessary to enhance the satellite capacity of monitoring with high temporal and spatial resolution of Italy, of Continental Europe and of the Mediterranean Basin.

Objectives: The goal of the investment consists in realising a new satellite constellation in low orbit, equipped with instrumentation (thermal and infrared, radar and hyper-spectral optics) adequate to observe, monitor and collect data in high resolution coming from the National and European territory and orbits of national and union interest. The availability of such data will allow for the development of methodologies of innovative computerised analysis (Artificial Intelligence, supercomputing) and calibrated on the specific needs of different strategic sectors, with a significant impact on the industrial and agricultural national supply chains, as well as on the civil and military fields. Furthermore, the large amount of data generated by the constellation will be an enabling factor for companies and startups specialised in geodata-analytics.

Data coming from the constellation will allow for the development of a multitude of services, among which:

- Marine-coastal monitoring for tracking and forecasting the wave motion, the geomorphological changes of the coast, the natural habitat, and the events that have an impact on the marine environment in general.
- The “Servizio Qualità dell’Aria” (Service for High-Quality of Air) to map and forecast the dispersion of pollutants, powders, ashes and other materials related to natural or anthropic events.
- Monitoring of ground movements due to earthquakes, volcanic eruptions, landslides and other natural episodes.
- Mapping of crops, forests, volcanic areas and the ground in general as well as its use and consumption degree.
- Monitoring and forecasting of the greenhouse gases levels and other essential climatic variables.
- Monitoring and forecasting the risk of floods and other events of hydro-geomorphological nature.
- Services for the identification of critical events such as floods, fires, earthquakes and volcanic eruption and mapping the relative damage caused.
- Services for the surveillance of terrestrial and maritime borders of the European Union.
- Services of surveillance, tracking, identification and characterisation of space objects resident in LEO (Low Earth Orbit), MEO (Medium Earth Orbit) and GEO (Geosynchronous Earth Orbit) orbits.
- Service for the protection of satellite spacecraft, infrastructure, and satellite mis-

sions from intentional and unintentional threats.

The project also involves the constitution of the National Institute of Earth Observation (Istituto Nazionale di Osservazione della Terra, INOT), which will manage and distribute the products and services resulting from the analysis of satellite data to the central and local State Administrations.

The expected milestones are:

- Approval of regulations aimed at the establishment of the INOT (by Q4 2021)
- Purchase of the supercomputing computer (by Q4 2022)

The targets set for 2026 are:

- n. of satellites built and placed in orbit: 30 (n. 24 OT and n. 6 SSA)
- n. of monitored variables: 8 (services identified for Public Administration)

Implementation: The Presidency of the Council of Ministers is responsible for the initiative. For the realisation of the satellite constellation, it is expected the involvement of an entirely Italian supply chain of SMEs supported by the competences of the Academies and Italian Research Centres.

Target population: The whole Italian territory (and of EU), Public institutions, private enterprises.

Timeline: 2021-2026 (see Table 2 for details).

Investment 5: Supply chain industrial policies and internationalisation

The project plans to support industrial supply chains, in particular those that have been most affected by the effects of the crisis and those most advanced from the point of view of innovation and environmental sustainability, in order to improve their positioning in European and global value chains and to reduce dependence on third countries.

Particular attention will be paid to companies (SMEs in particular) that promote “Made in Italy” products in the world. For this purpose, it will be used a “fund of funds”, through which the allocated resources are transferred to specialised operating funds for financial instruments, risks assumed and sectors of intervention. This contribution, together with EIB and EU instruments and participation in the capital and/or financing of financial intermediaries and partners, can represent the endowment that each individual fund would use to finance the initiatives of this project. Furthermore, it will be provided a set of interventions that stimulate the quality and specialisation in the aggregation processes of the supply chains in each sector, especially in those of national importance.

In this vein, integrations and interconnections between companies in the various stages of production processes will be encouraged, favouring also merger and capitalisation processes

with suitable tools.

[in progress ...]

Timeline: 2021-2026.

4. Green and digital dimensions of the component

a) Green Transition:

Work in progress...

b) Digital Transition:

Work in progress...

5. Milestones, targets and timeline

See Table 2 work in progress

6. Financing and costs

See Table 2 work in progress

Cost estimation methodology

Investment 1: Transition 4.0

The measures envisaged in the plan are largely in continuity with the past, albeit with changes that simplify and broaden their scope. As a precaution, the estimate takes into account the financial impact of similar measures in previous years.

In particular, for the Transition Plan 4.0 the value is obtained by estimating the tax advantage on a potential amount of investment assets in capital goods consistent with that of the previous version, integrated with the resource requirements attributable to management software (which can be facilitated starting from 2021).

For the 2020 R&D tax credit, have been taken into account the 2018 tax returns relating to the 2017 fiscal year.

The cost of the projects relating to this proposal was quantified on the basis of the quotations of similar services envisaged in the recent CONSIP SIAN tender.

Investment 4.A: Fast Internet connection (Ultra-broadband and 5G)

- 1) Italy 1 Gbit / s Plan. The cost base, linked to the infrastructure of the real estate unit, derives from the historical cost obtained on the basis of the previous financed interventions and is estimated at approximately 470 euros / real estate unit.
- 2) Completion of the School Plan. The cost base used (EUR 29,000 on average for each school) is the same as that used for phase 1 of the plan, for which the tender has already been launched.
- 3) Health facilities plan. The health centers obtained from the ISTAT database of the PA offices were mapped on an address basis, to evaluate the distance from the known fiber points. The locations for which the fiber is not in proximity are about 4,700 and it is at an average distance of 600mt. The cost of the CPE, of the transport and of the bandwidth, of the internet service and of the management and maintenance services was therefore estimated on the basis of the prices of the equipment available on the market and of the price lists of bandwidth and service offers.
- 4) Fiber for natural parks. An average cost was assumed for the equipment of the nodes / pylons in the park and an average of 20 nodes per park. The average cost of the node is estimated at around 37,500 euros.
- 5) Fiber for museums and archaeological sites. For the coverage of museums, an average cost was assumed to equip a single hall (approximately € 100,000 per hall), including the cost of connectivity. An average of 25 rooms per museum have been assumed. The cost of connectivity for the 200 locations (250,000 euros per site) has been added.
- 6) 5G networks in public sports facilities. An average cost per plant of approximately 120,000 euros was assumed.
- 7) 5G along extra-urban communication routes. The cost per km derived from the historical cost of manufacturing fiber backbones was used, to which was added the cost for the preparation of points for housing the 5G signal repeaters and boosters, equal to a total of 60 EUR/mt (i.e. 60 thousand EUR per km).

Investment 4.B: Development of a Constellation of Satellites and the National Institute of Earth Observation (INOT)

For the cost evaluation of the constellation, the estimate was made on the basis of the database of the Italian Space Agency, which identified by similarity the average costs of a multi-sensor constellation of this type and with the project performance. For the estimate of personnel costs, the reference are professionals of the same level currently operating at the Italian Space Agency. Market quotations were used to evaluate the purchase of the supercomputing computer.

For INOT, the estimate of personnel costs was carried out by referring to professional figures of the same level currently operating in research institutions.

3 M1C3 - Tourism and Culture

1. Description of the component

Summary box

Policy area: Tourism and culture

Objectives: With 55 sites included in the 2020 list of UNESCO World Heritage, cultural and creative sectors and tourism are key assets for Italy, in terms of their economic value and employment. Together they account for 12% of the National GDP, with the culture and tourism sectors generating respectively over 6% and up to 15% of total employment .

Culture and tourism also have significant positive social impacts on other policy areas, such as health, education, inclusion and urban regeneration. Participation in cultural activities, travel experiences and the encounter with foreign tourists offer the opportunity to appreciate the richness of cultural diversity, thus promoting equality and intercultural understanding, which is important in terms of social security.

Moreover, active cultural participation triggers innovative thinking, as suggested by the strong correlation observed in EU countries between top performers in terms of cultural practices and the ranking levels in the European Innovation Scoreboard. Access to cultural content fosters digitalisation and acquisition of digital competences, being prime fields of development and experimentation of emerging technologies, such as augmented and enriched reality, the Internet of Things and Artificial Intelligence.

Finally, culture and sustainable tourism can also favor the diffusion of more responsible environmental behavior and induce citizens to shift their consumption habits, thus favoring the emergence of the circular economy. A new and broader perspective on the value of investments in culture has been explicitly recognized by the “European Framework for Action on Cultural Heritage” (SWD (2018) 491) and the “New Agenda for Culture” (COM/2018/267 final) of the European Commission, which indicate the positive effects on health, innovation and social cohesion as key orientations of the EU’s future policy on culture.

Also the European Court of Auditors (*EU investments in cultural sites: a topic that deserves more focus and coordination, 2020*) has recently highlighted that not enough attention is paid to the sustainability of cultural sites in terms of investments.

The present Component, therefore, aims to improve the quality of life of citizens and tourists, to raise the levels of cultural, creative and touristic services, and to support the digital and green transitions and the socio-economic development of the Country. Its main objectives are:

- 1) To increase the attractiveness of strategic cultural sites, including a focus on the unique cultural heritage of Rome, making them accessible both digitally and physically, and maximising their contribution to the European Green Deal;
- 2) to foster culture-led-regeneration and sustainable tourism in remote and rural areas as well as in urban peripheries, including measures for the seismic security and restoration of the places of worship;
- 3) to upskill, reskill and prepare cultural and touristic operators for the future with a view to improving the quality of the tourist services.

Twin transition:

The proposed component provides an opportunity to promote jointly the green and digital transition. A series of investments, e.g. in slow tourism and in energy efficiency of the cultural sites, will reduce greenhouse gas emissions, while others, e.g. the capacity building of cultural operators in the green transition, will promote the circular economy. In parallel, many investments regard the digitalisation of cultural operators, sites and itineraries, to make them more accessible and promote creative and cultural industries.

Jobs and growth:

The investments related to the proposed component will create a significant number of jobs and contribute to growth both at local and national level. In 2016 the highest number of jobs connected to tourism in the EU was observed in Italy (4.2 million). In 2019, before the Covid pandemic, tourist expenditures in Italy reached EUR 44 billion.

Social resilience: Culture and tourism are among the most affected sectors by the current crisis, although the dynamics vary across sub-sectors, with venue-based activities (e.g. tourism, museums, performing arts, live music, festivals, cinema) and the related supply chains being the hardest hit by the social distancing measures. According to initial estimates, during the first lockdown phase in the first half of 2020, the museums and cultural sites of Italy have lost around 80 million Euro, the cinema around 120 million Euro and music shows have suffered a reduction of revenues of 350 million Euro . The proposed component will include targeted interventions to improve the safe accessibility to cultural heritage sites and buildings, allowing wider participation to culture, thus promoting inclusion and socio-cultural regeneration of neglected areas and economic and social well-being. Remote and rural areas as well as urban peripheries will be affected by the investments of the component.

Reforms and investments:

Outcome 1: Cultural Heritage for next Generation

Investment 1.1: Strategic Investments Plan on cultural heritage sites, buildings and natural areas;

Investment 1.2: Digital Strategy and Platforms for Cultural Heritage;

Investment 1.3: Removal of physical and cognitive barriers in museums, libraries and archives to enable wider access and participation to culture.

Investment 1.4: Caput Mundi. Investments on artistic and cultural heritage of Rome.

Investment 1.5: Upgrade of a strategic production hub for the Cinema Industry (Cinecittà).

Outcome 2: Small tourist and cultural sites, rural areas and urban peripheries.

