



## **Professional Training and Technological Innovation**

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**Introduction: The dialogue between RID and SSM as a condition for the effectiveness of reforms and the quality of the judicial system.**

There is a close correlation between the activities of the Italian School for the Judiciary (SSM/ISJ) and those of the District Innovation Representatives (RID). While the latter's main areas of commitment are technological innovation and the improvement of the organizational conditions of judicial work<sup>2</sup>, the SSM is institutionally responsible for «the training and professional updating of magistrates». Two evidently complementary and convergent perspectives.

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<sup>1</sup> Presentation delivered at the annual meeting of the CSM with RID, Rome, Palazzo Bachelet, May 30-31, 2024. The author is a member of the Steering committee of the Italian School for the Judiciary and coordinator of the New Technologies, Continuing Education, and Executive Training sectors.

<sup>2</sup> According to the current Circular on district referent magistrates and magistrates for innovation (CSM resolution of November 6, 2019), RIDs, in collaboration with the CSM, of which they are the local bodies for technological innovation, cooperate with the Presidents of the Courts of Appeal, the Attorney Generals, and the managers of judicial offices in the district. RIDs, in particular, develop projects and innovations aimed at improving the organizational conditions for individual magistrates and offices, thereby enhancing the quality of judicial work.

As the *Magna Charta*<sup>3</sup> of judges reminds us, «initial and continuous training is a right and a duty for the judge. It must be organized under the supervision of the judiciary. Training is an important element of guaranteeing the independence of judges as well as the quality and efficiency of the judicial system». There is a close link between the independence and autonomy of the judge on one hand, and training and knowledge of innovation, including through professional updating, on the other; and likewise between training, innovation, and the efficiency of the judicial system. The acquisition of “new” knowledge serves to improve one's professional activity. The permanent nature of training and updating commitments is the best sign of the need for judges to “not fall behind” in the face of regulatory and technological changes. The quality and efficiency of the judicial system, as well as the independence and autonomy of the judiciary, stem from this attitude to consistently fulfill what constitutes an individual duty, which institutionally corresponds to the main responsibility of the SSM.

The resolutions of the CSM<sup>4</sup> have historically sketched out the contents of the relationship between the SSM and the RID in a succinct manner. Therefore, this relationship remains in the background in secondary regulations, whereas it deserves to be enhanced, made more immediate, and as much as possible, more disintermediated.

The CSM Circular of November 6, 2019, indeed, structures the dialogue between RID and SSM within a precise perimeter that involves the intermediation of various subjects for coordination needs. The current Circular entrusts the organization of at least one annual study meeting for the RID to the Seventh Commission of the CSM, aimed at their training and information on characterizing issues through the exchange of experiences in the field. For the **preparation of the meeting, the RID**, in collaboration with the MAGRIF, send a **report** to the Superior Council of the Judiciary by November 10 each year. This report, in addition to reporting the status of the implementation of judicial IT in their district, including any encountered critical issues or constraints to be removed, **outlines the IT training needs** using the format that will be published on the communication portal (art. 5 paragraph 2 of the Circular). The STO<sup>5</sup> provides support to the RID for the application of best practices, the initiation of

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<sup>3</sup> Council of Europe, Consultative Council of European Judges, Magna Carta of Judges, Strasbourg, November 17, 2010.

<sup>4</sup> Cfr. R. MASI, *Il ruolo del Rid quale componente dell'U.D.I. – I rapporti tra Rid e Magrif – Le attività di formazione e informazione, Relazione all'incontro con i RID di nuova nomina*, 23.3.2024, Roma, inedita. With Resolution 31/IN/2015, the CSM highlighted the need to implement a decentralized training model agreed upon between RIDs and Trainers through an overall training project in the field of informatics distinct for Magrifs and magistrates. With Resolution 172/IN/2015, the CSM invited RIDs, in collaboration with Decentralized Trainers based on agreement with the SSM, to develop a district-level training program in the areas of innovation and computerization according to the programmatic guidelines outlined in the same resolution, and to communicate specific training projects to the seventh commission. Through Circular 26 October 2016, the CSM requested RIDs and MAGRIFs to promote information/training projects at the local level, including on the ministerial applications in use, reaffirming the model of agreed training between RIDs and decentralized training structures of the SSM for organizing study meetings focusing on specific themes of judicial informatics, statistics, organization, and best practices.

<sup>5</sup> The technical organizational structure (STO), as provided for in Article 18 of the Internal Regulations, is a permanent advisory body composed of ten magistrates appointed by the CSM, following consultation, from

innovative projects, and the promotion of data cleaning activities<sup>6</sup>. At the end of the course, the **STO** prepares a document with any **observations and proposals** to identify the need for **CSM interventions**, interactions with the Ministry of Justice within the relevant Joint Committee, or **with the Italian School for the Judiciary**, or to prompt office heads (art. 5 paragraph 4 of the Circular). The Seventh Commission, based on the STO's proposal, proposes a **resolution to the plenary session** summarizing the state of judicial IT in the various districts, representing any requests to be formulated to the Ministry of Justice within the relevant Joint Committee, and **the training needs of magistrates to be presented to the SSM in central or decentralized training sessions on judicial IT, statistics, and best organizational practices** (art. 5 paragraph 5 of the Circular). The resolution is **transmitted to the SSM** so that, within its competencies, it can also **organize study meetings on specific themes of judicial IT, statistics, organization, and best practices with the decentralized training structures in concert with the RID and the MAGRIF** (art. 5 paragraph 6 of the Circular).

Training needs are conveyed to the SSM following a very articulated process, according to a system that does not suffer from criticalities in terms of timeliness only because it is appropriately integrated with a complementary perspective stimulated by the CSM with previous circulars. This includes: *i*) promoting **training projects at the local level**, including on ministerial applications in use, according to the training model agreed upon between RID and the decentralized training structures of the SSM for the organization of study meetings on specific themes of judicial IT, statistics, organization, and best practices; *ii*) **organizing study meetings** on the aforementioned themes with the decentralized training structures.

The ongoing reform and innovation process in the Italian judicial system makes the dialogue between RID and SSM indispensable. The success of the legislative process relies on two additional perspectives: structurally, digitization, and personally, training in the use of new technological structures. Without these, no reform could hope to achieve improvements in efficiency and quality; and it is concerning these perspectives that RID and SSM are called to offer effective and decisive contributions.

It is of interest here to recap the broader context in which the SSM plays a proactive role in creating the conditions for the effectiveness of the anticipated change to ensure the quality and efficiency of the judicial system. To this end, it is necessary to trace the development lines of the modernization of the European Union's judicial systems revealed by the strengthening of digitization and training on innovation. This

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among those with experience in office organization, computerization, workflow analysis, workload, and pending proceedings. The term of office is three years and may be renewed upon request, but not for more than one additional year. For an overview of the functioning and duties of the STO, please refer to <https://www.csm.it/web/csm-internet/csm/sto>.

<sup>6</sup> The Technical Structure for Organization prepares each year, with the support of the CSM's statistical office, by the date set for the RID course and for its discussion there, a summary document of the reports submitted by the RIDs (Article 5, paragraph 3 of the 2019 Circular).

occurs in a scenario where **the link between judicial training, digital justice, and cross-border judicial cooperation in the EU** is decisively consolidating. Consider the international projects - from the EJTN working group “digitalisation” project to the JuLIA project - in which the SSM is actively involved.

One conviction must be clear and deserves to be reiterated: if the PNNR has given a decisive boost to the digitization of justice in our country, the success condition of the entire judicial reform framework rests on the effectiveness of the “digital” transition and training for which the RID on one hand and the Italian School for the Judiciary on the other are highly responsible.

The School is trying to meet this commitment not only on the international and national training front but also on the “domestic” organizational front: as it has been well said, «**practice is the hardest part of learning, and training is the essence of transformation**».<sup>7</sup>

### **1. The modernization of the European Union's judicial systems: development lines between digitization, artificial intelligence, and training on innovation.**

In the process of **modernizing the European Union's judicial systems**, the main **pillars** of the Commission's action are represented by the **digitization of justice and the new strategy on European judicial training**. This set of digital justice tools aims to further assist Member States in adapting their national judicial systems to the digital age and improving cross-border judicial cooperation within the EU among the competent authorities.

**Digitization**, in fact, is proving to be a fundamental tool **for transnational judicial cooperation**, ensuring cost reduction and better access to justice for citizens. These measures are funded with the mechanisms available under the **multiannual financial framework 2021-2027** and the “Next Generation EU” recovery instrument. Complementarily, the use of **Artificial Intelligence systems**<sup>8</sup> is also emerging, now

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<sup>7</sup> Ann VOSKAMP, in *Manuale REFG sulla metodologia della formazione giudiziaria in Europa*, 2021

<sup>8</sup> The European Ethical Charter on the use of artificial intelligence in judicial systems and related fields, adopted by the Council of Europe's Commission for the Efficiency of Justice (CEPEJ) during its 31st Plenary Meeting in Strasbourg on December 3-4, 2018, deserves to be recalled. This Charter is intended for both public and private actors responsible for creating and deploying AI tools and services concerning the processing of judicial decisions and data (including machine learning or any other data science-derived methods). It also applies to decision-makers competent in legislative or regulatory frameworks and those involved in the development, verification, or utilization of such tools and services.

Recognizing the increasing importance of AI in modern societies and the anticipated benefits when fully utilized to serve efficiency and quality in justice, CEPEJ formally adopted five fundamental principles (referred to as the “European Ethical Charter”) for the use of AI in judicial systems and related fields: i) respect for Fundamental Rights Principle: Ensuring fundamental rights are respected in the development and implementation of AI tools and services; ii) Non-Discrimination Principle: Preventing the development or intensification of discrimination among individuals or groups of individuals; iii) Quality and Safety Principle: Requiring the use of certified sources and intangible data for the processing of judicial decisions and data, employing models developed interdisciplinary in a secure technological environment; iv) Transparency, Impartiality, and Fairness Principle: Making data processing methodologies accessible and understandable, allowing for external verification; v) User Control Principle: Avoiding a prescriptive approach and ensuring that users are informed actors with control over their

regulated by the Artificial Intelligence regulation approved by the Council of the European Union in the final reading on May 21, 2024<sup>9</sup>. In light of a peculiar definition<sup>10</sup> of an AI system for the purposes of the **AI regulation** (art. 3 no. 1: «an automated system designed to operate with **varying levels of autonomy** and that can exhibit **adaptability** after deployment and which for explicit or implicit goals **deduces from the input it receives how to generate outputs** such as predictions, content, recommendations, or decisions that can influence physical or virtual environments»), the European regulator has made precise value choices: as evidenced by recital 61, **AI systems intended for the administration of justice** and democratic processes deserve to be **classified as high-risk systems** due to their potentially significant impact on democracy, the rule of law, individual freedoms, and the right to effective remedy and an impartial judge. It is therefore appropriate to classify as high-risk AI systems intended to be used by or on behalf of a **judicial authority to assist judicial authorities in the activities of research and interpretation of facts and law and in the application of the law to a concrete set of facts**. AI systems intended to be **used by alternative dispute resolution bodies for such purposes** deserve to be considered high-risk when the outcomes of dispute resolution proceedings have legal effects for the parties. The use of AI tools can support **judicial decision-making or the independence of the judiciary**, but it **cannot replace it**: the final decision-making process must remain a **human-guided activity**. However, it is not appropriate to extend the classification of AI systems as high-risk to AI systems intended for **purely ancillary administrative activities** that do not affect the actual administration of justice in individual cases, such as anonymization or pseudonymization of decisions, documents, or judicial data, communication among staff, and administrative tasks<sup>11</sup>. This approach is reflected in the draft legislative proposal concerning «Provisions and

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choices. These principles collectively constitute the European Ethical Charter, providing guidance and standards for the ethical deployment of AI in judicial systems and associated domains.

<sup>9</sup> Regulation of the European Parliament and of the Council establishing harmonized rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139, and (EU) 2019/2144, and Directives 2014/90/EU, (EU) 2016/797, and (EU) 2020/1828, approved by the Council at its final reading on 21 May 2024 and awaiting publication in the Official Journal of the European Union (OJEU). The regulation aims to improve the functioning of the internal market and promote the dissemination of human-centric and trustworthy artificial intelligence (AI), while ensuring a high level of protection for health, safety, and fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union, including democracy, the rule of law, and environmental protection, against the harmful effects of AI systems in the Union, and promoting innovation.

<sup>10</sup> For an overview of the issue cfr. C. PARODI, *Sistema penale e ddl sull'intelligenza artificiale: prospettive e criticità*, in G. Ius, 13 maggio 2024; A. BALSAMO, *L'impatto dell'intelligenza artificiale nel settore della giustizia, in Sistema penale*, 22 maggio 2024. Per le definizioni di I.A. nel quadro precedente al Regolamento AI Act cfr. F. Di Vizio, *Prevenzione e investigazioni: l'uso di IA, big data e soluzioni tecnologiche in ambito finanziario e nel contrasto al riciclaggio e al finanziamento del Terrorismo*, in *discrimen.it*, 11.1.2024.

<sup>11</sup> Indeed, in ANNEX III of the regulation on artificial intelligence, among the high-risk AI systems referred to in Article 6, paragraph 2, for the "Administration of Justice and Democratic Processes" sector, point 8(a) includes "AI systems intended to be used by or on behalf of a judicial authority to assist in the research and interpretation of facts and law and in the application of the law to a concrete set of facts, or to be similarly used in alternative dispute resolution."

Delegation to the Government on Artificial Intelligence»<sup>12</sup>, announced in press release No. 78 of the Council of Ministers on April 23, 2024.

Regarding European **judicial training**, the EU strategy aims to **expand training opportunities** for justice professionals in new strategic areas such as digitalization and artificial intelligence<sup>13</sup>. Additionally, it aims to promote a common European judicial culture based on the rule of law, fundamental rights, and mutual trust. The set objective is to train 65% of judges and public prosecutors and 15% of lawyers in EU law by 2024.

## **2. The connection between judicial training, digital justice, and judicial cooperation in EU sources.**

The **Treaty of Lisbon**<sup>14</sup> conferred upon the European Union competences to support **judicial cooperation** in civil and criminal matters through «**training** of judges and judicial officers»<sup>15</sup>. Since then, judicial training on EU law has improved the **correct and uniform application** thereof, fostering mutual **trust in cross-border** judicial proceedings and contributing to the development of the EU's area of justice.

Since 2008, the European Commission and the Council of the EU have closely collaborated to define cross-border digital initiatives in the field of justice. A first outcome of the political commitment to facilitate and enhance access to national and European electronic justice was the adoption of the **Multiannual Action Plan on e-Justice 2009-2013**. Following its completion, **strategies and action plans for e-Justice were adopted for the periods 2014-2018 and subsequently for 2019-2023**. In implementing these plans, the Commission conducted a «**study on the use of innovative technologies in the field of justice**» to explore existing national and EU policies, strategies, and legislation and assess the current use of Artificial Intelligence and technological tools Blockchain in the field of justice. Stakeholders include EU institutions and agencies, public authorities and judiciaries of Member States, legal professionals' organizations, and ICT companies.

In 2020, the Commission undertook several initiatives to strengthen the digitalization of justice and to respond swiftly to emerging challenges. Among the actions taken in this regard, the Strategic Forecast Report 2020 stands out, recognizing the necessity and relevance of an effective and rapid digital transformation of justice systems.

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<sup>12</sup> The draft provides, in Article 14, that "In the administration of justice, the use of AI is allowed exclusively for instrumental and support purposes, namely for the organization and simplification of judicial work as well as for jurisprudential and doctrinal research aimed at identifying interpretative orientations. The decision on the interpretation of the law, the assessment of facts and evidence, and the adoption of any measure, including the judgment, is always reserved for the judge."

<sup>13</sup> E. LONGO, *Rivoluzione digitale e sviluppi della partecipazione democratica nell'Unione Europea*, in *Osservatorio sulle fonti*, fascicolo 3 (2021), pp. 1309-1330.

<sup>14</sup> Signed on December 13, 2007, and officially entered into force on December 1, 2009.

<sup>15</sup> Art. 81, § 2, letter h), and Art. 82, § 1, letter c), of the TFEU.

**The Commission's Communication in 2011, «Building trust in European justice: A new dimension for European judicial training»<sup>16</sup>, brought about a radical change in the organization of judicial training in the EU**, both in approach and scope. Prior to this, the majority of judges and prosecutors in the EU had never received judicial training on EU law or the law of another Member State. Following the adoption of the communication, more than half of EU legal professionals (over one million) received such training. The evaluation of the European judicial training strategy for the period 2011-2020 (published in 2019)<sup>17</sup> and the annual reports on European judicial training<sup>18</sup> show that, overall, the strategy achieved most of its objectives; the result of training half of the EU law practitioners (i.e., 800,000 people) between 2011 and 2020 was achieved in 2017; the **number of training activities has increased**, **exchange programs** have been promoted, and training on EU law for various categories of legal professionals (particularly judges and public prosecutors) has improved. The strategy has also developed the **capabilities of networks such as the European Judicial Training Network (REFG-EJTN)**<sup>19</sup> and strengthened networks and training institutes at the European level.

The **European Judicial Training Network (EJTN)** brings together 36 judicial training institutions from 27 EU Member States, in addition to the Academy of European Law and 9 observer countries. The Italian School for the Judiciary (SSM), a member of the Network since 2012, is currently an elected member of the Steering Committee of the

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<sup>16</sup> COM(2011) 551 final.

<sup>17</sup> Evaluation of the 2011-2020 European Judicial Training Strategy, Commission Staff Working Document (SWD(2019)380); Evaluation of the 2011-2020 European Judicial Training Strategy, Commission Staff Working Document (SWD(2019)380).

<sup>18</sup> Reports from the Directorate-General for Justice and Consumers of the Commission.

<sup>19</sup> The *Réseau Européen de Formation Judiciaire* (REFJ) or *European Judicial Training Network* (EJTN) is an international non-profit association established in 2000, based in Brussels, with the purpose of promoting the exchange and sharing of knowledge regarding judicial systems for the benefit of members of the European judiciary. The European Judicial Training Network (EJTN) represents the interests of over 120,000 judges, prosecutors, and judicial trainers in Europe. The fields of interest of the EJTN include civil, criminal, commercial, and European Union law, as well as linguistic and corporate matters. The perspective of the EJTN is to create a common European area of Justice. The EJTN develops training programs that include activities aimed at promoting the understanding of the judicial systems of the Member States, mutual understanding of judicial cooperation instruments between the Member States, language skills, the development of common training tools, particularly in the field of judicial cooperation, and the deepening of knowledge in the judicial sector. In the context of creating a common European area of Justice, the EJTN aims to cooperate in the analysis and identification of training needs, the development of programs and methodologies for common training activities, the promotion of exchange and sharing of knowledge regarding judicial systems, the exchange and dissemination of experiences in the field of judicial training, the coordination of Members' programs and activities with particular regard to European Union initiatives, and the provision of know-how and knowledge to European, national, and international institutions. The general policy and structure of the EJTN promote internal democracy and stimulate cooperation. The administration is ensured by the General Assembly, composed of representatives from each Member State and convened annually, as well as by the Steering Committee, which meets several times throughout the year. The Secretary General ensures the proper management of the Network and its budget. He participates in the design of actions, coordinates and monitors the activities of the Network, and is also the head of the EJTN Secretariat. The Network's projects and programs are planned and implemented by three specialized Working Groups, each focused on specific topics within their respective areas of expertise: the "Programs" Working Group, the "Exchange Program" Working Group, and the "Judicial Training Methodologies" Working Group. There are also targeted Subgroups to address specific projects or issues. The EJTN collaborates with the European Commission and with approximately 40 national judicial bodies that are Members and Observers of the Network.

Network, participates in all working groups (linguistic, criminal, methodologies, fundamental rights, exchange programs, digitalization), and coordinator of the civil group<sup>20</sup>.

Judicial training is a priority for the EU, demanding ongoing commitment. The EU faces several new developments and challenges that judicial training must confront, including the rule of law crisis and attacks on fundamental rights in some Member States, and the **exponential digitalization** of our societies. Furthermore, **participation levels in training still vary** significantly among Member States and across different professions in the justice sector, potentially impacting the uniform and efficient application of EU law.

With the **communication** to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions titled «**Ensuring justice in the EU – A European judicial training strategy for the period 2021-2024**»<sup>21</sup> the Commission has defined a comprehensive strategy to further enhance the training of justice operators on EU law. This strategic intervention extends to new themes, professions, and geographical areas, addressing new challenges and setting new objectives for the 2021-2024 period. The strategy aims to provide a flexible response to emerging training needs on EU law, ensuring that justice operators are equipped to adapt to new developments, particularly in the field of EU law. Among these lines of development appears the **improvement of the digitization of justice**. Specifically, **judicial training must prepare justice operators to fully adopt digitalization and the use of artificial intelligence**<sup>22</sup>.

The communication highlights the awareness that developments in this area increasingly influence all aspects of our lives. The COVID-19 pandemic has demonstrated that judicial systems must rapidly adapt through digitalization. Justice operators need to be aware of the impact that digital tools and technologies have on cases and be prepared to use them correctly in everyday practice, including in cross-border proceedings<sup>23</sup>. Operators must ensure adequate protection of individuals' rights and personal data in the digital space, particularly enabling parties to access case files and participate in hearings. In more detail, the aforementioned 2020 Commission communication **recommended training institutes**, among other things, to: *i*) provide training to enhance knowledge and skills **in digitalization and artificial intelligence and the efficient use of digital judicial procedures and case files**; *ii*) focus training on protecting individuals' rights in the digital space (e.g., data protection, privacy protection, non-discrimination, protection against online gender-based violence, contract law, consumer rights); *iii*) offer **interactive, practical, and**

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<sup>20</sup> The SSM was re-elected to the Steering Committee during the Network's General Assembly held in Paris on June 7 and 8, 2022. In 2022, a total of 7,175 European magistrates and administrative staff members of judicial offices participated in activities conducted as part of the Network's projects, and 995 activities were organized.

<sup>21</sup> Cfr. COM/2020/713 final, <https://eur-lex.europa.eu/legalcontent/IT/TXT/?uri=CELEX%3A52020DC0713>.

<sup>22</sup> In line with the Commission's communication "Digitizing Justice in the EU" (COM(2020) 710 final).

<sup>23</sup> Council conclusions on the topic *Accesso alla giustizia – Cogliere le opportunità della digitalizzazione* (2020/C 342 I/01).

**accessible e-learning** tailored to training objectives for all learners; *iv*) further explore the potential of modern techniques such as virtual classroom training and extended reality solutions; *v*) increase the use of “pills” (short, updated and targeted) of online training modules to meet the immediate needs of justice operators in specific case contexts; *vi*) **ensure that trainers are trained to fully exploit the potential of e-learning methodologies**. The Commission is committed to integrating a “**European Training Platform**” into the **European e-Justice Portal**<sup>24</sup> as an information center on judicial training activities for justice operators and a single access point for self-learning materials on EU law. European justice operators can now access the European Training Platform (ETP) (<https://european-training-platform-e-justice.europa.eu/about-platform>), which serves as a single, free, and easily accessible gateway to find information on judicial training opportunities and training materials available on the internet. The platform also contributes to disseminating results from EU co-funded projects and is implemented by the Commission with ready-to-use training materials or manuals<sup>25</sup>.

The main objectives of European training aim, first and foremost, to ensure that European *acquis in the field of the rule of law and fundamental rights* becomes the subject of continuous training for judges and legal professionals. Another goal is to **integrate judicial skills with non-legal knowledge and competencies** in continuing education programs, ensuring that all judges participate in cross-border exchanges in this field. Currently, the **training providers** include: *i*) European Judicial Training Network (EJTN); *ii*) Academy of European Law (ERA); *iii*) European Institute of Public Administration (EIPA); *iv*) European University Institute (EUI)<sup>26</sup>.

### 3. The main initiatives for modernizing cross-border judicial cooperation in the EU through digitalization.

In 2021, the European Commission significantly advanced the modernization of EU cross-border judicial cooperation through digitalization<sup>27</sup>. Following the 2020

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<sup>24</sup> [https://e-justice.europa.eu/content\\_european\\_training\\_platform-37158-it.do](https://e-justice.europa.eu/content_european_training_platform-37158-it.do)

<sup>25</sup> If training providers provide information on the training activities they organize in the EU in different languages, legal practitioners and practitioners can find training courses and self-study materials on a wide range of topics by searching according to different fields of interest (from civil law to public law, from criminal law to fundamental rights, from legal language to ethics to legal skills). The platform is currently being tested and is open to EU-wide training providers whose skills have been recognized and certified; they receive annual funding grants and are listed in EU funding programs. Once the trial phase is completed, the Commission will examine the possibility of opening the platform to other training providers. programs. Once the trial phase is completed, the Commission will consider the possibility of opening the platform to other training providers.