Investment 2.1: Attractiveness of Small Historic Towns;

Investment 2.2: Protection and enhancement of rural architecture;

Investment 2.3: Programs to enhance the identity of places, parks and historic gardens, participatory regeneration of urban peripheries;

Investment 2.4: Seismic safety in places of worship and FEC heritage restoration;

Outcome 3: Tourism and culture 4.0.

Investment 3.1: National Training Center for tourism operators;

Investment 3.2: Capacity building for culture operators to manage the digital and green transition;

Investment 3.3: Historical paths. Slow tourism;

Investment 3.3: Renewal and digitalisation of accommodation facilities and tourist services;

Estimated costs:

EUR 8,000 million to be covered by RRF

MIC3 - Tourism and culture

	Resources (euro/ml)				
	Existing	New	Total	REACT-EU	TOTAL NGEU
	(a)	(b)	(c) = (a)+(b)	(d)	(e) = (c) + (d)
Cultural Heritage Next Generation	-	2.70	2.70	-	2.70
- <i>Strategic Investments Plan on cultural heritage sites, buildings and natural areas</i>	-	1.10	1.10	-	1.10
- <i>Digital Strategy and Platforms for Cultural Heritage</i>	-	0.50	0.50	-	0.50
- <i>Removal of physical and cognitive barriers in museums, libraries and archives to enable wider access and participation to culture</i>	-	0.30	0.30	-	0.30
- <i>Caput Mundi. Investments on artistic and cultural heritage of Rome</i>	-	0.50	0.50	-	0.50
- <i>Upgrade of a strategic production hub for the Cinema Industry (Cinecittà)</i>	-	0.30	0.30	-	0.30
Minor sites, rural areas and peripheries	-	2.40	2.40	-	2.40
- <i>Attractiveness of Small Historic Towns</i>	-	1.00	1.00	-	1.00
- <i>Protection and enhancement of rural architecture</i>	-	0.50	0.50	-	0.50
- <i>Programs to enhance the identity of places, parks and historic gardens, participatory regeneration of urban peripheries</i>	-	0.40	0.40	-	0.40
- <i>Seismic safety in places of worship and FEC heritage restoration</i>	-	0.50	0.50	-	0.50
Turism and Culture 4.0	0.30	2.60	2.90	-	2.90
- <i>Culture 4.0: National Training Center for tourism operators</i>	-	0.40	0.40	-	0.40
- <i>Capacity building for culture operators to manage the digital and green transition</i>	-	0.50	0.50	-	0.50
- <i>Historical paths. Slow tourism</i>	-	0.50	0.50	-	0.50
- <i>Renewal and digitalisation of accommodation facilities and tourist services*</i>	0.30	1.20	1.50	-	1.50
TOTAL	0.30	7.70	8.00	-	8.00

Note: (b) includes FSC existing resources, to be devoted to specific measures.

* Includes lines of intervention with leverage effect.

2. Main challenges and objectives

a) Main challenges

Cultural and tourism infrastructures need investments in order to facilitate post-COVID recovery

According to estimates of the World Tourism Organization, the international tourist arrivals in Europe have fallen by 58% between January and March 2020. In Italy, according to estimates of the National Institute of Statistics (ISTAT), in the 3-month period from March to May the pandemic has caused a reduction of 20% of the touristic presences foreseen over the entire year, and the second wave started in September will result in a more significant drop.

OECD ²⁵ recently recalled the need for a strong and responsive public support and the inclusion of culture and tourism sectors in National recovery strategies, in order to prevent that the combined effects of the crisis on distribution channels, the drop in public and private investments, and the sharp reduction of international and domestic tourist flows, affect both sectors over the long term. Moreover, OECD warns that the downsizing of cultural and creative sectors and tourism might induce a domino effect, with negative impacts on cities and regions in terms of “jobs and revenues, levels of innovation, citizen well-being and vibrancy and diversity of communities.”

The creative and cultural sector has been increasing in importance in Italy over the years, before being hit by the Covid pandemic. In 2018 there were 416.080 creative-driven companies in Italy²⁶, (i.e. using cultural content to increase their competitiveness) and 291.025 were part of the core cultural sector (creative and cultural industries, performing arts, historic and artistic patrimony). In 2017 the sector was estimated to have an overall value added of 95,8 Billion Euro. Over the last 3 years the demand for the use of cinema studios in Rome has, for example, increased by 200%, showing that the Cinecittà brand is strong, but the capacity to address this demand has been limited due to underinvestment in the past.

The crisis has hit life performances particularly hard, since meeting with audiences remains essential for the sustainability of the cultural and creative sectors and of tourism, and will be even more important for their recovery. Reconnecting with the public is the wish of any artist, musician, performer, tourist and cultural operator. Solutions to support the realisation of performances, shows and events open to the public and for accommodating tourists in safe conditions, i.e. more expensive and less profitable, will hence be required to support both sectors and to improve their economic and employment performance.

²⁵OECD, Culture shock: COVID-19 and the cultural and creative sectors, September 2020.

²⁶Report: “Io sono Cultura” Unioncamere, Fondazione Symbola.

In the public sector, Italy has a very vast and valuable cultural heritage that requires significant annual investments to be maintained, but can be an important pole of attraction for cultural activities and tourism. Numerous projects exist to revalue cultural and historic sites in the main metropolitan cities, including areas in the peripheries (e.g. the Biennale of Venice, the Old Port of Trieste, the European library for cultural information in Milan, the river area of Turin, the old forts of Genova, a new museum pole in Florence, the roman museums and archeological sites in Rome, a coastal park in Bari, an auditorium at the old Tobacco factory in Palermo). A special focus on the cultural heritage of the Capital city is needed, because the unique value and the specific attractiveness of such cultural heritage, especially in the view of the 2025 Jubilee which represents an important opportunity to develop a model of sustainable tourism.

There is also a need to invest to make Italian cultural sites more accessible to wider parts of the population and of tourists. According to the World Health Organization (WHO), 15% of the world's population (1 billion people) is estimated to live with some form of disability, and several obstacles still limit their access to cultural sites, with an impact on accessible tourism policies. Many exhibition facilities still have physical and sensory barriers: in Italy only half (53%) of the 4.908 museums, archaeological areas, monuments and eco-museums open to the public in 2018 were equipped with ramps, bathrooms and lifts for people with reduced mobility, and just over one in ten (12%) offered tactile paths and sensory information materials for visually impaired and blind persons. Due to the reduction in revenues, contributions and sponsorships generated by the pandemic, museums, libraries and archives are not able to afford the investments needed to remove these barriers in order to attract new audiences and tourists and thus rebuild their financial sustainability.

In terms of the touristic sector, the crisis can also offer opportunities. Before the crisis, Italy's tourist flows were characterised by high levels of concentration in the main historic cities (Rome, Florence and Venice) and in certain seasons. Compared to Spain, Italy has so far not managed to capture to the same level of off-season tourists from Northern Europe. There is now the opportunity to balance touristic flows by investing in rural and sustainable tourism. Italy has for example many small historic centres ("borghi") and places of worship, which can offer enriching and different types of touristic experiences. In addition, there are many citizens of Italian origin around the world, who could be interested in a kind of tourism connected to the discovery of their roots.

In order to attract more international tourists, also off-season, there is however a need to upgrade tourist accommodations. At present the quality and service levels of tourist accommodations across the country varies and is not always well captured by the number of stars or by quality certificates, which does not make it predictable. In some areas there has been underinvestment in tourist accommodations, which needs to be counteracted to increase Italy's attractiveness for tourists.

Fragmented digital infrastructures and shortage of skills limits the digital transition

Digital access to public information on cultural heritage is limited, thus reducing the opportunities for cultural and creative enterprises to use and reuse information for their products and services, and for the Education and research sector to raise the level of essential cultural services.

Many cultural institutions lag behind because of limits in their digital infrastructure. According to the National Institute of Statistics (ISTAT) in 2018 only 11.5% of the 460 state museums had a digital scientific catalog of their collections; only 20.8% had digitised their collections and only for 6.1% of them the catalogue was accessible online (43.7% had a dedicated website and 65.9% had a profile on the most important social media).

In addition to investments in digital infrastructures, cultural institutions need new skills: at present only 16% of Italian museums have staff dedicated to ICT and digital activities. This is a fundamental requirement, allowing them to reach out to local communities in times of social distancing and to offer services to cultural and creative enterprises (for example, by facilitating access to public information).

The pandemic has induced an acceleration in the use of digital tools by artists and cultural operators, which have made their content available online, but the provision of free and digitally mediated cultural content has so far not been supported by a sustainable revenue model.

The fast development of new digital technologies in the cinema sector, especially those related to virtual production, requires a strategic investment in the training of new professionals in this field, in order not to lose competitiveness compared to other countries.

The contribution of the cultural sector to the green transition and to the European Green Deal

Italy has a strong tradition in the restoration, conservation and adaptive reuse of built heritage, an approach which reduces the consumption of natural and energetic resources and land use, with substantial reduction of emissions. But there is a need to improve the energy efficiency of cultural heritage buildings and to update cultural heritage practices, in order to progress towards a more circular economy and contribute to the European Green Deal.

As mentioned above, after months of social distancing the increase of participation in life events will be crucial for the recovery and sustainability of the cultural sector. But cultural events, exhibitions, festivals, cultural reviews, musical events or fashion generate a significant environmental impact, in terms of greenhouse gas production and consumption of natural and energy resources. To promote a green approach throughout the supply chain of the cultural and creative sectors, it is therefore necessary to reduce the ecological footprint of cultural events and of specific activities and processes, such as those of conservation and restoration, minimising the production of greenhouse gases and the consumption of natural resources.

At the same time, cultural activities might contribute to the green transition as they can orient the behaviour of their suppliers (businesses and cultural and creative organisations), clients (public administrations and/or public and private cultural institutions) and their audiences. Cultural and creative sectors can contribute to climate action, combining design and sustainability for the strategic rethinking of more responsible lifestyles and behaviours towards nature and the environment, thus contributing to the New European Bauhaus launched by the European Commission under the Green Deal.

b) Objectives

1. Cultural Heritage Next Generation

- 1.1 Recover, develop and enhance, within a systemic logic, the widespread artistic and cultural heritage of Italy.
- 1.2 Develop the systems and skills necessary to create value in the digital environment and increase cultural demand through digital tools and services for growth of a market for cultural, educational and tourist services.
- 1.3 Remove physical and cognitive barriers to allow the weakest sections of the population to enjoy the cultural heritage widely.
- 1.4 Enhance Rome's archaeological and cultural heritage by reactivating virtuous tourist routes starting from "minor" places or monuments, not always involved in the large tourist flows that characterized the eternal city before the COVID-19 crisis.
- 1.5 Enhance the digitalization, energy efficiency and competitiveness of Cinecittà film studios, also in order to increase its attractiveness for major national, European and international productions.

2. Minor sites, rural areas and peripheries

- 2.1 Enhance the offer of accommodation and services to support touristic-cultural use, through the recovery and functional adaptation of buildings, structures typical of the agricultural and rural tradition, giving priority to interventions that pursue energy savings and the use of alternative energies.
- 2.2 Recover the rural building stock and preserve the characteristic features of historic rural landscapes to enhance the country's growth through the creation of jobs to increase the social cohesion and well-being of local communities, by reducing the ecological footprint of the conservation chain towards a circular economy model.
- 2.3 Increase and diversify the cultural offer through the promotion of innovative projects that value the role of cultural, institutional and social centers in areas not normally reached by this type of activity and cultural projects, such as peripheries; also enhance and upgrade parks and historic gardens.
- 2.4 Restore and recover the heritage of buildings of worship for conservation and prevention in relation to seismic risks.