<sup>26</sup> For a detailed framework cfr. B. CARAPELLA, R. VOZA, M. CAPASSO, E. CARLETTI, M.F. GRASSI, B. SANTERAMO, *La transizione digitale della giustizia in Europa, Nuove figure professionali e nuovi fabbisogni formativi*, in *Rivista Judicium*, 27.12.2023.

<sup>27</sup> On **December 1, 2021**, the Commission adopted two proposals: a proposal for a regulation laying down rules on digital communication in judicial cooperation procedures in civil, commercial, and criminal matters (COM/2021/759 final) and a proposal for a directive aligning the existing communication rules with the rules of the proposed regulation. With the new legislative proposal, the use of digital channels for all cross-border judicial cooperation communications and data exchanges between national competent authorities becomes mandatory,

communication, a **strong impetus has been given to the digitalization of interactions between authorities operating in the justice sector, leveraging the efficiency of modern communication tools where they are needed for civil and criminal procedures, the fight against terrorism, and investigative activities in general.**

The primary objective was to achieve widespread use of new digital tools for electronic communication in cross-border judicial procedures. Specifically, the Commission aimed to adapt EU civil and criminal judicial cooperation instruments, such as the European Small Claims Procedure and the European Arrest Warrant, to digital opportunities. Currently, most data exchanges in cross-border judicial cooperation still occur on paper, leading to delays and inefficiencies compared to electronic means. Therefore, **digital communication between competent authorities became the default option, allowing citizens and businesses to file requests and communicate directly online with competent authorities.**

In particular, E-CODEX (Electronic Communication in the Field of Justice via online Data Exchange) stands out as a key technological tool for modernizing communication in cross-border judicial proceedings through digitalization<sup>28</sup>. On December 2, 2020, the Commission proposed the e-CODEX Regulation as a legal framework to establish a European system. On June 1, 2022, **Regulation (EU) 2022/850**<sup>29</sup> was published in the Official Journal, amending Regulation (EU) 2018/1726 and establishing the electronic system for cross-border electronic data exchange in civil and criminal judicial cooperation (**e-CODEX system**). This system facilitates the electronic transmission of information and documents for cross-border civil and criminal proceedings, including European Payment Orders and proceedings for small claims. Operationally, e-CODEX access points ensure interoperability between national systems, facilitating information exchange exclusively among Member States. Users benefit from a communication tool based on a common language that overcomes differences between national systems, thereby simplifying and streamlining cooperation between judicial authorities<sup>30</sup>.

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subject to some justified exceptions. Citizens and businesses will be able to communicate electronically with the courts and other judicial authorities of the Member States. To this end, the use of national IT portals, where available, or alternatively an access point on the European e-Justice portal is foreseen. To take advantage of this possibility, citizens and businesses will need to have qualified electronic signatures and/or seals that must be recognized throughout the Union. It will also be possible to pay court fees electronically. Additionally, the Commission's proposal allows for the conduct of oral hearings remotely via videoconference, under certain conditions, in both civil and criminal matters.

<sup>28</sup> E-CODEX is a package of software components that enables connectivity between national systems, allowing its users (competent judicial authorities, legal professionals, and citizens) to electronically send and receive documents, evidence, or other information quickly and securely. In this way, e-CODEX facilitates the creation of decentralized, interoperable, and secure communication networks between national computer systems to support cross-border civil and criminal proceedings.

<sup>29</sup> Regulation (EU) 2022/850 of the European Parliament and of the Council of 30 May 2022 on an electronic system for the cross-border exchange of data in the field of judicial cooperation in civil and criminal matters (e-CODEX system) and amending Regulation (EU) 2018/1726.

<sup>30</sup> The management of e-CODEX is entrusted to the European Union Agency for Large-Scale IT Systems (EU-LISA), based in Tallinn, Estonia, within the area of freedom, security, and justice.

The digitalization of cross-border judicial cooperation will notably impact **Eurojust's national office file management system**<sup>31</sup>, enabling the agency to conduct cross-checks on various cases to coordinate the EU's fight against serious cross-border crime, such as terrorism. A key element of Eurojust's work in this area was the Judicial Counter-Terrorism Register (CTR), whose prototype was launched in September 2019<sup>32</sup>.

The Commission aimed to **enhance digital information exchange in terrorism cases and other serious cross-border crimes**. Given that information exchange is one of the most important tools in combating cross-border crime, **secure digital communication channels will be established between national authorities and Eurojust to ensure rapid and secure information exchange**. In addition to providing a clear legal basis for cooperation with liaison prosecutors from third countries at Eurojust, the aim is to overcome the system where Member States currently share information on terrorism-related cases with Eurojust through differentiated channels<sup>33</sup>. With the Commission's proposal, the aim is indeed to remedy these shortcomings and enable Eurojust to play a proactive role in supporting coordination and cooperation among national authorities by creating a **digital case management system that stores information and allows for cross-checking**. Specifically, the regulation will: *i)* digitize communication between Eurojust and Member State authorities and establish secure communication channels; *ii)* Enable Eurojust to effectively identify links between cross-border terrorism cases and other serious forms of cross-border crime, both past and ongoing; *iii)* Once these links are established, allow Member States to coordinate investigative activities and judicial responses.

Another objective of the 2021 initiative is the development of a **collaboration platform for Joint Investigation Teams (JITs)**<sup>34</sup>, formed by two or more Member States for specific criminal investigations. While the system has proven functional, JITs currently face various technical difficulties, including slow and costly exchanges. Facilitating the sharing of information and evidence and enhancing communication

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<sup>31</sup> Eurojust, the European Union Agency for Criminal Justice Cooperation, is a unique center located in The Hague, Netherlands, where national judicial authorities closely collaborate to combat serious forms of transnational organized crime. The Agency plays a role in making Europe safer by coordinating the work of national authorities — both from EU Member States and third countries — in investigations and criminal actions against transnational crime. See Regulation (EU) 2018/1727 establishing the European Union Agency for Criminal Justice Cooperation (Eurojust); L. CAMALDO, *La metamorfosi di Eurojust in Agenzia dell'Unione Europea per la cooperazione giudiziaria penale* in *Cassazione penale*, fasc. 7 (2019), pp 2708- 2717.

<sup>32</sup> The goal was to identify potential links between counter-terrorism judicial proceedings and ensure coordinated responses to emerging needs. However, practice has shown that Eurojust's current legal and technical structure does not adequately support this proactive tool. Therefore, one of the key priorities of European criminal law has become improving the functioning of the CTR.

<sup>33</sup> Currently, Member States send information to Eurojust regarding terrorism-related judicial proceedings through various channels, often insecure ones such as email or CD-ROM. Eurojust's information system did not allow for adequate verification of this information, and the goal of the initiative is to modernize these practices.

<sup>34</sup> Joint investigative teams are teams created to conduct specific criminal investigations for a defined period. They consist of competent authorities from two or more Member States, with possible involvement of relevant third countries, to jointly manage cross-border investigations. The SIC framework allows team members to directly exchange evidence without requiring traditional judicial cooperation procedures.

security, a dedicated IT platform would allow JITs to manage operations jointly. The proposed platform will facilitate JIT coordination and daily management, ensuring secure communication and temporary storage of operational information and evidence, with traceability. Accessible via a secure internet connection, it will feature a centralized information system linked to relevant IT tools used by JITs. The platform's use will be strongly encouraged but remain voluntary.

With **Regulation (EU) 2023/2844 on the «digitalization of judicial cooperation and access to justice in civil, commercial, and criminal matters at the cross-border level** and which amends certain acts in the field of judicial cooperation», the Parliament and Council aim to enhance the effectiveness and efficiency of judicial procedures through the **digitalization of existing communication channels. Effective from May 2025**, the Regulation's main goal is to ensure the right to effective judicial protection. To this end, it introduces digital innovations aimed at **overcoming barriers that limit effective access to justice**, thereby improving judicial protection's timeliness, efficiency, and effectiveness. Key provisions include ensuring secure, efficient, and reliable communication between judicial bodies and competent authorities, reducing administrative burdens, and ensuring system resilience against emergencies or force majeure, drawing lessons from the COVID-19 pandemic. For instance, under Article 3, **digital communication between competent authorities is specified as the ordinary and mandatory communication mode**, with specific exceptions. This represents a shift towards prioritizing digital communication over paper-based communication, focusing on efficiency. Article 4 establishes a **European electronic access point in the European e-Justice Portal**, enabling individuals and legal entities to communicate with judicial authorities and competent authorities in all cases covered by the Regulation. This enhances judicial system accessibility by simplifying communications and enabling faster communication, thereby reducing procedural times. Articles 5 and 6 allow **participation in civil and criminal hearings via video conferencing or other communication technology** upon request by a party or their representative, when located in another Member State. Finally, Articles 8, 9, and 10 ensure the **validity and acceptance of electronic signatures and seals in electronic communication within the context of cross-border judicial cooperation**, stating that electronically transmitted documents retain full legal effect and that their electronic form cannot be grounds for declaring them inadmissible in cross-border judicial proceedings. **The Regulation's practical success will depend significantly on infrastructure adjustments and future investments to be implemented**<sup>35</sup>.

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<sup>35</sup> It can be observed, finally, that while Italy (like other countries such as Austria or Finland) has already implemented many of the measures prescribed by the Regulation (for example, the possibility of paying trial costs or submitting documents electronically), European legislation has become necessary to bridge existing gaps in other countries, thereby ensuring uniform implementation and effective access to judicial protection across the entire territory of the Union. This is particularly important in light of an increasingly interconnected European context, where disputes easily cross national borders. In this regard, a collaborative approach among judicial authorities, European institutions, and other stakeholders will be essential to ensure the success of this significant initiative.

Additionally, **Directive 2023/2843<sup>36</sup>** aims to **adapt certain cooperation instruments, such as the European Protection Order, the European Investigation Order, and the European Arrest Warrant.**

**Regulation (EU) 2023/2131<sup>37</sup>** mandates Member States to **provide Eurojust with information on any criminal investigations related to terrorist offenses** as soon as such cases are under their judicial authorities. Notably, the measure establishes a **secure digital communication channel between Member States and Eurojust** - Amend the rules on data processing within the Eurojust case management system, where all personal data is stored and verified through cross-checking, to enable the creation of a state-of-the-art technical infrastructure; - improve Eurojust's ability to identify links between investigations and cross-border criminal proceedings related to terrorism and to inform Member States about such links; - simplify cooperation with third countries by granting access to the case management system to liaison prosecutors seconded to Eurojust

#### **4. The NRRP and the digitalization of justice.**

The reform of the Italian justice system, besides aligning with the aforementioned European context, fits into the broader **reform of the Public Administration<sup>38</sup> and the digitalization process of work.** The need for simplification and acceleration of the justice system, while respecting citizens' constitutional rights, must now be combined with the opportunity to renew the framework of skills among justice professionals to make it suitable for changing organizational models, forms, and work processes.

One of the most crucial aspects of the justice reform is the **digital transition process**, as currently seen at the European level, involving the redefinition of professional profiles and skills related to the justice system, necessitating adjustments

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<sup>36</sup> Directive (EU) 2023/2843 of the European Parliament and of the Council of 13 December 2023 amending Directive 2011/99/EU and 2014/41/EU of the European Parliament and of the Council, Directive 2003/8/EC of the Council, and Framework Decisions 2002/584/JHA, 2003/577/JHA, 2005/214/JHA, 2006/783/JHA, 2008/909/JHA, 2008/947/JHA, 2009/829/JHA, and 2009/948/JHA of the Council regarding the digitalization of judicial cooperation.

<sup>37</sup> Regulation (EU) 2023/2131 of the European Parliament and of the Council of 4 October 2023 amending Regulation (EU) 2018/1727 of the European Parliament and of the Council and Council Decision 2005/671/JHA concerning the digital exchange of information in cases of terrorism.