3. Tourism and Culture 4.0

- 3.1 Create a national structure for the high level of training and training of tourist staff in order to promote higher vocational training.
- 3.2 Organize learning activities of operators in the cultural and creative sectors in the use of digital and new technologies in order to increase cultural participation and the demand for cultural products and services.
- 3.3 Recover historic railways to offer an opportunity to travel along historical lines to visit the suggestive places in Italy, and enhance walking paths to promote a segment of tourism able to relaunch territories in internal areas; whereby the ancient paths become tools of widespread knowledge of the history and heritage of Italy.
- 3.4 Redevelop accommodation facilities, in order to increase their quality and competitiveness through the restructuring and modernization of both basic structural components, environmental components, also aiming at innovation and digitalization of services.

c) National strategic context

The investments envisaged in the component are consistent, synergic and integrated with the priorities and actions included in the national strategies in the field of culture and tourism.

The protection and enhancement of cultural heritage for territorial attractiveness and social inclusion is at the heart of the mandate of the “Ministry for Cultural Heritage and Activities and for Tourism” (MiBACT), in line with the Constitutional objective of protection and conservation of cultural heritage for public enjoyment and use. MiBACT is engaged to unleash the potential of culture and cultural heritage as key factors for the attractiveness of territories, also in terms of competitiveness of the tourism sector, opportunity for human capital growth and social cohesion.

On this basis, the investments envisaged by the component “Culture and Tourism” are fully consistent with MiBACT’s investment plans (both ordinary and extraordinary programming) and in line with the priorities of i) strengthening great cultural attractions, ii) increasing the accessibility of places of culture and cultural participation, and iii) promoting cultural regeneration and sustainable tourism in marginal areas.

The proposed investments are hence well integrated with the strategic *National Reform Plan* and the *South 2030 Plan*. In particular, close complementarities exist with the *Strategic Grand Plan Cultural Heritage Projects* (Law 106/2014 and 2016 Stability Law), aimed at relaunching the competitiveness of the territories through interventions on assets and sites of exceptional cultural interest and national importance, with the *PON Culture and Development* (FESR 2014 -2020) and with the *Culture Operating Plan and Tourism (FSC 2014-2020)*, aimed respectively at enhancing cultural venues owned by the State (for the PON) and by local authorities (for the FSC), according to the logic of territorial competences.

The territorial approach is also at the basis of the proposed interventions on historic

villages (“borghi”), focused on enhancing the interdependencies between tourism and culture, activating synergistic and integrated strategies oriented towards the sustainable development of the territories.

The enhancement of physical, sensory and cultural accessibility and cultural participation constitutes a strategic component of the policy for the use of cultural sites. The main reference for these interventions are the Guidelines for the preparation of the *Plan for the elimination of architectural barriers* (P.E.B.A) in museums, museum complexes, archaeological areas and parks, drawn up in 2018 by the Directorate-General for Museums of MiBACT.

The relaunch of tourism is pursued by investments closely related to the objectives of enhancing cultural heritage and strengthening the physical and cultural accessibility of places and territories. The interventions aim on one hand at implementing the *Strategic Tourism Plan* (PST) 2017-2022, engaging public institutions, operators and stakeholders in jointly improve the sector’s policies, and on the other hand are synergic with the measures adopted by the Government to contain the effects of the Covid-19 emergency.

The planned investments share with the PST their transversal and integrated approach - based on sustainability, innovation and accessibility/physical and cultural permeability - and implement some of its "specific objectives", such as: the "creation of a digital ecosystem of culture and tourism"; the provision of a tourist system of information and value-added services, adapted to local needs; the "qualification of the offer of major attractors and mature tourist destinations, with a view to sustainability"; the "tourism development of emerging destinations, such as cities of art and villages"; to "develop and qualify tourism businesses", strengthening the incentive system for digitalisation and defining a national classification system for both hotel and non-hotel accommodation facilities to meet the need to improve the quality of the accommodation offer and consequently increase the competitiveness of tourist destinations; to "increase the culture of hospitality and develop skills appropriate to the evolution of the market" through training courses along all segments of the training system; the implementation of "strategic projects for mobility for tourism purposes (e.g. national cycle routes, paths, tourist rail services, slow mobility)".

Finally, the investments in the **digital transformation of the culture, cultural heritage and tourism ecosystems** are:

- envisaged in the Strategy for technological innovation and digitalisation of the country 2025, which refers to the creation of new, efficient and simple digital services for the benefit of citizens and businesses, and the creation and support of services for the growth and development of innovation, primarily focused on the sectors of “Made in Italy” (manufacturing, tourism, food, fashion, design, social, digital humanities).
- consistent with the three-year plan for IT in the Public Administration 2020-2022,

including its various technological components and the National Museum System Platform, and with the implementation of specific plans and provisions of the MiBACT (Three-year plan for digitalisation and innovation of museums 2019; various MiBACT Decrees).

- synergic with the recent creation by MiBACT of the Central Institute for the digitalisation of cultural heritage (Digital Library), with the task of elaborating and supervising the implementation of the National Plan for the digitalisation of cultural heritage, currently being prepared.
- aligned with the Strategic Tourism Plan 2017-2022, which includes among its objectives the Digitalisation of the Italian tourism system, aimed at bridging the serious digital divide of national sector operators with respect to the main European counterparts.

3. Description of the reforms and investments of the component

1) Cultural Heritage for next Generation.

Investment 1.1: Text... .

Challenges: In recent years Italy has not invested sufficiently in cultural sector and cultural heritage due to the debt limitations of the public sector with particular reference to the municipal levels. The investment in upgrading cultural heritage sites constitutes a strategic choice for Italy's post Covid recovery. The Plan is aimed at strengthening the system of the great cultural infrastructures of the country, understood as poles of attraction, participation and cultural production; renovation of key heritage sites and buildings in urban centres and rural areas is an opportunity to make them more energy-efficient, less carbon-intensive over their full life-cycle and more sustainable, thus contributing to the European Green Deal²⁷. Renovation of key landmarks can also attract international and national tourism and foster urban regeneration, bringing social, environmental and economic benefits to local communities.

The intervention is fully synergistic with other plans and programs financed with EU and national funds (NOP Culture and Development-FESR 2014-2020, Operational Plan for Culture and Tourism-FSC 2014-2020, Major Cultural Heritage Projects referred to in art.7 of Legislative Decree 83/2014; NOP 21-27, in line with the policy objectives of the proposed EU Regulation and the preliminary strategic guidelines of the Partnership Agreement, will not include similar lines of action) as it is an integral part of a unitary strategy that the MiBACT pursues from different programming periods.

There are no overlaps with these programs, but rather appropriate complementarities,

²⁷COM(2020) 662 final

on the one hand, due to substantial differences in the characteristics of the interventions, although they are all part of the same general strategy, on the other, as other assets and other locations have been intentionally chosen with the aim of ensuring, in the complex of MIBACT programming, the maximum diffusion of the intervention to strengthen the great cultural and tourist-cultural centers.

Objectives: Investments on heritage sites and buildings and natural areas are expected to increase attractiveness for tourists and citizens, injecting a stimulus in the broader economy, including the commercial and construction sectors. As stated in the Commission’s Communication *A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives*²⁸, renovation must respect design, craftsmanship, heritage and public space conservation principles, thus contributing to people’s quality of life and to the sustainable development of our cities and rural areas, in line with the Davos Declaration “Towards a High-quality Baukultur in Europe”. Considering these references, the recovery of cultural heritage is intended at the service of recovery, resilience and greater social inclusion, and converges towards the two flagship initiatives *Power up and Renovate*, in line with the requests of the Commission which invites the MS to include these initiatives in their National Plans for Recovery and Resilience.

The objectives of the interventions are:

- to enhance the offer of cultural services by promoting wider access to culture and participation in cultural activities.
- to exploit the potential of cultural investments for tourism and sustainable development.
- to contribute to direct and indirect job creation and green and digital competences.
- to improve cohesion and social inclusion.
- to reduce the carbon footprint of the conservation chain and progress towards circular economy.
- to increase social resilience and lower the impact the crisis.

In particular, 11 interventions on cultural heritage sites, buildings and natural areas have been selected all over Italy, based on their strategic relevance. The interventions, with few exceptions, are located in the main Italian cities and all share the nature of complex projects where the recovery of cultural heritage assets is the basis of urban regeneration and / or environmental and landscape requalification processes.

The interventions include the Biennale in Venice, the Old Harbour in Trieste, the city Park River in Turin, the European Library of Information and Culture in Milan, the defensive system of the City of Genova, the River Po Park, some components of the Museum systems of Florence and Rome, various areas for “Recovery of Art” (Rome, Alessandria, Piacenza, Caserta, Camerino) as deposits in case of seismic events, a coastal

²⁸COM/2020/662 final

park in Bari, and an auditorium in the old Tobacco factory in Palermo. All sites have been selected for their potential in activating urban or rural regeneration processes.

The selection was made in synergy between MIBACT and Regions-Local Bodies and take based on criteria of complementarity with other national, regional and local programs as well as, in some cases, with the processes of transformation and urban development in progress, in order to ensure greater effectiveness investments of the PNRR, also in terms of ensuring the appropriate completion interventions. It should be noted that the investments concern only public assets / areas; for any operation that, after the investment, involve private components, the traditional public tender procedures will naturally be activated.

Implementation: A series of projects (i.e. the ones in Trieste, Turin, Milan, Genova, Florence and Bari) will be implemented by the municipalities, who will be in charge of finalising the project design, obtaining the required permits, awarding and supervising the works. The municipalities will sign agreements with other key stakeholders involved and organize joint working groups, in order to ensure the progress of the works in the envisaged timeframe.

The project in Venice will instead be implemented by the Foundation of the Biennale, the River Park Po (area that extends over 18 municipalities in Veneto and Emilia Romagna) by the public body responsible for safeguarding and enhancing the Park and the peripheral structures of MIBACT, the museums and archeological sites in Rome by the peripheral structures of MiBACT as well as the Bourbonic parks in Campania (with the exception of Ercolano, implemented by the “Fondazione Ville Vesuviane”), while the “Recovery Art” project will be followed by MiBACT and, for the areas located on ex-military site, by SoGIN (the “Società Gestione Impianti Nucleari”).

The projects are at different stages of development. Around 25% at present have a technical and economic feasibility study, 2 are at preliminary project design stage and one at executive design stage. The time required to finalise the executive project design for most projects is estimated to be around 12-16 months and develops progressively from the second half of 2021 to the end of 2022, while the award of works is expected to require in 3-6 months, allowing completion by mid/end 2026

Target population: Local residents, national and international tourists, cultural and creative enterprises.

Timeline: The timelines of the 11 interventions are very different. The time intervals within which the main implementation phases of the interventions are developed are set out below:

- completion of the design levels: from II semester 2021 to - II semester 2022
- Works and services contract award: from II semester 2022 to - II semester 2023
- completion of works and services: from I semester 2025 to - II semester 2026

Investment 1.2: Digital Strategy and Platforms for Cultural Heritage.

Challenges: Italian cultural sites and museums currently suffer from a digital divide, both in terms of digital infrastructures/systems, as well as in terms of the capacity of their staff. The challenge is to bridge this digital divide by improving the access to cultural resources and digital services, implementing a user-centered design of access points and building skills and competences.