<sup>38</sup> M. FARINA, *Il Piano di Transizione alla Giustizia Digitale*, in *Rivista Judicium*, 7.12.2022, The reform of Public Administration outlined in the National Recovery and Resilience Plan (NRRP) addresses one of the main requests of the European Commission within the framework of Country Specific Recommendations. This intervention falls under horizontal reforms, which are structural innovations affecting all strategic sectors aimed at strengthening administrative efficiency. The Plan (p. 50) specifically notes that "the weak administrative capacity of the Italian public sector has been an obstacle to improving services and public investments in recent years." According to the Digital Economy and Society Index (DESI) on the digitalization status of EU Member States, Italy ranked twentieth by the end of 2022, with critical points also identified in human skills and instrumental resources. Regarding the public sector's digital transition, the Plan includes a specific and detailed line of actions aimed at accelerating its completion process. This is part of Mission No. 1 (titled "Digitalization, innovation, competitiveness, and culture"), which encompasses the component "Digitalization, innovation, and security in the Public Administration." This component is further divided into three parts: "digitalization of Public Administration," "innovation in Public Administration," and notably for this context, "organizational innovation in the judicial system."

in training paths. As noted, «justice professionals must be prepared not only to operate in organizational systems that have already changed and are still being redefined but also to anticipate and accommodate future unforeseeable changes»<sup>39</sup>. An efficient **judiciary encourages innovation**, fosters investment and attractiveness of *doing business*<sup>40</sup>, improves credit quality while reducing costs, and renews citizens' trust in the functioning of the democratic state.

**Data from 2023**<sup>41</sup> show some **improvement**, albeit modest, in the overall performance of the judicial system, achieving PNRR<sup>42</sup> objectives; however, much remains to be done. According to available data<sup>43</sup>, the **average duration of cases** has decreased by 19.2% in civil matters and 29% in criminal matters compared to the NRRP baseline, although it remains significantly higher than the European average. Significant challenges still exist in the enforcement and bankruptcy processes, where the time for initial sales operations remains over three years. Backlogs are steadily and progressively decreasing (-19.7% in Courts and -33.7% in Courts of Appeal), but achieving the goal of a 90% reduction by June 2026, already deemed unattainable in 2023, necessitated a revision of the plan<sup>44</sup>. It will be necessary to await subsequent data for new evaluations. Furthermore, it should be considered how the reduction in backlogs and case durations is partly influenced by a decrease in the demand for justice. The anomaly of the Court of Cassation remains evident with a substantial backlog (71,805 cases outstanding for over a year in the third quarter of 2023) and a significantly higher number of appeals compared to other European courts (34,793 civil and 50,350 criminal appeals filed in 2023).

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<sup>39</sup> B. CARAPPELLA, R. VOZA, M. CAPASSO, E. CARLETTI, M.F. GRASSI, B. SANTERAMO, *La transizione digitale della giustizia in Europa, Nuove figure professionali e nuovi fabbisogni formativi*, in *Rivista Judicium*, 7.12.2023.

<sup>40</sup> The Doing Business Index, published annually by the World Bank in collaboration with the International Finance Corporation (IFC), has provided since 2003 a quantitative measure of the business environment by analyzing the regulatory and tax framework applicable to small and medium-sized enterprises throughout their lifecycle.

<sup>41</sup> ASSONIME, *Lo stato di attuazione delle Riforme sulla Giustizia, Note e Studi*, 2/2024.

<sup>42</sup> Decree-Law No. 59 of 6 May 2021, titled "Urgent measures related to the Supplementary Fund to the National Recovery and Resilience Plan and other urgent measures for investments," converted with amendments by Law No. 101 of 1 July 2021. For a preliminary analysis on the centrality of the National Recovery and Resilience Plan (NRPP) in the administration of justice, refer to SANDULLI's article *Sanità, misure abilitanti generali sulla semplificazione e giustizia nel PNRR*, in *Federalismi.it*, - Osservatorio di diritto sanitario July 2021.

<sup>43</sup> The sources from which data are extracted present parameters that are highly diverse in terms of temporal aspects (judicial year/calendar year), content (litigation, execution and bankruptcy procedures, etc.), and temporal frequency (quarterly, semi-annually, annually). This heterogeneity complicates any measurement and evaluation of the health status of the judiciary. Furthermore, there is a lack of systematic monitoring of data for individual judicial offices, which is essential for understanding performance trends and identifying territorial challenges.

Only by comparing case progress with actual human resources deployed and the organizational models adopted can we understand the difficulties faced by different offices and the remedies needed to promote a uniform and efficient judicial system nationwide. Therefore, it is essential to reorganize the data collection system and build analysis models - including through innovative digital tools - that can enable robust monitoring to support proposals tailored to the real challenges of the system, promoting optimal allocation of NRRP resources.

<sup>44</sup> The commitment made with the European institutions - to be achieved by 2026 - aims for a 40% reduction in the average duration of civil proceedings and a 25% reduction in the average duration of criminal proceedings, as well as a 90% reduction in backlog. However, regarding the reduction of backlog, European institutions have accepted the request to revise the target due to the evident challenges in achieving it, which were already apparent by June 2023 (see the Third Report to Parliament on the implementation status of the NRRP by the Minister for European Affairs, Southern Italy, Cohesion Policies, and the NRRP, dated 20 June 2023).

Justice reform is one of the essential chapters of the National Recovery and Resilience Plan (NRRP) and aims to achieve two **main objectives**: i) a 40% **reduction in overall disposition time**<sup>45</sup>, the sum of disposition times across the three levels of judgment in civil cases and a 25% reduction in criminal cases by June 2026; ii) a 65% **reduction in civil backlog** in Trial Courts<sup>46</sup> and a 55% reduction in Courts of Appeal by the end of 2024, and a 90% reduction in both Trial Courts and Courts of Appeal by June 2026. However, as previously indicated, this goal has undergone revision. In 2023, due to implementation difficulties with various reform measures, the Government proposed modifications to the Plan, which were approved by the European Commission. On December 8, 2023, the revised Plan was adopted by the European Council. The changes primarily concerned investments in human capital<sup>47</sup>. Another fundamental change concerned the objective of **reducing the civil backlog**, where it was noted that achieving a 90% reduction by June 2026 from the backlog accumulated starting from 2023 was challenging. For these reasons, two time intervals were identified: one preceding the pandemic emergency (with files generating backlog until December 31, 2019) and another from 2020 to 2022, encompassing the initial phases of NRRP implementation. Based on this distinction, initial objectives were revised to include: i) a 95% reduction in backlog by December 2024 at Trial Courts (337,740 cases) and Courts of Appeal (98,371); ii) a 90% reduction by June 2026 at Trial Courts for pending files as of December 31, 2022, registered from January 1, 2017 (1,197,786) and at Courts of Appeal for pending files as of December 31, 2022, registered from January 1, 2018 (179,306). The final modification pertains to the **digitalization of judicial files, reducing the target from 10,000,000 to 7,750,000 files** from the last twenty years (instead of the originally planned ten years) of trial and legitimacy processes in Trial Courts, Courts of Appeal, and the Court of Cassation,

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<sup>45</sup> This index is obtained by calculating the ratio between the pending cases and those resolved at the end of a specific year, and multiplying this figure by 365 (the number of days in a year).

<sup>46</sup> The backlog refers to the subset of pending cases that have exceeded the reasonable time limits set by Law No. 89 of 24 March 2001 (known as the Pinto Law): 3 years for the Tribunal, 2 years for the Court of Appeal, and 1 year for proceedings in the Court of Cassation. According to the latest report from the European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe, Italy ranks last among the 38 observed countries, holding the record for the longest judicial process times, followed by Croatia and Bosnia and Herzegovina. The report, published in 2022, refers to data from 2020. On average, it takes 9 years for Italy to conclude all three levels of civil proceedings, which amounts to approximately 3,226 days: 674 days for the first instance, 1,026 days for the second instance, and 1,526 days for the third instance. For further details, please refer to the Council's website in the CEPEJ section: [<https://www.coe.int/en/web/cepej>](<https://www.coe.int/en/web/cepej>).

<sup>47</sup> The measure originally envisaged the hiring on fixed-term contracts and the entry into service of 19,719 personnel units to support the Civil and Criminal Courts of Appeal and Tribunals, including staff for the Office of the Prosecutor and technical-administrative personnel. Given the peculiarities of the public sector labor market, characterized by high difficulty in employing and retaining fixed-term personnel, especially considering competition among public administrations, the Ministry of Justice proposed and obtained from European institutions: i) Extension of the contracts for NRRP personnel in service until June 30, 2026; ii) The possibility to allocate technical-administrative personnel to support NRRP implementation activities at Ministry offices and territorial units; iii) Reduction of the total number of NRRP personnel units in service from 12,294 to 10,000 by June 2024.

which must be dematerialized (rectius “digitized,” cf. *infra*) by 2026. The intermediate goal for December 31, 2023, was set at 3.5 million files to be “digitized”<sup>48</sup>.

Achieving these objectives requires a systematic approach combining legislative interventions with investments in human and material resources, **technological innovation**, and more efficient court management. To this end, the NRRP allocates approximately **three billion euros** and outlines numerous **procedural, organizational, and legal interventions**, including reforms to civil and criminal proceedings, tax justice, crisis and insolvency discipline, judicial organization, strengthening of the Office for the Process, system digitalization, and restructuring of judicial buildings.

From a **regulatory perspective**, most reforms originally planned under the NRRP have been fully implemented and are in force or under implementation<sup>49</sup>. Past experiences, however, show that process interventions cannot be considered standard and produce significant results before five years. At this stage, therefore, the complete implementation of investment plans under the NRRP is crucial. In this regard, the most challenging aspect concerns human resources<sup>50</sup>.

Regarding **digitalization, investment schedule 1.6 of Reform 1.8, “Digitalization of the judicial system”**, aims to enhance the operational processes of ordinary justice and the Council of State through (i) infrastructure enhancement and simultaneous (ii) review and dissemination of high-performing and scalable telematic systems for **managing procedural activities and transmitting acts and provisions**, (iii) digitalization (rectius “**dematerialization**”<sup>51</sup>) of remaining paper documents to complete the electronic file, and (iv) the design of a **data lake** as a single access point for all raw data generated by the judicial system.

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<sup>48</sup> In response to the recognition of greater flexibility margins, the European Commission has nonetheless requested the Government to exert greater effort in achieving all NRRP objectives in the field of justice. Specifically, by March 2024, the Commission has requested the activation of appropriate economic and non-economic incentives to: i) Strengthen the Office for the Process; ii) Support less efficient Courts in reducing backlog; iii) Reward Judicial Offices that achieve annual objectives in reducing the number of pending cases.

<sup>49</sup> For an updated and detailed overview of the status of implementation of justice reforms [https://www.giustizia.it/giustizia/page/it/pnrr\\_attuazione\\_misure](https://www.giustizia.it/giustizia/page/it/pnrr_attuazione_misure).

<sup>50</sup> At the end of December 2023, only 5,897 staff were employed in the Office for the Process (UPP) and 3,038 technical-administrative personnel (out of a total of 19,719 hires originally planned to achieve the original objectives). These numbers are insufficient and entirely predictable considering the type of contracts and the low level of compensation offered, within a context where recruitment by other institutions offering permanent contracts is certainly more attractive.

<sup>51</sup> The loss of physical consistency of paper archives and their subsequent replacement in digital form is termed dematerialization. This process goes beyond mere conversion of paper documents into digital format, ensuring their legal validity. In some cases, dematerialization of documents may also involve the “discarding” (elimination) of original analog documents. Dematerialization should be distinguished from digitalization, which pertains more specifically to the reorganization and efficiency of administrative processes that involve digital document flows from their inception, in accordance with Article 40 of Legislative Decree No. 82 of March 7, 2005 (Digital Administration Code or CAD). In this regard, Article 42 of the CAD stipulates that public administrations evaluate the cost-benefit ratio of retrieving documents and acts on digital media where their conservation is mandatory or appropriate, and establish plans for replacing paper archives with digital archives in compliance with guidelines published by AgID (Agency for Digital Italy), which operates as the technical body of the Presidency of the Council to ensure the achievement of goals of the Italian Digital Agenda and promote the use of information and communication technologies.

**Intermediate objectives of the NRRP regarding digitalization** have been fully achieved, although the expenditure so far, out of **133 million euros** of NRRP funds, is **minimal (6 million)** and could still cause delays in final objectives<sup>52</sup>. The **full telematic civil process** has been implemented in all stages and levels of judgment, although it relies on different programs in civil, administrative, and tax justice, with rules and systems that are not uniform, leading to confusion<sup>53</sup>. The **telematic criminal process** has only started for the preliminary investigation phase. Moreover, frequent issues arise from network interruptions that should support both telematic processes<sup>54</sup>.

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<sup>52</sup> Among the implementing measures of the Digitalization Reform (M1C1-R1.8) see: Law No. 134 of 27 September 2021 (Delegation to the Government for the efficiency of the criminal process as well as on restorative justice and provisions for the swift definition of judicial proceedings); Law No. 206 of 26 November 2021 (Delegation to the Government for the efficiency of the civil process and for the revision of the discipline of alternative dispute resolution tools and urgent measures for streamlining procedures in matters of rights of individuals and families as well as enforcement); Legislative Decree No. 150 of 10 October 2022 (Implementation of Law No. 134 of 27 September 2021, delegating to the Government for the efficiency of the criminal process as well as on restorative justice and provisions for the swift definition of judicial proceedings); Legislative Decree No. 149 of 10 October 2022 (Implementation of Law No. 206 of 26 November 2021, delegating to the Government for the efficiency of the civil process and for the revision of the discipline of alternative dispute resolution tools and urgent measures for streamlining procedures in matters of rights of individuals and families as well as enforcement); Decrees of 4 July and 18 July 2023 (Criminal Acts Deposit Portal - Start of the experimentation phase and subsequent integration decree); DGSIA Measure 48076.U of 4 December 2023 (Technical specifications for the submission of applications and maintenance of the register of technical consultants and the national list of technical consultants); DGSIA Measure of 7 December 2023 (Technical rules for the audiovisual recording of the hearing of minors, its storage, and insertion into the electronic file, pursuant to Article 473 bis.5, fifth paragraph, of the Code of Civil Procedure, as well as identification of the modalities for remote audiovisual connection for the hearing of the incapacitated or disabled person unable to appear, pursuant to Article 473 bis.54 of the Code of Civil Procedure); DGSIA Measure of 7 December 2023 (Identification of remote audiovisual connections for the conduct of hearings and the modalities ensuring the publicity of the hearing in which the case is discussed, pursuant to Article 127-bis of the Code of Civil Procedure and Article 196-duodecies, fifth paragraph, of the implementing provisions of the Code of Civil Procedure); Decree No. 217 of 29 December 2023 (Regulation concerning: "Decree pursuant to Article 87, paragraphs 1 and 3 of Legislative Decree No. 150 of 10 October 2022, and Article 4, paragraph 1 of Decree-Law No. 193 of 29 December 2009, converted with amendments by Law No. 24 of 22 February 2010, amending the decree of the Minister of Justice in agreement with the Minister for Public Administration and Innovation of 21 February 2011, No. 44).

<sup>53</sup> On the topic of digitalization, the Report of the First President of the Court of Cassation highlights the achievement of the goal of full mandatory use of electronic civil proceedings in all its phases and degrees, with now complete uniformity of the procedural flow through digital channels. Only at the Court of Cassation between January 1st and November 11th, 2023, the following were deposited: 181,849 electronic submissions by parties (introductory and subsequent); 68,538 electronic judicial acts (judgments, orders, decrees, etc.); 3,840 electronic submissions by the Attorney General (indictments and briefs). According to the Minister of Justice's Report, similar activities have been completed at lower courts and Courts of Appeal regarding compliance with the civil reform provisions related to electronic civil proceedings (PCT). However, electronic civil proceedings still face challenges; network interruptions and issues related to continuous software updates are still common. Furthermore, while the computerization of all jurisdictions (administrative, accounting, tax, and ordinary) has been initiated and completed, each has followed its own path, resulting in systems that do not interact with each other and similar but not identical solutions. It would be desirable, instead, to achieve full uniformity in the tools adopted.

<sup>54</sup> Regarding the criminal sector, on November 24, 2023, the first version of applications related to electronic criminal proceedings became operational (although not yet mandatory). With ministerial decree no. 217 of December 30, 2023, specific criminal acts were identified for which electronic filing will be mandatory starting January 2024. For magistrates, it is expected that they will operate through a dedicated application (APP-Criminal Procedure Application) for acts related to archiving procedures. This application is a computer system that allows all authorized parties to draft, sign, and digitally file criminal acts electronically, thereby managing all procedural flows in digital format. As of December 31, 2023, the installations of this system have been completed at the Public Prosecutors' Offices, Offices of the Investigating Judges (Uffici GIP), Courts of Review (Tribunali del Riesame), and General Prosecutors' Offices, limited to the avocational procedure. Defense lawyers will operate through the

Conversely, the **civil decision database** (cf. *infra*) is fully operational, and more than **3.5 million files from the last twenty years have been dematerialized**. In particular, according to data provided by the Ministry of Justice<sup>55</sup>, as of November 18, 2023, the number of fully digitized files amounted to 3,584,672. It is plausible that the goal of 7,750,000 files will be achieved by June 2026. The objective of digitalizing the Council of State has also been achieved with the creation of a data warehouse (DWH) containing approximately 2,500,000 judicial acts. As of December 31, 2023, the execution of the contract for the implementation of six knowledge systems of the **Data Lake**<sup>56</sup> had commenced, through the adoption of specific administrative acts by the procedure manager. This digital archive of judicial acts comprises six knowledge systems (anonymization system for civil and criminal judgments, integrated management system for monitoring judicial office activities, management and analysis system for civil processes, management and analysis system for criminal processes, advanced statistics system on civil and criminal processes, automated system for identifying victim-offender relationships), aimed at supporting magistrates in the cognition phase and conducting advanced statistical analyses on the efficiency and effectiveness of the judicial system.

As anticipated, the **civil decision database**<sup>57</sup> has been fully operational since December 14, 2023, freely and freely accessible to all justice operators and external users.

The policies defined in the NRRP regarding the digitalization of files address a complex and varied reality, managing not only administrative documentation created using computer tools (Art. 40 CAD) but also a substantial volume of paper documents, totaling over 11 million judicial files (hybrid and paper) registered over the last ten years, relating to substantive civil proceedings (first and second instance) across the national territory (excluding general roll actions for voluntary jurisdiction) and to the legitimacy proceedings issued by the Supreme Court of Cassation<sup>58</sup>.

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Criminal Acts Deposit Portal (PDP), which allows the electronic transmission of acts, documents, and requests to judicial offices by authorized external parties. The development for lawyers to access acts via PDP was completed and rolled out nationwide by the end of 2022.

<sup>55</sup> Reported in the parliamentary dossier on monitoring the implementation of the National Recovery and Resilience Plan of February 20, 2024.

<sup>56</sup> The Data Lake is a centralized repository that allows storing large amounts of data in their native format, originating from diverse and heterogeneous sources. Essentially, it serves as a place for storing, analyzing, and correlating both structured and unstructured data (ranging from CRM data to social media posts, ERP data to production machine information) in their original format. Its uniqueness lies in enabling data retrieval and organization based on the type of analysis intended. This innovation, compared to traditional Big Data Analytics systems, represents a simplification and significant enhancement of the tool. Unlike Data Warehouses, which require data modeling before storage, thereby limiting the full exploitation of data value, the Data Lake simplifies this process.

<sup>57</sup> The **Merit Database of the Ministry of Justice** (<https://bdp.giustizia.it/>) provides access to abstracts of civil judgments, decrees, and orders from the Civil Sector Information System (SICI) starting from January 1, 2016, to the present day. However, the database does not include decisions related to family matters, minors, and personal status.

<sup>58</sup> To concretely implement this ambitious project, since the early months of 2022, the Directorate General for Automated Information Systems – particularly the Department of Judicial Organization, Personnel, and Services at the Ministry of Justice – has launched a notice for a negotiated electronic procedure, divided into fifteen lots,

The modernization of public information assets in the judicial sector is part of the broader **digitalization process** outlined in the CAD and AgID guidelines, which can become effective and efficient only if the electronic document<sup>59</sup> and its aggregated forms are treated according to the rules contained therein, ensuring the management of the three fundamental phases of the electronic document life cycle: formation, management, and finally, preservation<sup>60</sup>. The document management system, indeed, falls within the broader document **flow management system**, encompassing functionalities that manage and organize the documentation received and produced by Public Administrations<sup>61</sup>. Through the correct implementation of the principles and rules underlying the document management system, the objectives of simplifying document classification processes, collecting and bundling (also thanks to metadata definition), automating the registration of incoming and outgoing documents with allocation to various organizational units, dematerializing documents and flows not yet digitized, up to correct archiving, are realized, setting the stage for meeting subsequent requests for retrieval and preservation of electronic documents.

In terms of context, within the reality of judicial offices, a **complete reorganization of information assets** (and the offices themselves) becomes inevitable. Conversely, reorganizing workflows according to the mentioned rules, if coordinated with provisions governing public archive management, also promotes the **proper formation of document archives** and enables organization and utilization of documents according to the typical phases of archive management: "current", "deposit" and ultimately "historical". The **benefits of digital archiving for the justice system are manifold**<sup>62</sup>; however, **technological tools for archive digitization are the**

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aimed at outsourcing the service for digitizing judicial case files of Tribunals, Courts of Appeal, and the Supreme Court of Cassation.

<sup>59</sup> The electronic document, as defined in Article 1, letter p) of the CAD, is 'the electronic document containing the computerized representation of legally relevant acts, facts, or data.' However, the electronic document, as defined in point 35 of Article 3 of EU Regulation No. 910/2014 (EIDAS), is 'any content stored in electronic form.'

<sup>60</sup> See AgID Guidelines on electronic documents issued in May 2021, available at the following address: [https://www.agid.gov.it/sites/default/files/repository\\_files/linee\\_guida\\_sul\\_documento\\_informatico.pdf](https://www.agid.gov.it/sites/default/files/repository_files/linee_guida_sul_documento_informatico.pdf).

<sup>61</sup> Article 64, paragraph 3, of Legislative Decree No. 445 of December 28, 2000, indeed establishes that "The system for managing document flows includes the computerized document management system."

<sup>62</sup> Among the main advantages of creating a correct and complete digital archiving system are the following: i) Regarding appeals procedures (in civil, criminal, and administrative contexts), reducing the so-called "crossing times," during which the process is not actually held pending organizational activities necessary to transfer the case file from one judicial level to another. ii) Ensuring consistent operation and fulfilling the functions of the Office of the Process and the measures outlined in the National Recovery and Resilience Plan (NRRP); this includes tasks such as collaborating in the study of disputes and relevant jurisprudence, drafting draft decisions, and assisting in the collection of declarative evidence (relevant to civil proceedings). According to Article 16-octies, paragraph 1, of Legislative Decree No. 179/2012, establishing such organizational structures aims to "ensure reasonable duration of proceedings through innovation in organizational models and ensuring more efficient use of information and communication technologies. iii) Digital archives serve as a functional tool for instituting policies to collect and maximize judgments, define jurisprudential directions, and establish freely accessible databases of case precedents visible to all citizens and interested parties. They are also integral to organizational projects aimed at reducing backlogs and duration of proceedings, facilitating immediate and comprehensive access to available judicial data. iv) Facilitating the analysis of digital flows to determine management objectives swiftly, such as stabilizing flow and redistributing workload, monitoring and prognostic evaluation of process duration based on the activated legal procedure, and assessing the costs and feasibility of set objectives. v) Improving the speed and efficiency of

**prerequisite to achieving these benefits.** They facilitate immediate access and availability of judicial materials, leading to reduced delays in procedural activities and the transmission of acts and decisions, ultimately ensuring reasonable duration of legal proceedings.

## **5. Digital and Technology Training Offered by the Italian School for the Judiciary**

Starting from these premises, the SSM has regularly offered **distance learning courses** in English on legal subjects to all magistrates, including those in initial training. In the context of initiatives to address the health crisis in terms of education and new technologies, the SSM has contributed specifically to the development of **new training methodologies**. For the first time, alongside traditional e-learning courses, **web-based seminars** have been experimented with, allowing real-time participation of individuals from various locations<sup>63</sup>. Methodologies employed include slide and video presentations, screen sharing, shared chat, and evaluation applications.

The central role assumed by **informatics**, especially in its dynamic dimension (the network and its vast potential), prompted the SSM to establish a **New Technologies Department**. This department is specifically delegated to automate internal processes, maintain the website up-to-date, and manage digital communication. Additionally, a dedicated “**digital training**” section has been created on the **website**, offering a collection of **contributions on digital civil and criminal telematic processes**, as well as themes related to the use of **informatics in legal proceedings** (both civil and criminal). **Two subsections** have been allocated for the **two branches of process digitalization**. Has benn created a third section focuses on **collecting IT tools** to aid magistrates in their work. Simultaneously, the **website** has become a **tool for digital communication**, featuring alerts, news updates, and the publication of the School's newsletter.