Objectives: The objectives of the proposed investments are the following:

- to facilitate the growth of a complementary market of cultural services for small and medium-sized enterprises and innovative start-ups;
- to facilitate the transfer of R&D innovations into cultural heritage practice;
- to develop the potential of cultural databases and digital collections, both from an edutainment and scientific point of view;
- to ensure the long-term use and accessibility of digital archives and products of digitalisation of cultural heritage;
- to reduce inefficiencies and lower management costs through the rationalisation of information systems (cloud approach), the dematerialisation of paper archives and the digitalisation of deposits.

In particular, the investments will consist in:

Organising, integrating and increasing the digital heritage produced by State archives, libraries, museums and cultural venues;

Developing an infrastructure for the collection, preservation and wider access to these digital resources for citizens and operators, including for use and reuse by cultural and creative enterprises and innovative start-ups and educational purposes;

Creating a portal for the procedures for the protection of cultural heritage, in order to facilitate the delivery of digital services to citizens, enterprises and civil society.

Implementation: The MIBACT will overview and manage the implementation of the project through (i) its Central institute for the Digitalisation of the Cultural Heritage, (ii) its General Directorate for Organisation, (iii) the Central Archive of the State and (iv) the Regional Secretariats, which will manage relations with the Regions. A series of actions will be implemented by third parties (private entities, third sector) through contracts and partnership agreements as well as through tenders.

Costs are distributed as follows:

- National digitalization plan 5.0 mln;
- Digital infrastructure for Culture 90.1 mln;
- Digital Conservation Center 62.8 mln;

- Digital identity system of cultural heritage 17.0 mln;
- Service portals and procedures 10.0 mln;
- Digitization 200.0 mln;
- Complementary services (Service Network) 45.0 mln;
- Training and crowdsourcing 30.0 mln.

Target population: citizens, enterprises, cultural, economic and education operators, cultural and creative enterprises, public administrations.

Timeline: 4Q2021 Release for consultation of the National Plan for the digitization of cultural heritage; 4Q2022 Beginning of digital identity certification of cultural heritage; 4Q2023 Awarding of tenders for contributions to the development of innovative digital services for cultural heritage; 4Q2024 Full functionality of the digital infrastructure of culture; 4Q2025 Doubling of digital resources made available online; 2Q2026 consolidation of Network of complementary services for the digital use of cultural heritage.

Investment 1.3: Removal of physical and cognitive barriers in museums, libraries and archives to enable wider access and participation to culture.

Challenges: The removal of architectural, physical, cognitive and sense-perceptive barriers constitutes a criticality of Italian cultural sites. According to ISTAT in 2018 only 53% of State and non-State museums, monuments, archaeological areas and parks had improved their facilities removing physical barriers. Moreover only 12% of them had addressed perceptive, cultural and cognitive barriers, taking into account all difficulties, deficits and barriers that limit a true cultural experience.

Objectives: The proposed investments have the following objectives:

- to increase and diversify the cultural offer for different types of users, through the creation of innovative and transversal paths aimed at the widest use of Italian cultural sites;
- to guide museums operators in the development of Accessibility plans to remove physical and cognitive barriers in State museums, libraries and archives;
- to implement concrete solutions to remove physical and cognitive barriers in State museums, libraries and archives;
- to collect and provide information about the level of accessibility of State museums, libraries and archives. The availability of preliminary information to visit State cultural sites is, in fact, a critical factor to prepare the visit.

The investment consists in four components:

- drafting of a Strategic Plan for the elimination of sense-perceptive, cultural and cognitive architectural barriers (PEBA) in Italian cultural sites (about 2% of total investment);

- design and implementation of targeted interventions aimed at removing sensorial-perceptive, cultural and cognitive architectural barriers in museums, monumental complexes, archaeological areas and parks, state archives and libraries (about 85% of total investment);
- creation of an information system, aimed at presenting the cultural venues with a view to accessibility, including clear, certain and verified, effective and efficient information for a wide range of audiences, in Italian and EU languages (about 11% of total investment);
- capacity building scheme, training heritage professionals in the use and effective implementation of the measures undertaken (about 2% of total investment)

The investment is primarily focused on the state cultural sites (352 museums, monuments, archaeological areas and parks, 129 archives, 46 libraries) located in the whole country and, for a share equal to about 10% of resources, to regional, provincial, civic or private museums, managed by public entities or non-profit organizations.

Implementation: The intervention is implemented through a public notice issued by MiBACT and addressed to state cultural sites for the presentation of proposals; the identification of non-state institutions will be carried out through calls for tenders. Following the selection of the proposals, the resources will be assigned to sites of culture.

MiBACT will provide constant monitoring of the implementation and will be responsible for monitoring and reporting activities.

Target population: Resident population and tourists

Timeline:

- Identification of cultural sites object of intervention (following notice): Q4 2021
- Drafting of PEBA Q3 2022
- Works contract award: Q2 2023
- Completion of works and other activities: Q2 2026

Investment 1.4: Caput Mundi. Investments on artistic and cultural heritage of Rome.

Challenges: This action aims to define an innovative process of enhancement of the archaeological, cultural and tourist heritage of Rome in the perspective of the next Jubilee of 2025. The planned interventions include integrated cultural paths reaching the peripheral areas of the city, where there are relevant archeological sites along the main streets that came out of Rome, including tombs, catacombs, basilicas, villas and settlements arose. The project represents an international best practice of how the Roman historical, archaeological and cultural heritage could lead the process of requalification of the urban context and give opportunities for an economic development based on new tourist-cultural itineraries.

With the concerned action, a large number of artistic and archeologic sites are expected to be reopened to the public. The perspective of the 2025 Jubilee will ensure the completion of the projects well before the deadline, because the need to reopen the sites during the Jubilee year. The project includes a specific action for the training and of specialized staff to be employed in the management of the new restored sites. This is expected to increase significantly the cultural offer.

The main changes expected are:

- greater and diversified touristic offer through new cognitive paths and new cultural thematic within the city
- requalification of a relevant number of cultural sites which will be reopened to the public;
- processes of reviving Rome's tourism economy through the relevant increase in cultural supply
- creation of new jobs in the tourism sector.

Objectives: The main objectives are:

- significantly increase the number of cultural complexes restored and made usable;
- create valid and qualified tourist-cultural alternatives to the crowded central area;
- allow the training and entry into service of qualified personnel for the tourist management of the restored complexes.

Description of the investment:

In particular, this line of action includes the following investments:

- 1 - Roman Cultural Heritage for EU-Next Generation is aimed at regenerating the cultural and urban heritage, by restoring and re-functionalize a complex of high historical-architectural value of the city of Rome: a) the Aurelian Walls; b) The City of Arts Ex Mattatoio; c) The Park of Colle Oppio; d) the Museum of Roman Civilisation; e) Tevereever; f) The Capitol; g) the Imperial Forum; h) The Celius.
- 2 – I percorsi Giubilari 2025: dalla ‘Roma pagana alla Roma cristiana’. In view of the forthcoming Jubilee of 2025 ecological and cultural paths will be created with interventions of safety, anti-seismic consolidation, restoration of buildings, and their restitution to the public usage. The monuments will be included in Jubilee paths and in this way the most famous itineraries already existing in Rome will be better defined and enriched. The actions is extended to peripheral areas of the city, with the aim of making accessible sites that have not yet been permanently opened to the public.
- 3 – La città condivisa (“Shared City”) project we will act in contexts where participation in the cultural life of the city – understood as an indispensable condition

for a critical and informed citizenship, for social progress and human emancipation – is more difficult. It is intended to encourage the implementation of inclusion projects and increase various skills, involving local communities and public administrations. The multidisciplinary and creativity of young people are encouraged and their potential for innovation in the digital age is enhanced through cultural co-production and co-management of heritage. Some interventions will be useful to renovate public real estate intended for social and cultural services, educational purposes and/or restore public spaces, fountains, gardens and public parks today in degraded conditions. Thematic itineraries will be created to attract tourism in suburban historical and cultural paths. This investment includes interventions on the areas and buildings of large peripheral areas ranging from Via Salaria to Via Appia, including the places of Constantine on Flaminia and Casilina and the eastern outskirts of the city.

- 4 – Mitingodiverde. This action is based on three milestones: environment, integration and cohesion. It aims at restoring the citizens' sense of belonging to the city and at creating spaces for meeting, leisure and public green. Investments will therefore be made in the renovation of identity places, parks, fountains and historical gardens, supporting projects that foresee the active participation of the local communities. To this end, some emblematic places selected, threatened by decline, abandonment and reduction of the original perimeters. The popularity of these sites is linked with the historic city; in this framework the intervention on historical gardens and parks such as Villa Borghese and Villa Pamphili has particular importance, but also the recovery of fragments of gardens and green complexes that constitute a precious part of the city's heritage (Military Hospital of Celio or the slopes of Monte Mario to give an example), in addition to the green areas that go from Rome to the Lazio coast.
- 5 – Roma4.0. This intervention is aimed at offering citizens a new fruition experiences and to operators the ability to respond to an increasingly articulated and differentiated demand. It is part of the overall marketing and management strategy and is an indispensable tool for guiding, encouraging and increasing the attractiveness of Rome. The challenges to be addressed are, inter alia: bridging the digital divide in access to cultural resources and digital services; simplifying the relationship of Roma Capitale with citizens and businesses, providing online services related to the use of cultural heritage; increasing the use of digital technologies and in particular of augmented reality and virtual reality to enhance the large and small archaeological sites of the city; promoting the creation of a competitive market of complementary services in the cultural sector, for small and medium-sized enterprises and innovative start-ups.
- 6 – Amanotesa. The focus of the planned investments concerns: social inclusion, aggregation and intercultural dialogue to reduce the isolation and vulnerability of the weakest part of the Italian population; the cultural and social integration of people of all ages, ethnicity, gender and levels of education through museum,

librarian and cultural heritage; the elimination of architectural, sense-perceptive, cultural, cognitive and communication barriers in places of culture; the involvement of young operators of cultural and tourist heritage; the increase in institutional communication.

Implementation: The interventions involve the signing of a Programme Agreement between MIBACT, as responsible entity, the Municipality of Rome Capital City, the Ministry of Interior, the Diocese of Rome and the Ministro of Economy and Finance. For most of them the design is ongoing. All actions will be carried out in compliance with current rules on public procurement.

Timeline: Investments are multiple and diversified with differentiated timelines:

1. Roman Cultural Heritage for EU-Next Generation: by Q1 2026
2. I percorsi Giubilari 2025: dalla ‘Roma pagana alla Roma cristiana’: by Q1 2025
3. La città condivisa (“Shared City”): by Q2 2026
4. Mitingodiverde: by Q1 2026
5. Roma 4.0 Q4 2024
6. Amanotesa: by Q2 2026

Target population: - Resident population, tourists, experts and schools.

Total investment cost: 500 million euros

Investment 1.5: Upgrade of a strategic production hub for the Cinema Industry (Cinecittà).

Challenges: Current infrastructural and production capacity of the main Cinema production hub in Italy (Cinecittà Studios in Rome) do not meet the demand of large film productions. In 2018/2019, it was not possible to accommodate 70% of international demand due to the unavailability and inadequacy (in terms of technological innovation and size) of the studios: this resulted in an economic loss of approximately 25 million Euro. The absence of large Stages (over 2000 square meters) and already equipped Stages with the latest production technologies (virtual stage and underwater shooting stage, motion control) has pushed potential customers towards competing studios (e.g. Pinewood, Babelsberg, Nu Boyana).

Objectives: The investment aims at renewing the infrastructure and enlarging the area at disposal in order to attract European and other international film and television productions. By upgrading the film studios and improving the qualitative and quantitative level of the production offer, the investments aim to increase the attractiveness of Cinecittà for large national, European and international productions and to be able to compete with major international competitors. The project will increase stages availability by 80%, which is expected to lead to an increase of the turnover of about 90% and of

the employment in the related industries.