In response to this reorganization, the **educational offerings in judicial telematics** have been progressively enhanced, both centrally and locally, recognizing that specific technical competence is essential to fully leverage the potential of informatics. Given that informatics operates on mechanisms that enhance performance speed and manage vast amounts of data and information, it requires careful mastery and adequate expertise to prevent it from becoming a source of

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searching and selecting jurisprudential repositories, enhancing the analysis and verification of previous legal orientations by judicial bodies. vi) Supporting the implementation of automated decision-making systems or artificial intelligence systems to assist judges, leveraging the informational wealth contained in archives. vii) Mitigating challenges associated with the saturation of court storage spaces and state archives. These advantages highlight the transformative impact of digital archiving on judicial processes, enhancing efficiency, accessibility, and decision-making capabilities within the legal system.

<sup>63</sup> This formula has the advantage of allowing an unlimited number of people to view the event simultaneously. However, it has the drawback of offering only limited interaction between teachers and learners, who can ask questions via chat but cannot interact directly with other participants.

gradual disempowerment of decision-makers and degradation of the necessary level of specific judgment consideration.

Regarding **training in legal and judicial informatics**, the SSM has expanded **educational initiatives** aligned with recent reforms and the forecasts of European regulations for the so-called “digital decade,” necessitating the requalification of judiciary personnel.

In early 2020, amid the pandemic emergency, the School organized essential webinars on the Ministry of Justice's **Teams platform** to provide magistrates with **minimal competencies necessary** to continue judicial activities; thousands of magistrates participated in these sessions in April 2020. Additional webinars addressed **emergency regulations** across all sectors (civil, criminal, and labor)<sup>64</sup>. In 2020, to enhance magistrates' technical IT skills, a course was launched to obtain **Microsoft Specialist Word 2016** certification, catering to ordinary magistrates, MOTs, and honorary magistrates, with modules of 95 participants each. Attendance at these courses prepared participants to undertake exams for Microsoft Office Specialist (MOS) certification. **Training on IT tools** was also disseminated through **decentralized training** initiatives. In the realm of continuing education, numerous courses focused on **new technology themes**<sup>65</sup>.

In addition to traditional training, the School has undertaken the production of specific **studies and volumes** entrusted to experts, preceded by debates and in-depth discussions on complex topics. Notably, in 2022, the SSM initiated a “**Study on the Digitalization of the Process**,” addressing all new regulatory frameworks of civil and criminal proceedings to identify areas where these are not compatible with digital and telematic handling of processes<sup>66</sup>. With the study “Digitalization of Justice and Evolution of Civil and Criminal Procedural Norms”, the School critically analyzed the state of digitalization of justice, also in light of subsequent legislation, to encourage informed interpretations. During the profound reforms of civil and criminal procedural codes, studies were conducted on practical procedural rules and practices post-reform, stimulating reflections on the frequent mere digital transposition of

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<sup>64</sup> "Webinars focused on COVID-19 emergency law, covering both penal and civil law aspects."

<sup>65</sup> "Webinars dedicated to the institutes of telematic process (both Penal and Civil), as well as the following topics: Information and telematic technologies and means of gathering evidence; telematic criminal proceedings; telematic civil proceedings; telematic search tools Italgiureweb; nomophylaxy and informatics; competition law within the project 'DiCL – Digital Markets and Competition Law'; Automated decisions and public administration; Algorithms and predictive justice; Data protection (course in English); Dematerialization of acts and documents in law and process; Labor and new technologies; Digitalization, justice, rights (online course); Property relations and new technologies; Judicial statistics (online course); Artificial intelligence and law; Cybercrimes; Cyber threat (course organized with DIS); Artificial intelligence, law, and process (course organized with the Occorsio Foundation); Digital platforms: legislative and jurisprudential updates; Information technologies and criminal justice."

<sup>66</sup> The work collected and processed was delivered to the legislative committees appointed by the Ministry of Justice and utilized by the legislative office as material for drafting new legislative texts implementing civil and criminal delegation laws. The study results were subsequently presented during a study day held on October 13, 2023, accompanied by a webinar organized by the Judicial School.

paper practices<sup>67</sup>. In 2023, a study dedicated to **digital domicile and identity** was conducted, examining the issue across civil, criminal, and administrative law with both substantive and procedural perspectives to provoke appropriate reflections and correct repositioning of these institutes within the revised EIDAS regulation framework<sup>68</sup>. Also noteworthy in documentation, Volume 16 of the “Quaderni della Scuola” series, “**Digital Justice**”, was published and is freely accessible on the public site alongside other volumes.

Further initiatives have included **educational and informational videos on technology topics**. Notably, “**Cyber Security Pills**” were highlighted. In collaboration with the Department for Digital Transition of the Ministry of Justice, the School has produced **practical video documents** aimed at enhancing the **digital and IT skills of magistrates**. These materials focus on topics related to digital identity for judges, including their interactions with various stakeholders and the tools they use in their work. This initiative addresses the rationalization of digital identity conditions for judges, examines key threats, and provides concrete guidance on preventing and avoiding cyberattacks for judges and officials.

“**Pills of IT clips and video courses**” have been produced on the use of **legal and judicial informatics**. Educational videos have been created on the Italgireweb **database** search engine of the Court of Cassation, databases of the European Court of Justice and the European Court of Human Rights, on the use of telematic procedures, demonstrating the applications distributed by the ministry and their functionality, to impart knowledge on key aspects of telematics<sup>69</sup>.

Additional **webinars** (<https://www.scuolamagistratura.it/web/portalesm/webinar>) covered topics related to the National Recovery and Resilience Plan (NRRP<sup>70</sup>), directing attention towards

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<sup>67</sup> In practice, the School appointed a group of experts in procedural law and telematic processes, with a timeframe spanning three months, in order to provide a reflective contribution to the Ministry of Justice for the implementation of ongoing reforms.

<sup>68</sup> Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

<sup>69</sup> These video courses, available at the link <https://www.scuolamagistratura.it/web/portalesm/videocorsi>, covered the following topics: - Clips on the search engine of the European Court of Justice (InfoCuri); - Telematic procedures; - Telematic search tools Italgireweb (by the C.E.D. of the Court of Cassation); - Research tools for using HUDOC, the database of the European Court of Human Rights. On the same page, accessible after logging into the reserved area of the website, there are a series of educational videos (clips) for using telematic procedures (specific software). These are asynchronous video courses available on demand.

<sup>70</sup> - Reform of civil procedure (series of 12 webinars);

- Reform of criminal procedure and sanctioning system (series of 12 webinars);

- Criminal protection of public funding (superbonus, liquidity decree, and NRRP) Organizing justice - Study days;

- The office for the process: an opportunity for justice;

- Digitalization of Justice;

- New legislation on the European Public Prosecutor's Office;

- Telematic search tools Italgireweb and IT resources of the SSM;

- Covid-19 emergency; procedural rules and application issues;

- Hearing console (course organized by the working group CSM/STO – CNF – Ministry of Justice on console models, with SSM support);

the digitalization of justice connected to study days organized by the Court of Cassation within the inter-magistrature table<sup>71</sup>. Specific sessions dedicated **to legal and judicial informatics** were conducted in other training sectors, including courses for: 1) Directors (involving judicial statistics and application usage); 2) Trainee magistrates (focusing on telematic processes and judicial statistics); 3) Reconversion magistrates; 4) Honorary magistrates; and 5) Trainers (Training of Trainers course).

## **6. International Judicial Training Projects: from the EJTN Working Group Digitalisation to the JuLIA Project.**

The EU has established a **committee to address the digitalisation of judicial cooperation and access to justice in cross-border civil, commercial, and criminal matters**. The work began on March 5th last year and will gradually continue through the adoption of specific implementing acts for various legal instruments over several years, with deadlines set until 2029.

The SSM participates in **working groups** established within the European Judicial Training Network dedicated to exploring digitalisation<sup>72</sup>.

It is clear that the **EJTN has attributed significant importance to this theme, including digitalisation among its main areas of activity**.

A *working group digitalisation* was established on a proposal from Italy, Spain, Portugal, and France, which was later supported by other countries during the general assembly held last year on June 15-16, 2023 in Sweden. On that occasion, the event in Stockholm gathered the highest number of participants in EJTN history. A total of 150 participants representing EJTN members, associate members, observers, and partners attended either in person or online. The central theme of the meeting included discussions on the **challenges posed by digitalisation and ways to encourage participation** in EJTN's digitalisation activities, taking into account numerous regulations issued and being issued by the EU in the sector<sup>73</sup>. To meet this need, the group aims to address the increasingly significant training needs of European judges by developing digital skills and cybersecurity, as well as knowledge of new technologies such as artificial intelligence. Subsequently, in October 2023, within the framework of the EJTN Directors' Conference, the members and

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- Telematic process institutions within the common framework of the Digital Administration Code;

- Applications of institutions in civil and criminal proceedings: PEC, domicile, and registries.

<sup>71</sup> Telematic process institutions within the common framework of the Digital Administration Code (Webinar on October 10, 2020); - Digitalization of Justice and Office for the Process, Capri, October 9, 2021; - Organizing Justice. Reforms in law and procedure, keeping pace with technological innovation, in the NRRP season, Capri, October 8, 2022; - Digitalization of Justice between present and future, Capri, October 14, 2023.

<sup>72</sup> The data reported in the text is sourced from unpublished reports by Antonella Ciriello, formerly a member of the steering committee of the SSM, and from the quadrennial report prepared by the previous steering committee of the SSM, which underscored a strong commitment to these issues.

<sup>73</sup> [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030\\_it](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_it)

coordinator of the new working group were elected, and a questionnaire was distributed, along with other preparatory activities for last week's Paris meeting.

Activities continued in **Paris on March 15-16, 2024**. The activities focused on planning concrete initiatives and training projects in the field of judicial digitalisation. To make the work more concrete and fruitful and to produce a training programme suitable for the diverse needs of judges, judicial managers, and administrative staff, it was proposed to divide the group's work into four additional subgroups, as listed below:

i) **general digital skills**: in this first discussion thread, the foundations were laid for basic and general training on digitalisation institutes and tools, with the preparation of practical-theoretical seminars and the creation of a glossary, followed by certifications, both online and in person, aimed at both trainers and final learners;

ii) **Artificial Intelligence (AI)**: given the complexity of this technology, both in general, ethical, and regulatory terms, and practically, attention was paid to the development of seminars dedicated to both trainers and judges, focusing on procedural, substantive, and organisational uses; a UNESCO representative proposed a training model that was approved by the group, and its implementation was decided in Italy in the city of Syracuse, in July 2024, with the participation of UNESCO<sup>74</sup>;

iii) **sharing best practices**: the theme was examined with the idea of training contexts for sharing experiences among member countries on digitalisation practices in the Union, in order to promote mutual awareness and determine further synergistic actions, useful for the development of coherent systems among them, also in innovation; the European telematic process in civil, criminal, and commercial judicial cooperation instruments was also addressed, later the subject of the Brussels meeting with the EU Commission on April 25-26, 2024;

iv) **new concrete digitalisation tools**; on this theme, the discussion was concrete, given that the humanistic training of judicial operators in all EU countries often leaves them lacking in specific technological skills, which must instead be strengthened in view of the general digitalisation affecting the entire public administration and notably the judiciary for a precise EU design; training projects were thus envisaged in the form of webinars, video pills, and face-to-face meetings to promote concrete sessions on digital domicile and identity themes (clarifying their concrete contents, etc.) of digital document creation and transmission methods, digital signature checks, as well as digital preservation systems; a glossary was also proposed for this group. The groups, after working separately, compared notes and agreed on additional sessions to produce specific training projects.

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<sup>74</sup> It is an intensive three-day training program, developed in collaboration with UNESCO and ENM, scheduled to take place in Siracusa from July 8 to 10, 2024, at the Siracusa International Institute for Criminal Justice and Human Rights (<https://www.siracusainstitute.org/>). The course, aimed at members of the working group on digitalisation among others, is entirely dedicated to artificial intelligence and its impacts on the judiciary sector. It will delve into a detailed description of the technology, its uses, and an analysis of potential risks such as biases and lack of transparency. The course includes interactive lectures, exercises, case studies, and discussions. Upon completion, participants will receive a certificate issued jointly by UNESCO and EJTJN.