In particular, the investments include the following:

A1. The construction of new studios, recovery of existing studios, investments in new digital technologies and systems, services.

A2. The construction of 6 new high-tech theatres with annexes and services and related systems and roads on an area of 473,000 square meters;

B. Innovative technological infrastructural investments to enhance the production and training activities of the “Experimental Center of Cinematography” and an enhancement of the Cineteca heritage: new tools for audiovisual production, internationalisation of the National School of Cinema and cultural exchanges between the member countries of the European Union; creation of a photochemical laboratory for the preservation of the analogue collections of the National Film Archive and their robotic migration; conservation and safeguarding of the enormous historical and audiovisual artistic heritage of the National Film Archive and its migration to digital platforms.

C. Development and implementation of the national strategy for audiovisual training in 3 professional macro-areas: organisational/managerial; creative/artistic; technical workers (current professional skills required by this sector today come from non-EU countries).

Considering the energy-intensive capacity of the film and audiovisual industry, great attention will be dedicated to identifying eco-sustainable techniques and technologies for controlling the environmental impact in all phases of the production cycle, with specific reference to plant and technological solutions for the lighting, mobility, construction of film sets and audiovisual products. This includes the improvement of energy efficiency of Cinema production in Cinecittà, with new generation power plants, integrated with photovoltaic panels, in order to allow a significant energy saving, estimated at 70% of current needs.

Implementation: MIBACT – Direzione Generale Cinema e Audiovisivo (General Directorate for Cinema and Audiovisual) is responsible for the implementation of the project

With reference to components A1 and A2, the project will be implemented according to the canons of the building regulations and Legislative Decree 380/2001, that is, with a building permit issued by Comune di Roma (Municipality of Rome) for construction and according to the reference regulations for plants.

With reference to component B, the project will be implemented through an executive plan that organizes the implementation of the individual interventions into macro-activities:

Activity 1: design, planning and selection of technologies and layouts of the spaces for the virtual set, the photochemical laboratory and the robotic migration of the audiovisual

heritage;

Activity 2: design of intangible components for the creation of services related to the e-learning platform, the “CSC interactive” app and forms of valorisation of the CSC archive material;

Activity 3: planning of training initiatives that will be carried out both within the organization and in the educational offer that the CSC, thanks to these interventions, will be able to offer.

With reference to component C, the project includes the following implementation phases:

- analysis and monitoring of training needs, planning and scheduling of activities;
- first test on specific training targets and start of communication and dissemination activities throughout the national territory (this activity continues also in subsequent years);
- analysis of the results obtained with the first test and launch of a new experimentation on further targets;
- implementation of courses and training activities for the typologies of recipients identified (both with respect to the needs of the supply chain and with respect to that of professionals);
- completion of the actions and measurement of the results achieved.

Target population: Operators and enterprises in the cinema and audio-visual sector, professionals and students.

Timeline: Investments are multiple and diversified with differentiated timelines.

- Component A1: consists of 23 interventions. 12 interventions will be completed by 2024; 4 interventions by 2025; 7 interventions by 2026.
- Component A2: by 2026
- Component B: by 2024
- Component C: implementation of training activities from 2024 to 2026

2) Small tourist and cultural sites, rural areas and urban peripheries.

Investment 2.1: Attractiveness of Small Historic Towns

Challenges: In regular times Italy’s key touristic attractions in the main cities of art have suffered from over-tourism, worsening the quality of the touristic and cultural experience. In this respect the cultural heritage, history, art and traditions of many small Italian historic towns (“Borghi”) offers an enormous potential for sustainable tourism, helping to redistribute the economic benefits over the territory. These are often fragile contexts from a demographic and social point of view, characterised by high environmental risks, wors-

ened today by the effects of the Covid pandemic. The implementation of rehabilitation of public spaces, the restoration of the historical-architectural heritage, the activation of entrepreneurial and commercial initiatives, including new accommodation solutions such as widespread hospitality and hotel, can help revitalising the socio-economic fabric of these places, contrasting the depopulation and favouring the preservation of their remarkable cultural landscape and traditions.

The “Borghi” National Plan, divided into integrated local projects focused on tourism and culture, is part of the national policies for rebalancing territorial gaps, with particular reference to internal areas and is therefore consistent with multiple areas of national/regional programming towards which it develops suitable complementarities. In fact, with respect to the National Strategy for Internal Areas and the cohesion programs, also with reference to “Policy Objective 5” of programming period 2021-2027, the Borghi National Plan envisages sector-focused economic revitalization strategies (tourism, culture) and does not intervene on large-scale territorial areas but focuses the investment on small towns / villages. It should be noted that the MIBACT in the framework of policies on sustainable tourism, implemented in line with the Strategic Tourism Plan (STP) 2017-2022, has already launched a first edition of the "Bando Borghi" (Borghi Call), financed with national cohesion funds and addressed only to the less developed regions, which has collected a large number of proposals only partially financed due to the insufficient availability of resources.

Objectives:

The main objectives of the proposed project are to:

- orient tourism towards a more sustainable and widespread model, easing the anthropic pressure on major national destinations;
- create new opportunities for the economic development of fragile areas, affected by a hard to stop phenomenon of depopulation, also in light of new needs that have arisen as a result of the crisis generated by the pandemic;
- enhance accommodation facilities, services, small infrastructures and cultural activities to support the touristic-cultural use of the territories concerned;
- relaunch commercial, agri-food and craft activities, enhancing local products, knowledge and techniques.

The “Borghi” National Plan is a plan to support economic and social development in disadvantaged areas based on the tourist and cultural revival of small towns (villages).

Diversified actions are planned:

- Strengthening the offer of accommodation and services in support of tourist-cultural use, through the recovery of the historical heritage, favoring interventions that pursue energy saving and the use of alternative energy;
- the requalification of open public spaces through interventions for the elimination of architectural barriers, urban decor, etc.

- the creation of cycle and / or pedestrian paths for the interconnection and use of places of tourist-cultural interest;
- the creation and promotion of cultural and thematic itineraries, historical itineraries and guided tours;
- the creation of information and communication services for reception (info point, visitor center, etc.) also supporting the start-up of activities;
- the expansion of the cultural offer through the creation of cultural and artistic activities;
- the support of tourist, commercial, agri-food and artisan activities, enhancing local products, knowledge and techniques for the revival of local economies.

The Plan is expected to allocate:

- 850 mln euros for the recovery and requalification of the historical heritage and public spaces and for the construction of small service infrastructures: it is estimated to intervene on 283 Borghi, assuming an average contribution for each Borgo of about 3 mln euros.

- € 150 million for business support; assuming an average business contribution of 40,000 euros the support is estimated to reach around 3,750 enterprises.

Implementation: The definition and implementation of the Plan is based on the coordination and exchange between MiBACT, Regions, ANCI, Strategia Aree Interne (Internal Areas Strategy) which start from the early stages of the activities aimed primarily at sharing any preliminary choices, guided by complementary objectives with other programs, about the territorial areas targeted by the Plan as well as the public notice scheme that will be addressed to small municipalities as beneficiaries.

The selection of the Borghi in which to finance the tourism and cultural enhancement project will be made on the basis of a) appropriate territorial, economic and social criteria (statistical indicators) b) the ability of the project presented to impact on tourist attractiveness and to the increase the cultural participation of the resident population. In particular, the indicators will concern (preliminary indication): the consistency of the cultural and environmental heritage; the consistency of tourist and cultural use (tourist flows, museum visitors, etc.), the consistency of the tourist offer (hotels and other hotels, B & Bs, rooms and rental accommodation, etc.); the demographic trend of the municipality; the degree of cultural participation of the population; the consistency of cultural, creative and tourism enterprises (profit and non-profit) and related employees.

MIBACT is responsible for coordinating and managing the intervention; the resources will be assigned to public implementing bodies (municipality, peripheral structures of MIBACT, other public institutions) envisaged by the selected projects and to private subjects (companies, associations, etc.) selected through public tender procedures.

Target population: Public administration, firms, cultural and tourism operators.

Timeline: The intervention will be implemented according to the following phases.

2021: identification of the priority territorial areas (on the basis of statistical indicators); exchanges with regional and local administrations and other competent public and private institutions; publication by MiBACT of a call for proposals;

2022: evaluation of the proposals; signing of agreements / protocols with selected municipalities and signing of implementing regulations with beneficiaries;

2023: launch of public works; launch of a help desk for the collection of projects (by enterprises and non-profit organisations), evaluation and signing of agreements with private entities;

1st semester 2026: conclusion of activities.

As regards the implementation timelines, it is believed that the regulatory deadlines can be easily met as the complexities deriving from the concertation phases are offset by the characteristics of the projects, which are small and easy to implement.

Investment 2.2: Protection and enhancement of rural architecture.

Challenges: Traditionally, public investments in the cultural sector are aimed primarily at the restoration and enhancement of those assets that constitute the excellence of the national heritage which, however, is made up of a dense and continuous “fabric” of historical-architectural evidence whose deterioration and loss would inexorably compromise the integrity and identity of cultural landscapes. Many rural building structures, as well as agricultural assets, have suffered, over time, a progressive abandonment and degradation and tampering with the typological and construction characteristics and the surrounding open spaces. The proposed intervention is configured as an initiative that by territorial diffusion can generate important results in terms of safeguarding and / or restoring the landscape quality of the national territory, can significantly affect the environment by improving the energy efficiency of buildings and integrating, where possible and compatible, renewable sources. within an integrated recovery project, enhancing agro-forestry-pastoral crops of historical, characterized by low external energy inputs and by an excellent CO2 absorption capacity.

The cultural heritage present in rural and marginal areas is frequently characterized by a critical state of conservation that compromises its accessibility. The intervention gives back an underutilized heritage to the community and to public use, favouring the restoration of activities related to the agricultural world and the creation of services for the benefit of cultural and tourist use, such as small local museums connected to the rural world which play an important role in local communities and in particular in the education and training courses of the younger generations. Therefore, the intervention has effects in terms of competitiveness as it is connected to specific production areas

linked to the agricultural world; at the same time, the intervention is consistent with the tourism revitalization policy aimed at building alternative "destinations" that favor sustainable tourism models in inland areas and small towns.

The crisis following the spread of the Covid 19 epidemic has hit the economies of rural and marginal areas severely. The intervention constitutes an effective counter-cyclical measure since significantly activates the construction sector, skilled workers and a considerable number of professionals, generating employment both in the construction phase and in the perspective of continuity of maintenance actions.

Objectives: This proposal is aimed at giving impetus to a vast and systematic process of identification, conservation and enhancement of an articulated range of historical rural buildings and agricultural systems closely integrated with local development processes and directly supporting diversification actions on non-agricultural activities - and, among these, cultural and tourist activities - pursued by rural development policies.

The main objectives of the proposed project are to:

- Preserve the landscape values of historical rural landscapes through the protection and enhancement of the cultural heritage of immaterial material;
- Promote the continuity of local productions, specifically those that make use of traditional agricultural practices as they are crucial for the construction and maintenance of the landscapes associated with them;
- Promote the creation of activities linked to forms of sustainable tourist use and local traditions and culture.

In coordination with the Italian Ministry of Agricultural, Food and Forestry Policies, it is planned to support:

- through the definition of multi-year regional programs, the implementation of conservative rehabilitation and functional recovery interventions of agricultural settlements, buildings, artifacts or historic rural buildings, agricultural crops of historical interest and typical elements of architecture (also not subject to a restriction provision) and the rural landscape, ensuring the protection of the surrounding areas, the preservation of traditional types and methods of cultivation and encouraging the start-up and recovery of activities compatible with typical cultural traditions. Within the framework of the techniques adopted for the restoration and structural, functional and plant adaptation interventions, eco-compatible solutions and the use of alternative energy sources will be favoured;
- through the organization of existing data in the national and regional information systems, the updating and implementation of an information system dedicated to the types of rural architecture, interoperable with other systems;
- in the context of the National Register of Historic Rural Landscapes, established at the MiPAAF, the development and implementation of a section dedicated to rural architecture that can represent a place for collecting knowledge, for methodological

and technical-scientific study active participation of operators and citizens.

Assuming an average contribution of 150-180,000 euros/intervention, it is estimated that approximately 2,600-3,100 interventions will be carried out (UNESCO / FAO GIAHS sites / Rural landscapes recorded in the National Register / tourist-cultural itineraries and religious paths involved; buildings recovered for tourist functions; buildings recovered for cultural and social services; recovered buildings for farm activities; recovered agricultural crops of historical interest).

Implementation: The support for investments, which aim at the recovery and enhancement of the rural architectural heritage, owned or for various reasons held by both public and private entities, will privilege territorial areas of high landscape value (assets located in areas of landscape interest protected by law art.142 of Legislative Decree no. 42/2004 or of considerable public interest referred to in art.136 of the same Legislative Decree), the landscapes subject to recognition by UNESCO, FAO GIAHS and the landscapes registered in the National Register of Landscapes historical rural areas, established at the MiPAAF as well as the synergies with other candidate proposals for the PNRR such as the National Plan for villages, the Plan for slow tourism and other plans / projects of a territorial nature supported by the MiBACT programming, in particular those concerning tourist itineraries cultural and religious paths. In addition, area projects will be favoured that provide for aggregate applications that allow the redevelopment objectives of portions of the territory to be achieved more effectively.

Target population: Public and private entities who hold the ownership or use of assets (beneficiaries) for various reasons; operators in the sectors of tourism, crafts, agriculture, etc.; resident population, tourists (indirect recipients).

Timeline:

- By the first half of 2021: development of the consultation phase MiBACT, MiPAAF, Regions and Autonomous Provinces and the signing of an Agreement defining the phases and operating procedures of the intervention; definition of executive projects relating to centralized actions relating to the information system and the integration of functions relating to rural architecture within the National Register of Historic Rural Landscapes.
- By the second half of 2021: Start of the implementation phase of the centralized actions
- By the first half of 2022: Approval by MiBACT and MiPAAF of the regional intervention programs
- By the third quarter of 2022: Launch of the public tender procedure for the distribution of contributions to private entities and negotiation procedures for the selection of publicly owned interventions
- By the first quarter of 2023: Granting of grants to beneficiaries
- By the second half of 2023: Assumption of commitments and start of works
- By the first quarter of 2026: Conclusion of the intervention

Investment 2.3: Programs to enhance the identity of places, parks and historic gardens, participatory regeneration of urban peripheries.

Challenges: This sheet is about types of projects which, despite their diversity, focus on urban requalification and, therefore, on improving the quality of life of the population. It aims at the rehabilitation of the urban peripheries and, at the same time, the renewal of the concept of historic park and garden as center of “public beauty” for the population.

For peripheries, the action will support urban regeneration projects based on participatory culture in peripheral urban areas, with a focus on local communities, to create and enhance the offer of cultural and creative activities, in partnership with public and private stakeholders, civil society, foundations and / or cultural associations, universities, research centers, non-profit higher education institutes, enterprises and professionals.

With reference to historic parks and gardens, the programme will focus on the requalification of an important, though not exhaustive, part of the approximately 5000 sites present in Italy with an extensive action plan to acquire and spread knowledge about these areas and support their rehabilitation, ensuring their correct maintenance, management and public use.

Objectives:

For the urban peripheries:

- To increase and diversify the cultural offer through the promotion of innovative cultural projects that enhance the role of cultural, institutional and social leaders in areas not normally reached by this type of activity;
- to stimulate the participation of inhabitants of neighborhoods characterised by social and economic marginalisation and engage them in setting up and benefitting of innovative projects and cultural and creative activities;
- to improve cultural services and functions in the selected neighborhoods, through the opening, animation and use of cultural places (schools, libraries, community hubs) by their inhabitants;
- to create opportunities for the social and economic improvement of the selected neighborhoods, also by supporting innovative forms of cultural and creative enterprises in the neighborhood / urban communities, creating collaborative dynamics between residents, public institutions, local private entities, knowledge institutions, civil society organised, artists and creatives and / or other professionals.

For the historic park and garden:

- to equip and make public green spaces accessible, with impacts on urban attractiveness for residents and tourists and on improving environmental quality (e.g. air quality);
- to increase of the social and economic resilience and mitigation of the impact of the

crisis, as the intervention will involve companies from different sectors (construction, horticulture, etc.), skilled workers, professionals and multidisciplinary skills;

- to increase accessibility for all segments of the population to safe open-air resources for social life, with limited risks of spreading the COVID virus.
- to increase skills and competences for the management and maintenance of assets through the creation of training courses for the acquisition of specific and multidisciplinary qualifications.

The action aimed at the urban peripheries is implemented through a public notice addressed to the municipal administrations (provincial capital municipalities) in whose territories there are complex neighborhoods, in particular because cultural and educational reasons, identified through specific criteria and requirements, so that they present proposals for culturally based urban regeneration by local partnerships made up of public and private stakeholders mainly engaged in the cultural field and rooted in the local territories (university and school institutions, associations, foundations, organizations, committees).

The notice is aimed at supporting the creation and strengthening of the offer of cultural and creative activities with projects aimed at places of culture (museums, archives, archaeological areas also not open to the public), schools for the implementation of extra-didactic activities, libraries and cultural centers to finance projects aiming at making these structures hub for innovative cultural and creative activities. For these activities, it is also planned to carry out requalification interventions of public real estate already destined for social, cultural educational services and / or degraded and / or disused that are intended to be repurposed for socio-cultural activities for which it is possible to demonstrate the managerial sustainability of the initiative.

Only 2000 villas, parks and historic gardens under protection out of about 5000, are now regularly registered (and only 1/3 already recorded). A broad action plan is therefore necessary to improve the knowledge base and support the recovery of Italian historic parks and gardens, ensuring their proper maintenance, management and public use, also through restoration, requalification and enhancement. The intervention will start from censusing, cataloging and digitizing the assets, completing the ongoing census. Subsequently, the restoration, requalification and enhancement of about 95 historic parks and gardens (public and private) will be carried out. A training plan is also provided for operators in the sector where specialized and interdisciplinary skills are required.

Particular attention will be paid, because of their cultural and social relevance and importance (in terms of location and extension), to the Park and the Real Bosco di Capodimonte, the Park of the Royal Palace of Caserta and the areas of Villa Favorita in Herculaneum.

Implementation:

(i) Sites of Identity, peripheral urban Areas

The project approach is interdisciplinary and multilevel. It is implemented through the coordination of public and private administrations and institutions and in dialogue with the dense network of stakeholders in the area: public and private actors, organised social sector, foundations and / or associations cultural centres, Universities, research centres, non-profit advanced training institutes, businesses and professionals.

The initiative unfolds along the following main phases:

- 2021: Launch of the call by MiBACT (DG Contemporary Creativity) addressed to municipal administrations for the submission of preliminary projects prepared by local partnerships; evaluation and selection of proposals for financing;
- 1st semester 2022: Co-design of the initiatives supported by the call on the basis of an analysis of needs and resources (e.g. assets, skills, professionalism) and definition of the content of the "agreements" between the municipal administrations, local communities (public / private / third sector organisations); local offices of MiBACT (places of culture, research institutes, regional secretariats) will carry out accompanying and tutoring functions and, where appropriate, be partner of the initiatives. Signing of "agreements" between administrations and "active citizens"; implementation of initiatives and support for the creation of social, cultural and community enterprises that will ensure the sustainability of actions.
- 1st quarter of 2023: completion of planning and assignment of works and services;
- 2nd semester 2023: start of works, activities and services;
- 1st semester 2026: conclusion of activities.

(ii) Parks and historical Gardens

MiBACT (with the support of a technical-scientific coordination structure) will immediately select a first group of historic gardens and parks for interventions to be launched on 2021, while a second group of historical parks and gardens will be selected via a public call.

Phase 1 (to be completed by 2021):

- setting up the governance of the programme of interventions and technical-scientific coordination group (MiBACT, University, ANCI, sectorial organisations);
- identification of the first nucleus of historic state parks and gardens (5-7) - MiBACT decree for admission to financing and agreements with the beneficiary (MiBACT local structures);
- start of the census and recording of key data to be completed by 2023;
- Preparation of the training program and agreements with MUR, Regions, Schools;
- Publication of a public call for the selection of the second round of interventions of historical gardens-parks.

Phase 2 (2022-2026):

- evaluation of the applications received and admission decree for financing the selected interventions;

- Agreements with the beneficiaries;
- Tender procedures (by the implementing bodies) for the award of works;
- Realization of the works.

The management of both the projects will be supported by local authorities, for the action about urban peripheries, and by MiBACT and by local authorities, as well as by private stakeholders who will receive financing for the parks.

Target population: Local authorities, public institutions, non-profit private actors, resident population, tourists.

Timeline: 2026Q3

Investment 2.4: Seismic safety in places of worship and FEC heritage restoration.

Challenges: The intervention involves two components relating i)) the anti-seismic safety of places of worship and ii) the restoration of the FEC heritage under the responsibility of the Ministry of the Interior.

The earthquakes that have hit Italy in the last 25 years have highlighted the considerable fragility of historic buildings in the face of natural events. The lack in adequate preventive actions has resulted in considerable damage to cultural heritage over the years, as well as an enormous waste of economic resources for post-earthquake reconstruction interventions. It is therefore necessary to heal the still open wounds and to prepare a working methodology set for the verification of seismic vulnerability of the buildings that house our immense heritage and which are often themselves an integral part of it, avoiding interventions carried out in the emergency phase that often produce an aggravation the damage to the assets itself.

We now have an adequate technical-legal instrumentation that will allow us to act quickly on all cases widespread in Italy. It is therefore time to capitalize on the experience gained in this sector.

Objectives:

- Requalification of churches, towers / bell towers and, as a consequence, of the urban contexts gravitating around them through the improvement, including energy, of the structures targeted by the intervention;
- Restitution to the populations of monuments particularly representative of the local identity thanks to dynamics of re-appropriation in the communities involved, integration and involvement of the youth population through the relaunch of the sense of belonging to the community through awareness-raising and information actions on aspects related to civil well-being, protection environmental, cultural heritage.
- Triggering of processes to relaunch the economy, including local ones, thanks to the

support of highly specialized workers in the sector to unemployed youth populations, the increase in skills for the management and maintenance of assets, increase in the attractiveness of the territories for quality cultural tourism.

At the institutional level, MiBACT has adopted, in last few years, some initiatives aimed at defining and financing preventive anti-seismic interventions of architectural assets, however a large massive plan of anti-seismic preventive interventions has never been implemented that would definitively intervene on a wide category of assets to significantly reduce the seismic risk and avoid the enormous investment necessary for the restoration after the disaster, as well as the permanent loss of many of them, as unfortunately happens after every earthquake.

It is therefore considered necessary to propose an extraordinary anti-seismic prevention program on two particular typologies of monumental assets, churches and bell towers / towers that constitute the distinctive sign of entire communities that around these monuments have been recognized and strengthened in the key moments of their millenary history.