A **webinar on the study of the digitalisation of cooperation** was proposed, as provided for in Regulation (EU) 2023/2844 of the European Parliament and of the Council of 13 December 2023, which aims to facilitate and digitalise judicial cooperation processes between EU Member States to make access to justice more efficient. As seen, Regulation (EU) 2023/2844 provides for a kind of European telematic procedure, establishing the basis for a cross-border electronic communication system between the judicial authorities of the Member States. The aim is to digitalise and streamline judicial procedures in civil, commercial, and criminal matters, making the entire European judicial system more efficient and accessible<sup>75</sup>. The webinar should address this issue to prepare judges for the practical implications of implementing this regulation.

On April 25 and 26, 2024, at the Belgian Institute of Judicial Training (IGO-IFJ) headquarters, in Brussels, the 2024 **European Judicial Training Conference: Supporting the Digitalisation of Justice** was held, organised by the European Commission and dedicated to supporting the digitalisation of justice. The conference discussed tools, methodologies, and training courses that could help advance the digitalisation of justice across Europe. EJTN representatives discussed the future European judicial training strategy (the current one expires at the end of 2024) aimed at improving the use of digital tools and knowledge of EU laws, designed for the digital economy and society. This should improve skills in the use of digital tools and infrastructures to create a favourable environment for the digitalisation of justice and to develop the knowledge of justice operators in adapting EU substantive law to the needs of the digital economy and society, to a common digital culture, to Artificial Intelligence, and to the use of digital tools within judicial work. The EJTN believes that this new working group will significantly improve the efficiency, accessibility, and transparency of judicial processes throughout Europe. During the conference, EJTN representatives participated in a series of sessions on various topics such as training needs in the transition to digitalisation of justice, training needs in EU law and non-legal skills, the importance of changing mindset and methodology, as well as developing skills in applying digital tools. Starting from the complex differences existing between various countries and within the same countries, both in technological and legal terms, the most recent EU regulations on digital matters (subject to adoption under the European digital decade) were discussed, for which every country is required to provide thorough training, as they involve both legal and technical aspects. In particular, in addition to the **EIDAS 2**<sup>76</sup> regulation and AI ACT,

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<sup>75</sup> In short, the plans include: - Establishment of a decentralized IT system for secure and efficient communication among competent authorities. - European Electronic Access Point: An online portal enabling citizens and legal representatives to interact with judicial authorities, submit documents, and receive information. - Standardization of procedures: Digitalization of processes such as judicial document notification and evidence acquisition, aimed at simplifying and expediting cross-border proceedings.

<sup>76</sup> The **Regulation 2024/1183** (commonly referred to as **eIDAS 2**), published in the Official Journal of the European Union on April 30, 2024, entered into force (excluding implementing measures) on **May 20, 2024**. This new Regulation amends and supplements the previous eIDAS Regulation (2014/910), which remains in force. It

attention was paid to the regulation on the digitalisation of Judicial Cooperation and access to justice (Regulation 2023/2844/EU) aimed at making judicial procedures more effective and efficient through the telematisation of existing communication channels, with the evolution of the E- CODEX system. The point of view of EU Member States was also integrated into the programme.

Alongside the activities carried out within EJTN and in collaboration with the Council of Europe, important roles are played by training projects developed on a multilateral basis and co-financed by the European Commission.

The SSM, as an autonomous public body, has obtained inclusion, along with the Ministry of Justice and the High Council of the Judiciary, in the list of public administrations that can autonomously participate in international project tenders. Since the end of 2015, the School has regularly participated, as a co-beneficiary or associated partner, together with other judicial training schools and institutions, academies, universities, or research bodies from other EU countries, in multi-year projects on training and research in civil and criminal judicial cooperation or training on European law and human rights. The projects – carried out in collaboration with the most important European judicial and academic institutions – involve research activities, collection and analysis of case law, seminars and conferences, distance learning activities, preparation of manuals, guidelines, collections of best practices, and operational protocols. The projects involve Italian judges, academics, and professionals with specific experience. In addition, within the projects, the SSM has organised national courses, sometimes included in the permanent training programme, or coordinated the organisation of territorial courses, thus allowing hundreds of Italian judges to access project activities within training activities in the Italian language.

Among the **projects dedicated to the theme of innovation, JuLIA** (Justice, Fundamental Rights and Artificial Intelligence)<sup>77</sup> should be mentioned. In view of the **imminent developments of the EU legal framework on artificial intelligence (AI)**, the JuLIA project focuses on the **protection of fundamental rights (FR)** affected by **(semi)automated decision-making processes (ADM)**. The research explores how ADM affects the right to effective justice and good administration. The project aims to **improve understanding of algorithmic decision-making processes in judicial, administrative, professional, and market contexts, shedding light on their legal**

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addresses a diverse range of topics including digital identity (which must now be of "high" assurance level), electronic wallets, the new regulation of attributes (qualifications, functions, and powers), and electronic archiving, which is now regulated at the European level rather than solely at the national level. The Regulation also outlines its implications for national legislation and specifically impacts notarial functions, which are based in part on the identification of individuals and document preservation.

<sup>77</sup> Partners of the project: University of Trento (Italy); Pompeu Fabra University (Spain); University of Versailles Saint-Quentin-en-Yvelines (France); University of Groningen (Netherlands); University of Coimbra (Portugal); Institute of Legal Studies of the Polish Academy of Sciences (Poland); General Council of the Judiciary (Spain); Libre Foundation (Bulgaria); Study Centre for Judiciary (Netherlands); Bruno Kessler Foundation (Italy); Superior School of Magistracy (Italy).

**implications for due process, fair administrative procedures, and other fundamental rights and principles such as non-discrimination.** The project will provide the following **training tools**: i) five manuals with simulations of ADM in hypothetical cases based on case law; ii) six transnational training events involving 192 trainees and including Justice Labs (JL) for simulations of ADM in hypothetical cases; iii) seven online JLs in all partner countries to reach a broader audience (140 trainees); iv) four e-learning modules (one introductory and three specific to context) making JL results available for wider use in training; v) a project website including a case law database; vi) a final conference. **The project aims to**: i) provide a legal analytical framework for ADM and their use in different contexts (judicial, administrative, healthcare, consumer markets); ii) provide judges and lawyers with a guide to ensure compliance with FR and the rule of law, iii) provide a coherent interpretation of EU general principles and FR in case law and upcoming legislation on AI-based ADM, iv) facilitate mutual learning among judges, lawyers, and technical experts, v) disseminate best interpretative practices by national judiciaries, vi) consolidate and expand the network of trainers for judges established in previous projects.

## **7. Technological Innovation and Digital Transformation in the “Domestic” Organizational Experience of SSM**

The analysis of SSM's experience in employing technologically innovative structures can provide a valuable opportunity to assess the scope and complexity of the effort required to establish an organization aligned with the best practices of digital transformation<sup>78</sup>.

### **7.1 The Choice of Cloud**

SSM has been one of the pioneering Public Administrations in Italy to adopt a “**cloud-first**” approach, migrating its data and computer applications to the “public” cloud environment of a certified provider available on the market. Initially, the decision to use a cloud solution stemmed from the need to replicate the single “physical” server room located at the via Tronto headquarters. It was not feasible to establish a high-reliability environment with backup capabilities at the Scandicci site. The via Tronto server room comprised a physical HP server hosting the two main domain virtual servers and backup (Linux Zentyal), as well as servers (Linux Centoz) for managing the protocol and accounting program.

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<sup>78</sup> The following illustration draws on the informational content provided by Arianna Panzetta (Contracts and Conventions Area, SSM) and Eugenio Duca (ICT, Information and Communication Technology, SSM).

  
**Schema Infrastrutturale SSM – Via Tronto**

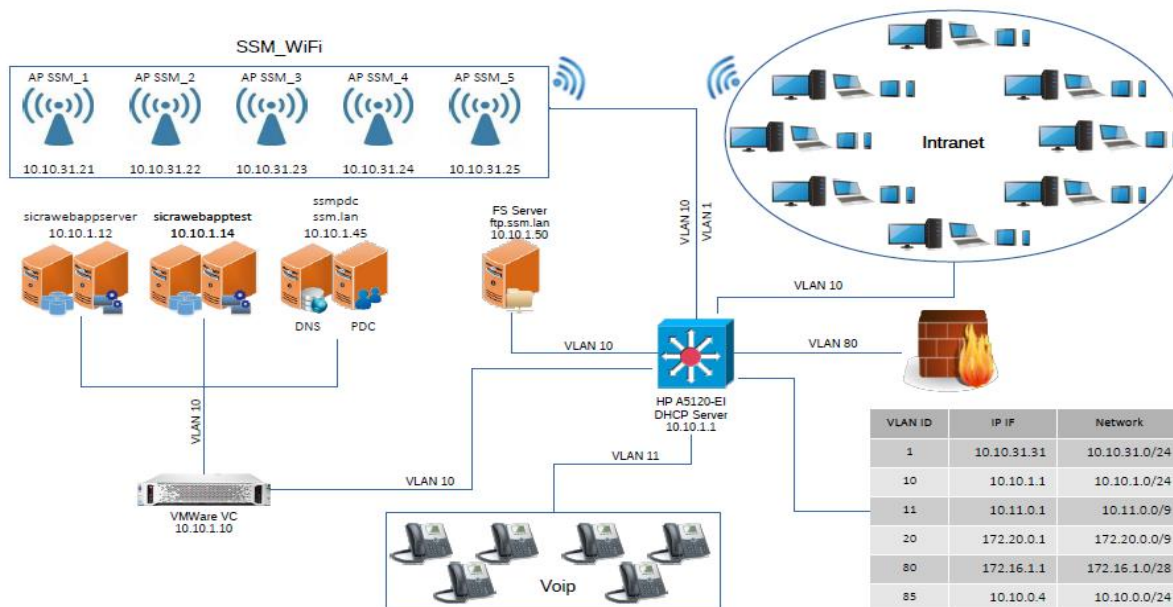


Figure 1 – “On-premise” Infrastructure

This choice not only simplified user management but also the data backup processes, previously conducted on physical disks (NAS - network attached storage) installed in the server room. Currently, services for managing over 30,000 users (administrators, judges, and teachers) are provided through a hybrid infrastructure known as **“on-premise-cloud”**.

In the cloud, two virtual domain servers replicate those “on-premise,” along with the School's website, Moodle site, synchronization servers between infrastructures, and e-mail management servers. This transition has enhanced the security and integration of services offered.

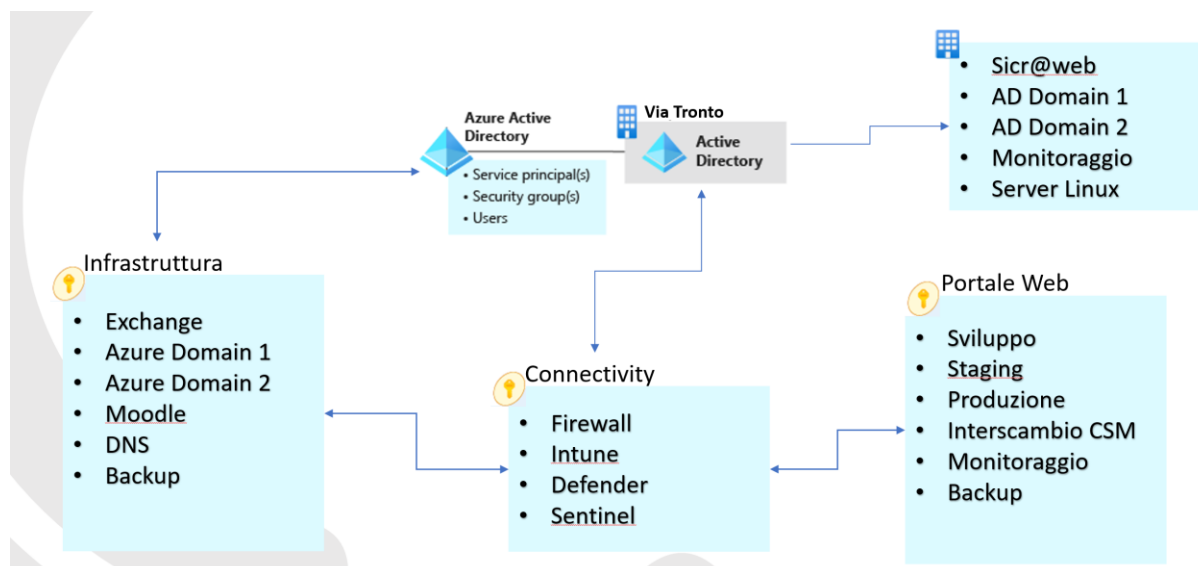


Figure 2 – “On Premise-Cloud” Infrastructure

Looking ahead, given the impossibility of creating ad hoc physical data centers due to space constraints and lack of personnel, there will be an evaluation to completely abandon the hybrid approach in favor of a “total cloud” strategy. The next phase will involve assessing migration to the National Strategic Hub (Polo Strategico Nazionale - PSN), a new dedicated cloud infrastructure (either fully “private” or “hybrid”), located within the national territory and advanced in terms of performance and security.