This program aims:

- on the one hand, to restore existing damage and to secure the cultural heritage (contents and containers)
- on the other hand, to put in place a plan in order to act preventively to prevent natural events, even of low intensity, from generating damage. relevant to cultural heritage.

It is believed to be able to intervene on a total of over 200 complexes (at least 150 churches and over 70 slender structures - towers and bell towers). The economic estimate of the request is based on the in-depth knowledge of the subject gained by the Administration in these difficult years. The planned monitoring action, which will be conducted in parallel, also implements the monitoring plan already in progress.

Implementation:

The program plans a differentiated timing, starting to carry out the interventions on the assets which, from an initial multifactorial screening, are emerging for seismic risk. At the same time, the vulnerability and risk filing plan, partly already started, and the implementation of the monitoring plan must be carried out. However, it is assumed that an important number of cultural complexes will be secured and adapted by implementing a typological strategy based on the nature of the asset on which the intervention will be carried out.

- Continuation of the filing on the conservation status of the Assets (during 2021)
- At the same time start of the interventions on the assets already mapped (2021-2025)
- Continuation of prevention and recovery interventions on assets progressively registered (2022-2026).

MiBACT and Ministry of Interior will be the beneficiaries and responsible for implementation. However, it will also be necessary to involve the other institutional and proprietary subjects (Regions, Local Bodies, Ecclesiastical Bodies) to set up management structures dedicated to the project to support the ministerial offices and cooperating with other implementing bodies.

Target population: Curies and other legally recognized ecclesiastical bodies, but also Regions, Local Authorities and, above all, Populations and tourists.

Timeline: 2026Q3

3) Tourism and culture 4.0.

Investment 3.1: National Training Center for tourism operators.

Challenges: In the coming years, the tourism sector will continue to change significantly due to the impact of technology, digitization and the need to revise consumption patterns reducing the carbon footprint of the sector. This will require not only the acquisition of new digital, green and social skills, but also of life-long education and continuous re-training and up-skilling of the workforce. Moreover, the pandemic has changed the perspective of tourism organizations, by demanding more flexibility. The tourism training project promotes quality professional training through the creation of a national structure for higher education and the training of personnel involved in tourism activities. The project will build on the results of the Blueprint for Sectorial Cooperation on Skills for Tourism .

The project aims to improve the institutional formative offer in the tourism sector through the review of the programs of formation and the definition of homogeneous professional profiles shared on the entire national territory (with particular reference to the definition of qualifications and certification of skills). By doing so it will be possible to increase and homogenize the quality of the tourist offer not only at company level, but on the articulation of the tourist ecosystem, favoring the creation of a system of high Italian *hôtellerie* (Hospitality Industry).

The added value of a high-level public training institution is that it does not target only those who come from tourist vocational training courses, but also professionals among the top management and those who already work in the sector. In this way it will be possible to accelerate the adaptation of skills and capabilities to the development of digital technologies, to increase the relational skills with customers and to offer the necessary tools to manage, with adequate organizational responses, the exogenous changes that can affect the sector.

The training programmes are defined by the MiBACT in consultation with the Regions

and other competent institutions (e.g. MiUR) in order to ensure homogeneity of the types and levels of training offered at the national level.

The provision of training for the tourism sector is aimed not only at people already involved in touristic activities, but also at the unemployed, non-working and inactive population in order to support and stabilise the growth of jobs in the sector.

The High Education School will be a permanent structure. Its purpose will be to promote systematic action to update the professional figures in the sector by supporting levels and quality of services in line with the increasingly high market needs. Therefore, at the end of the project the School will be integrated into the National Training System that will bear the related expenses.

Objectives:

- to create a national structure for higher education and training of personnel involved in tourism activities;
- to strengthen the training offerings for the tourism sector, both in relation to institutional training in schools and with higher education courses, and in relation to training workers in the sector, the unemployed and the not-working;
- to define training programs and contents (also in agreement with the Regions) shared and unified at the national level, establishing the minimum quality criteria of the training offerings;
- to contribute to the definition of recognized professional skills standards at the national level for the establishment of training actions aimed at workers in the sector and intended for the growth of professional and relational skills;
- to improve the quality of the services offered by the tourism sector;
- to reduce the percentage of operators with little or no specialist professional qualification, upskill the workforce and identify a path for the recognition and certification of professional competences needed to work in the tourism sector.

Implementation:

The proposal will be implemented according to the following phases:

(i) Setting up a higher education structure in the field of tourism.

- By Mid 2021: Identification of two premises for the education structure; design of training programs for students and managers in the tourism sector; start-up of planning and adaptation of spaces, technological infrastructures for the operation of the Training School and identification of non-teaching staff for the management of the Higher Education School; preparation and publication of a public notice for the adaptation of spaces and completion of the definition of training programs and identification of teaching staff;
- December 2021-July 2022: Execution of the work;

- July-September 2022 - Completion of the work, identification of the teaching staff and training staff and start-up of promotion and dissemination activities of the School's activities.
- November 2022: Beginning of the training activities.

(ii) National plan for training and professional updating in the tourism sector

- By Mid 2021: Institutional consultations with the Regions for the definition of the necessary professional skills and initiation of dialogue with the main stakeholders in the sector;
- June-September 2021: Preparation and publication of a public notice at the national level for the identification of the most suitable structures to provide the required training services. Preparation of a public notice addressed to companies in the sector and to the unemployed to be distributed at the territorial level according to the criteria shared with the Regions;
- December 2021: Identification of the bodies in charge of the training activities, according to the programs, procedures and criteria identified, and publication of the list of individuals in charge of providing training services;
- February 2022 until the completion of the intervention: Beginning of the training activities;
- March 2022: Completion of the consultation and sharing activities phase with the Regions. Preparation and approval of legislative and regulatory texts relating to the definition of competences and certification of the same homogenised and recognised at national level.
- September-December 2022: Adoption at regional and national level of shared rules and regulations.

Target population: staff employed in tourist accommodation and training, sector stakeholders, Regions, State Property Agency (for the possible identification and provision of suitable spaces for the establishment of the Higher Education School).

Timeline: 2026Q4.

Investment 3.2: Capacity building for culture operators to manage the digital and green transition.

Challenges:

The entire value chain of the cultural and creative sectors has been heavily affected by the pandemic. The sectors need new approaches to foster the resumption of cultural production and improve their sustainability. The strong push towards digitalisation induced led to a massive use of digital platforms as a way to offer cultural content. But unfortunately cultural operators lack the necessary skills and experience (and often even the

equipment) to make the best use of those opportunities and find a sustainable revenue model for their “innovative” cultural offer. Moreover, there is lack of capacity of make the best use of new technologies and data analysis (including through AI) for audience development purposes.

There is also need to improve the ecosystem in which the cultural and creative sectors operate, correcting the weaknesses of the cultural and creative sectors, characterised by a high fragmentation and “silos approaches”, small scale of the enterprises, by encouraging cross-sectoriality, networking and cooperation, learning lessons from European good practices, also by fostering the digital dimension throughout the entire value chain.

But the increase in cultural participation cannot be promoted to the detriment of the climate and the environment. Cultural events, exhibitions, festivals, cultural reviews, musical events or fashion generate a significant environmental impact, in terms of greenhouse gas production and consumption of natural and energy resources. At the same time culture can contribute to the green transition, by stimulating suppliers (businesses and cultural and creative organisations), clients (public administrations and / or public cultural institutions and private) and millions of users whose behaviour, suitably oriented, can contribute to sustainable growth and climate action, as highlighted by the New European Bauhaus initiative launched by the European Commission as part of the Green Deal.

Objectives:

The general objective of the investment is to support the recovery and relaunch of the cultural and creative sectors. The specific objectives of the actions are:

- A - Support the resumption of cultural activities by encouraging innovation and the use of digital technology throughout the value chain. The planned actions will support the capacity and action of cultural operators to implement innovative approaches, also via digital means, and grow their managerial and economic skills.

- B - Foster the green approach throughout the cultural and creative supply chain. The planned actions will encourage the green approach throughout the supply chain, by reducing the ecological footprint of cultural production and participation and promoting innovation and inclusive eco-design, in a circular economy key, to orient the public towards more responsible environmental behaviours.

Action A 1 - Interventions to improve the ecosystem in which the cultural and creative sectors operate by encouraging cooperation between cultural operators and organisations and facilitating their upskill and reskill.

The action will support (co-financing) existing networks and organisations, operating in the cultural and creative sectors (public and private), selected on the basis of their proved capacity with the aim of overcoming the extreme fragmentation of cultural and creative

sectors, which has constituted an element of fragility during the pandemic. The focus will be on improving the capacity of operators to promote innovation through digital training and business management, also by promoting the exchange of good practices and peer-learning.

Action A II - Support to the cultural and creative sectors for innovation and digital transition along the entire value chain (production, co-production, management, distribution and meeting with the public) towards new models of sustainability.

The action will support operators or organisations to implement activities that make use of new technologies and digital technology aimed at: Creation of new products for live and online circulation with particular attention to reaching to new audiences in deprived social contexts and internal areas; Ensuring an economic return to cultural offer while safeguarding intellectual property; Promote co-production, cross-border cooperation and international circulation, especially in the European Union; Culture-led regeneration processes, also through the enhancement of traditional skills in innovative contexts; Actions to diversify and improve the quality of the offer and better interact with the public.

Action B I - - Promote the reduction of the ecological footprint of cultural events

The action to reduce the ecological footprint of exhibitions, festivals, cultural events, musical events, and activities and processes such as those of conservation and restoration, minimising the production of greenhouse gases and the consumption of natural and energy resources. It will promote the inclusion of social and environmental criteria in public procurement policies in cultural events funded, promoted or organised by public bodies, orienting them towards environmental sustainability, thus steering the supply chain towards eco-innovation of products and services. It will build on the results of the LIFE GreenFEST project "Green Festivals and Events through Sustainable Tenders" which has developed Minimum Environmental Criteria for cultural events: exhibitions , festivals, cultural reviews, musical events).

Action B II - Promote innovation and inclusive eco-design, also in terms of circular economy and orient the public towards more responsible behaviour towards the environment and climate.

The action fosters the adoption of an ecological approach the creative/design sector, combined with the principles of Design for All, in order to ensure use and usability for all, regardless of age, capacity and / or social condition. The cultural and creative sectors will be encouraged to contribute to climate action, combining design and sustainability for the strategic rethinking of more responsible lifestyles and behaviours towards nature and the environment, thus contributing to the New European Bauhaus launched by European Commission under the Green Deal.

Implementation: The implementation will be supervised by the MiBACT and will involve the Ministry of Economic Development (MISE) as well as Regional and local

authorities, cultural hubs, cultural organisations and third sector entities.

Target population: Cultural and creative operators and organisations, cultural networks, creative hubs, cultural districts, Fablabs, creative spaces, third sector associations operating in the cultural field, museums, foundations training centers in the cultural and creative sector, schools and universities (for digital literacy and training programs), non-profit spaces, independent spaces, artist run spaces, etc.), artists and creatives.

Timeline:

The investment is organised along different lines of action:

Support the resumption of cultural activities by encouraging innovation and the use of digital technology throughout the value chain (Actions AI and AII)

- 4th quarter 2021: Call for the identification of organisations and networks to carry on training and peer-learning activities and support cultural and creative organisations in networking, cooperation and innovative actions at large scale;
- 1st quarter 2022: Call for support to innovative cultural projects;
- 2022-2023: Training and peer-learning activities and innovative actions;
- 2022-2025: Implementation of innovative cultural projects;
- 2022 – 2026: Monitoring and evaluation by MiBACT.