## 7.2 Data and Interoperability

The digital transformation of SSM has led to a change in **architecture and interconnection methods between sites**. The decision to adhere to the SPC2 agreement was made to meet the increasing needs of the School. The decision to disengage from the Ministry of Justice's network (RUG), was necessary precisely to facilitate autonomous and flexible management of the School's cutting-edge data and services. High-speed synchronous **Intrenet** connections (DSL) link the sites, and **Intranet** connectivity is crucial for direct communication among the three locations, ensuring access to private services hosted on servers at Via Tronto. Additionally, SSM is active in the **Infranet SPC** (Public Connectivity System) circuit, which facilitates interconnection between Public Administrations. Finally, thanks to MPLS connectivity, **VOIP** (internet telephony) **has been integrated** and is in the testing phase across all sites, with installed telephone devices enabling direct and free internal communication between various offices and external communication channels.

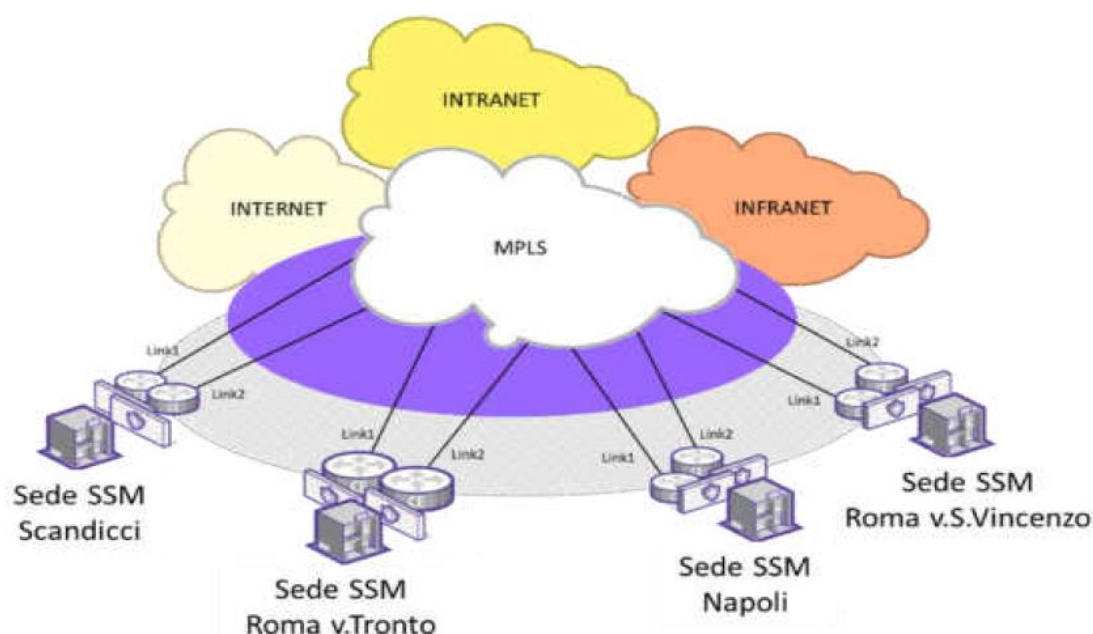


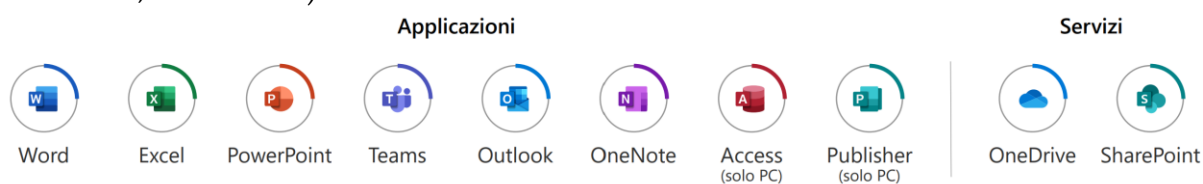
Figura 3 - Connettivity

### 7.3 Digital Identity

Creating a **single digital profile** ensures full interoperability of SSM datasets. **All public systems of the School** (including the website and Moodle platform) require **authentication through Microsoft accounts**. This not only guarantees uniform management of accounts but also enhances system security through integrated **multi-factor authentication** (via the MS Authenticator app on smartphones, SMS codes, or email codes). Efforts are also underway to provide authentication via SPID (Public System for Digital Identity) and CIE (Electronic Identity Card) on the School's portal, aiming to “offer secure, fast, and uniform access to online services nationwide.”

### 7.4 Student and Staff Licenses at SSM

Through participation in the CRUI Convention (Conference of Italian University Rectors) with Microsoft, which many Italian universities have also used for university teaching, SSM has acquired **Microsoft 365 Education A5 licenses** tailored for educational institutions. The A5 licenses **have strengthened SSM's digital services by enabling the use of all Microsoft applications** (including **Microsoft Teams** as a platform for SSM's educational activities), email services, and resource sharing systems essential for SSM's educational activities (such as Stream, SharePoint, OneDrive, and Forms).



With the use of A5 licenses, it was possible to grant access to training services of the **SSM and institutional email boxes** (name.surname@formazione.scuolamagistratura.it) to magistrates (honorary and ordinary) and teachers. Approximately 30,000 free Office 365 licenses were allocated for participation in teaching activities, distinct from those under name.surname@scuolamagistratura.it reserved for SSM personnel.

In particular, the Microsoft licensing package offers the following **additional services**:

- Office 365 licenses for office workstations and course participants;
- Email accounts;
- Teams multi-conferencing system;
- OneDrive folders for employees;
- SharePoint document sharing system;
- Updates for application licenses;
- Azure cloud environment for SSM's network infrastructure and management of educational content;

Support for Microsoft 365 activities (SharePoint, Teams, Exchange Online); creation of accounts in AD, license allocation via groups, assistance for live training events.

The School, in the context of digitalization, has also adopted a **messaging solution called Exchange Online**, based on Microsoft Exchange Server as a cloud service that allows users to access email, calendar, contacts, and tasks from PCs, web, and mobile devices, fully integrating with other services of the Microsoft 365 platform.

In line with the digitalization of processes, **tools for file sharing and collaboration have been enhanced significantly**:



In particular, **SharePoint Online** enables various training sectors to share and manage content, enhancing teamwork by storing, organizing, sharing, and accessing information from any device. Each project is managed using an intranet site that transforms workflows into operational and digitized processes.

The work of SSM personnel has shifted significantly due to the use of **OneDrive** as an online storage space for individual users within the organization, resulting in nearly complete abandonment of paper-based processes. Different workgroups archive and share their work files, with the ability to restore files after accidental deletions or malicious attacks.

The **SSM's TEAMS platform** is tailored for educational purposes and differs from the TEAMS Business used by other entities by allowing the creation of “class” teams and defining participant roles with different levels and policies (students and teachers). The entire SSM structure primarily communicates through TEAMS instant messaging, audio and video calls, online meetings, and collaborates on files and data using Microsoft 365 and other Microsoft and partner apps. The capability to record events, even for most “in-person” courses, allows stakeholders to access video **recordings of sessions later on-demand** or in podcast format, with transcriptions. Lessons and recorded videos saved in Teams are **archived in SharePoint Online**, and **meetings can be scheduled on TEAMS** with anyone having a valid email address.

All magistrates participating in training events access using the @formazione.scuolamagistratura.it account, while so-called non-listed learners (lawyers or military magistrates) access as external to the organization, granting them access to existing teams and channels.

The **number of learners reached through online training activities** is significantly larger compared to traditional in-person courses, which typically host 80 to 100 participants. The Teams platform allows for an extraordinarily higher number of participants, and in large-scale live web events or webinars, it can accommodate up to 10,000 or more participants, with the possibility to further increase the total number upon request.

SSM frequently utilizes the **Microsoft Forms** application to create assessments and surveys, gather feedback, and view results in real-time as they are submitted. It leverages built-in analytics to evaluate responses and exports results to Excel for further analysis or evaluation.

### **7.5. Cybersecurity.**

To address increased vulnerability due to digitalization, SSM has adopted a series of measures to counter cyber threats. **Centralized management of Defender antivirus** across all scuolamagistratura.it domain workstations has been implemented thanks to A5 licenses, with portal controls monitoring all anomalous behaviors of devices connected to the domain and users accessing services.

All “cloud” and “physical” infrastructures have been secured using **intelligent firewalls** filtering data traffic to domain servers, email, and portal services.

**Virtual Private Networks** (VPNs) have been established to connect internal School networks for remote personnel access and allow vendors to manage and modify portal services.

The work to secure the school's systems will continue by offering cybersecurity literacy courses to administrative users of the school, ensuring there are no weak links in the chain.

### **7.6. Staff Digital Skills.**

To enable SSM personnel and users to confidently use new tools introduced during the digitalization process, the School has organized training courses leveraging its ICT expertise. Workshops on security and Azure cloud utilization have been conducted to provide adequate ICT knowledge, along with specific courses for Microsoft certifications.

### **7.7. Artificial Intelligence.**

Aligned with the 2024-2026 Triennial Plan for IT in Public Administration, the School is implementing AI into its portal. A **chatbot** has been integrated into the site, retrieving information on training courses (currently covering the last three months) and guiding site users in managing their profiles, courses, requests, and form completion.

In addition to enhancing and implementing AI in the research sections of the website, for statistics, and in the administrative management of courses, we are

considering using the new Microsoft services that allow the use of Artificial Intelligence even in office practices with the integration of Copilot and advanced use of updated Office 365 systems following staff training.

### 7.8. Digitalization of Training Processes.

Regarding the digitalization of training processes, the School has long integrated a **back-office program** into its site for standardized and simplified course management.

In particular, permanent training is fully automated through a service **(algorithm) calculating, dynamically managing, and publishing course rankings**.

Communication with magistrate users occurs through a system scheduling exclusions and alerts.

The management of reimbursements and fees for students and teachers has been implemented through a computerized system. Magistrates or teachers can request reimbursement or compensation directly from the website by uploading receipts and documentation of expenses.

Through a summary interface, users can track the progress of their request, while administrative staff can manage each step, from receiving the application to processing it for payment, suspension, or rejection.

Due to the sensitivity of the service, strong credentials (Microsoft) are required for authentication, ensuring interoperability with our logging system.

The management of **Executive Courses** is fully computerized, covering tasks from entering lists received from the CSM to managing attachments, absences, courses, and teaching assignments.

Also underway is the implementation of digitalization for **initial training**, allowing for simpler and more flexible management of the needs of the numerous MOTs (Magistrates on Trial) preparing to start internships at the School.

Improvements are being made to manage queries from decentralized trainers by implementing alerts for assignment deadlines and participation revocations, and adding missing information to the back-office program.

There is still a need to reengineer the **entire back-office related to international training**, which currently does not fully meet the increased demands of the School.

In addition to the SSM portal and Microsoft services (Teams, SharePoint, OneDrive, etc.), a Moodle platform portal has been developed. This allows for complete management of synchronous and asynchronous courses, integrating forums, self-learning tests, and guided training.

In support of the SSM portal and Microsoft services (Teams, SharePoint, OneDrive, etc.), a **Moodle platform portal** has been developed to **manage synchronous and asynchronous courses**, integrating forums, self-learning tests, and guided training.

### **7.9. Portal - Coworking Devops.**

To implement the SSM portal and adapt it to new training needs, a software development and source code sharing system has been designed to monitor operations, changes, and transfer know-how from external system providers to internal staff. The DevOps service allows simultaneous modifications without affecting others' work and manages versioning of various projects. This sharing process enables SSM to autonomously and quickly manage the portal without depending on external company activities.

### **7.10. Digitalization of Administrative Processes.**

SSM has adopted an **integrated document management system** to manage all document flows, protocol, native digital documents, and accounting system.

Through the use of this integrated management system, the majority of documents and records produced are now in native digital format, leading to a reduction in paper usage. The School also ensures compliance by digitally archiving invoices, contracts, protocol documents, and all digitally signed documents with a third-party archiving service provider.