(ii) Foster the green approach throughout the cultural and creative supply chain. (Action BI and BII)

- 2nd quarter 2021 - Call for the acquisition of support services for the implementation of training activities, drafting of guidelines, coaching and exchange of good practices;
- 3rd quarter 2021 - Selection of the service providers;
- 2022-2026 Training and support activities.

Investment 3.3: Historical paths, slow tourism.

Challenges:

The project is in line with MiBACT's strategy on slow tourism, as outlined by the Strategic Tourism Plan, aimed at improving the attractiveness of remote areas and reducing anthropic pressure on "most visited" sites, balancing visitor flows, and opening up to the enhancement of new territories, in terms of sustainability and authenticity. In particular, the project will provide a new offer of Routes (*Cammini*) and will restore disused historic railway lines, or in the process to be dismissed, in areas of relevant cultural value, also restoring vintage old trains and museums explaining history of transportation and its role in the national development. The project will contribute to the European Year of Rails 2021 and is part of MiBACT's Recovery programme which saw 2019 as "Year of slow

tourism" and 2020 as "Year of tourist trains" and constitutes the element of union and correlation between all the topics the Ministry dealt with.

It will therefore be offered the opportunity to travel along historical railway lines through the most fascinating and evocative sites in Italy, building up a sustainable tourism also in minor destinations, to put people in closer contact with territories, focusing on authenticity, nature, natural parks, protected areas and historical and cultural places, all to be discovered and enhanced.

Objectives:

- To relaunch areas with a high natural and cultural value through the construction and / or restoration of infrastructures for sustainable tourism mobility (historic railways and routes), creating new opportunities for local economies induced by the expected increase in tourist flows and by new activities related to the management of the infrastructures and related services;
- To achieve a better distribution of tourist flows thanks to the organisation and promotion of alternative offers to the most popular destinations, allowing to stretch the tourist seasons and to diversify the offer;
- To reduce the environmental pressures by building a tourist offer inherently linked to forms of sustainable mobility, which might encourage the use of collective means of transport and promote the correct environmental behavior, respectful of places and natural resources.

A total of 16 historic railway lines, already precisely identified, will be restored for a total of 992 km, of which 10 in the center-south (725 km) and 6 in the center-north (267 km), in addition to the restoration of over 150 stations and at least 6 exhibition points.

Additional works will also be carried out - or completed - for 3 Paths ("Cammini") already on implementation phase by the Regions or local authorities under the direct coordination of MiBACT. In addition to the famous Via Francigena, entirely financed from North to South, a series of religious paths will be completed and the Appian Way path will come into operation (the delivery of the executive project is expected in the late spring of 2021). A further 1000 km of routes will be built as well as services that will improve the use.

Both projects will involve almost the entire national territory and most of the Regions, especially those in southern Italy.

The project is connected with the relaunch of the villages ("Borghi") and is included in a unitary strategy for a cultural relaunching of the country's marginal areas.

Implementation: The projects will be carried out, in continuity with those already underway, by the Regions and local authorities under the supervision of MiBACT.

The management of the two projects will be supported by the bodies in charge, by

FS Foundation with RFI in the case of historic railways and by the Regions and local authorities, with the support of the associations in the case of paths (“Cammini”).

Target population: National and international tourists, local population, A) FS Foundation; B) Local authorities, local MiBACT offices.

Timeline:

The project is divided into two main lines of action:

(i) *Recovery of the historical railway lines and the connected FS historical heritage.*

- 2nd quarter of 2021: MiBACT issues a decree for the admission to financing of the interventions; Agreement with Fondazione FS Italiane, that manages and enhances the historic rail heritage and Rete Ferroviaria Italiana (RFI), which manages the rail infrastructures in Italy;
- 4th quarter of 2021: start of the works;
- 2023: completion of works (except for lines in the Sardinia Region);
- 2025 completion of the works in the Sardinia Region.

(ii) *Enhancement of the Routes and of the associated tangible and intangible heritage*

- 1st half of 2021: Signing of Agreements (by integration of Agreements already in place) between MiBACT and the entities and institutions in charge of the identified Paths;
- 2nd semester of 2021: Agreements between MiBACT and individual beneficiaries;
- 1st half of 2022: completion of the projects design;
- 1st half of 2023: procurement procedure and awarding of works and services;
- 1st half of 2026: implementation and completion of interventions.

The entire project line will be concluded by 2026Q3.

Investment 3.4: Infrastructural improvement of tourist accommodations and tourist services.

Challenges:

The tourist accommodation facilities all over Italy have suffered strong losses due to the Covid pandemic. This has worsened their financial situation and made it harder for them to make the required investments in the quality and service levels, which would have been needed even before the crisis. The modernization and improvement of current standards of accommodation offer has the dual objective of increasing the competitive capacity of companies and promoting a tourism offer based on environmental sustainability, innovation and digitalization of services.

Objectives:

The redevelopment of tourist accommodations and the renewal and digitalization of the tourism ecosystem provide for the implementation of investments aimed to rising the standard of service (with an increase in the category level) in the key areas of environmental sustainability, digitalization, management innovation and renewal/diversification of the offer.

This line of action has a sectorial character in supporting the tourism industry that will be defined in the context of the usual State-Regions discussions to ensure maximum complementarity between national and regional intervention.

The intervention measures are intended for the entire system of tourist accommodations, and concern both hotels and extra-hotel facilities.

The measures also include support to increase the skills of employees in companies that have received funding and have made investments in more innovative sectors such as the digital space. These measures complement the investment and should therefore not be understood as training measures which are provided for in a different way. Investments will be encouraged through a combination of grants, low-interest loans and tax credits in line with EU State aid regulations.

Finally, the measures will take into account the "lessons learned" from the Covid-19 crisis in order to ensuring health security conditions in the current situation and identify ways of offering and managing services that may be more resilient to the occurrence of new potential crises in future. All future measures in the field of tourism and culture must include safety awareness.

The proposed investments have the following objectives:

- to redevelop accommodation facilities in order to raise their quality and competitiveness through the restructuring and modernization of basic structural components and improvement of environmental efficiency, also aiming at innovation and digitalization of services (e.g. optical fiber, online booking systems, automated check-in and check-out systems, online payment systems, digital marketing & communication etc);
- to raise the standards of hotel facilities to a higher level (4 stars and more) in order to attract new high-value tourism segments with a higher spending potential;
- to promote a new supply of touristic services capable of attracting segments of additional tourist demand and intercepting new trends (sports, sustainable, experiential tourism, etc.);
- to support and promote a "welcoming and safe" accommodation offer, calibrated on new needs and in compliance with the legislation on safety and physical distancing;
- to encourage virtuous behaviours and organizational, managerial and process innovations, including technical and structural aspects, aimed at reducing environmental impacts and improving eco-sustainable management (waste, energy consumption, water);

- to encourage the reduction of the fragmentation of the hospitality sector by supporting management innovations that imply ownership acquisitions or mergers, aimed at building hotel chains or merging several hotels, especially small and medium-sized hotels, under a single management;
- to promote innovative management models through the development of networks and other forms of aggregation between companies and operators in the sector, in order to overcome the weakness and fragmentation of the Italian business system and achieve European competitiveness standards;
- to increase the digitalization levels of companies operating in the tourism sector and to develop the digital and non-digital skills of operators in the tourism sector through access to qualified training.

Implementation: The implementation of the proposal under the coordination of the MiBACT foresees capital contributions in favour of the operators of accommodations.

Target population: Tourist accommodation enterprises; public entities at relevant institutional levels.

Timeline:

The project comprises the following phases:

- 1st semester 2021: Planning and signing of agreements with Regions and Municipalities and other stakeholders in order to define homogeneous elements throughout the national territory. Joint drafting and adoption of the necessary rules and regulations; sharing of the contents of the Public Notice. Creation of a Rotational Fund: definition and start of communication activities to inform everybody involved in advance to speed up the process.
- 2nd semester 2021: Definition of the regional allocation of resources; activation of a national one-stop-shop for the presentation of proposals.
- As of 1st quarter 2022 and until saturation of available resources: the collection of proposals begins. In compliance with the criteria for allocating available public investments throughout the country, the proposals will be evaluated using the FIFO system (First in, First out).
- The selection of beneficiaries will take place based on evaluation criteria set out in the joint call with the Regions and will take into account technical, economic and financial feasibility and innovation capabilities in terms of environmental and digital sustainability and maintained and/or created employment. Awards will be distributed taking into account the location of the most disadvantaged or remote areas.
- 1st half of 2026 – Completion of work.

4. Green and digital dimensions of the component

a) Green Transition:

Investments in cultural heritage will be consistent with the green principles. Regeneration of cities, territories and landscapes will be made in accordance with the principles of the circular economy, by reducing waste and attributing new values to natural resources, as well as supporting a fair and inclusive transition to a healthier, greener and fairer society and economy. However, such interventions do not contribute directly to the achievement of 37% target for the green transition.

The measures of this component cover different fields of intervention of Annex III to the Regulation with the following coefficients for the calculation of the support for climate change objectives and environmental support:

- Code 128. Protection, development and promotion of the public tourist heritage and tourist services.
- Code 129. Protection, development and promotion of cultural heritage and cultural services.
- Code 130. Protection, development and promotion of natural heritage and eco-tourism other than Natura 2000 sites.
- Code 88. Infrastructure for vocational education and training and adult learning.
- Code 108. Support for the development of digital skills
- Code 69. Other railways rebuilt or modernized.

b) Digital Transition:

The component does not contribute directly to the achievement of the mentioned 20% target foreseen for the digital transition, although it includes relevant interventions which promote the digital use of culture.

As a matter of fact, the project "Digital platforms and strategies for access to cultural heritage" has a coefficient of 100% for calculation to support the digital transition, referring to the digital field code "011 Government ICT solutions, e-services services, applications".

In addition, the action for the support of the cultural operators in the digital and green transition addresses the needs related to the development of digital skills, with regard to the training for the use of digital, digital literacy, community hub, creative labs, digital cultural use, creation of cultural ZFU.

See Table 1 work in progress

5. Milestones, targets and timeline

See Table 2 work in progress

6. Financing and costs

See Table 2 work in progress

In general, the Action is consistent with the 'Greener Europe' policy objective of the Cohesion Policy 2021/2027. The interventions financed by PNRR and those financed by the ESI Funds will be approached with a view of complementarity and/or integration. An ex-ante demarcation will be ensured to avoid the overlap of the programmes at national and regional level.

The tourism and culture sectors are crucial for the economy of the country. They represent a relevant induced economic for a large part of the country, especially for the regions where the local economy cannot count on the industry. To capitalize the potential of the sectors, the integration between different sources of financing has been promoted, in particular with the European Investment Funds regarding the intervention "Digital platforms and strategies for access to cultural heritage" and "Culture 4.0: Tourism training and initiatives for cultural diffusion in schools".

This approach is line with the EU policy aiming at strengthening the level of digitalization of the cultural heritage and the use of advanced technologies. It is also in line with the Partnership Agreement 2021/27 of the Cohesion Policy, which includes, among the specific objectives for the ERDF, the Priority Objective 4 on strengthening the role of culture and sustainable tourism in economic development, social inclusion and social innovation also in terms of improving skills and opportunities through education.

The economic estimates of the costs related to tourism and culture interventions are based on the available feasibility studies. The standard prices more recently used in recent interventions in the same field have been considered. In several cases, executive projects with a detailed business plan on construction and management costs are available. In the digital field, innovative components have been addressed on the basis of the previous experience on the similar projects.