

1. Introduction

Legal Tech¹ is or at least is becoming a structural aspect in the conduct of legal affairs, in particular regarding dispute resolutions in Italy.

Governmental and regulatory initiatives aimed at better defining the legislative framework of Legal Tech have emerged. Moreover, promotional initiatives supported by public and private subjects have been launched. Also, several use cases have been experimented with and developed in legal practice.

This chapter, therefore, explores the state-of-the-art of the Italian legal framework concerning Legal Tech issues, having regard to blockchain and dispute resolution systems².

1 Legal Technology or "LegalTech" is a term that broadly refers to the adoption of innovative technology and software to streamline and enhance legal services; other synonyms which are used interchangeably are "law tech", "LegalIT", "legal informatics", Marcelo Corrales, Mark Fenwick and Helena Haapio, 'Digital Technologies, Legal Design and the Future of the Legal Profession' in Marcelo Corrales, Mark Fenwick and Helena Haapio (eds) *Legal Tech, Smart Contracts and Blockchain* (Springer, 2019) 1.

2 In this context, Legal Tech refers to platforms, IT services, and software that make law firms and lawyers more efficient in performing their activities and can be defined as the integration of information technology services and software in a legal context, as well as the development of legal platforms and their applications, Mark Fenwick, Wulf A. Kaal and Erik P. M. Vermeulen, 'Legal Education in a Digital Age. Why Coding Matters for the Lawyer of the Future' in Marcelo Corrales Compagnucci, Nikolaus Forgó, Toshiyuki Kono, Shinto Teramoto and Erik P. M. Vermeulen (eds) *Legal Tech and the New Sharing Economy* (Springer, 2020) 110. LegalTech, therefore, comprises information technology services applied to court proceedings and disputes resolution mechanisms, which represent crucial aspects of the legal context and the provision of legal services, since "*judgement is the fundamental act of law as well as the fundamental act of thought*", Francesco Carnelutti, *La prova civile. Parte generale. Il concetto giuridico della prova* (Giuffrè, 1992) 9. In other words, the advent of digital justice, which offers online resolution of disputes and conflicts, is to be considered Legal Tech, Giuseppe Zaccaria 'Figure del giudicare:

The structure of the chapter is as follows. Paragraph 1 focuses on blockchain and distributed ledgers technologies. Paragraphs 2 focuses on digital tools applied to court proceedings in civil law matters, and paragraph 3 highlights novelties emerging in this concern due to the COVID-19 pandemic. Paragraph 4 concerns alternative dispute resolution mechanisms in financial sectors and applying technology within this field. At least, Paragraph 5 presents concluding remarks.

2. *Blockchain and distributed ledger technologies (DLTs)*

Blockchain technology fall within the more general concept of distributed ledger technologies ('DLTs')³, even though both terms are often used interchangeably. The Italian legislator introduced a legal definition of DLTs and smart contracts, and institutional actors' initiatives were launched to define the relative legislative framework and promote their uses. In the meantime, several projects were developed in legal practice to exploit the benefits of DLTs. Each of these issues will be explicitly examined in the present Paragraph, starting from the definition of DLTs adopted by the Italian legislator.

2.1. *Legal definition of DLTs and smart contract*

'DLTs' and smart contracts are defined under Italian law⁴.

In particular, DLTs means IT technologies and protocols using a ledger that is shared, distributed, replicable, simultaneously accessible and structurally decentralised on a cryptographic basis to allow the recording, validation, updating and storage of both not encrypted and encrypted data, which may be verified by each participant and which may not be altered and modified. A smart contract is defined as a computer program that

calcolabilità, precedenti, decisione robotica' in *Rivista di diritto ir. civile.*, (Cedam, 2020) 2, 277.

3 Gregorio Gitti and Marisaria Maugeri, 'Blockchain-Based Financial Services and Virtual Currencies in Italy' in EuCML, 2020, 43; for further information, see Technical Committees ISO TC 307 available at <<https://www.iso.org/committee/6266604.html>> accessed 24 February 2021.

4 See Art. 8-ter of Decree-Law no. 135 of 14 December 2018, as converted with amendments by Law no. 12 of 11 February 2019.

operates on DLTs and whose execution automatically binds two or more parts based on predefined effects from the same.

Both definitions have been criticised as they violate the principle of technological neutrality. Also, the definition of a smart contract binds the fulfilment of the written form requirement to the parties' identification. Identification that occurs according to a process that will have to be regulated by the Agency for Digital Italy (AgID)⁵.

Storing information with DLTs produces the legal effects of electronic time stamps under Art. 41 of EU Regulation no. 910/2014 of the European Parliament and the Council on electronic identification and trust services for electronic transactions in the internal market ('eIDAS Regulation')⁶. Similarly, it is provided that smart contracts meet the requirement of written form following computer identification of the parties involved through a process with the requirements set by the AgID⁷.

Unfortunately, AgID has not yet adopted the provided guidelines. Notwithstanding this, the storing of information with DLTs creates the same legal effects of electronic time stamps, with the consequence that such storing can be meant as creating data in electronic form, which binds

5 Giusella Finocchiaro, 'Intelligenza artificiale e responsabilità' (2020) 2 Contr. impr. 713; see also Giusella Finocchiaro, 'Intelligenza artificiale e protezione dei dati personali' (2019) Giurisprudenza Italiana.1670-1677, which affirms that *"Instead the Italian definition attempts to describe blockchain technology and smart contract applications, at their current state, crystallising them. In addition to this, it carries out a further operation that is useless and, indeed, harmful. It attributes to smart contracts, after having uselessly defined, according to that process contrary to the principle of technological neutrality that was explained earlier, the written form, only if the parties are identified according to a process that will be regulated by AgID. Now, the identification of the parties, according to general principles, is not a requirement of the contract. Besides that, the written form of computer document is a matter already extensively regulated by the Digital Administration Code, which certainly does not require further clarification"*.

6 See Art. 8-ter, par. 3, Decree-Law no. 135/2018. The following par. 4 provides that *"within 90 days from the entry into force of the law, the Digital Italy Agency sets the technical standards that technologies based on distributed ledgers must possess in order to produce the effects referred to in paragraph 3"*.

7 The Agency for Digital Italy ('AgID') is an Italian public agency established by Decree-Law no. 83 of 22 June 2012, converted with amendments by Law no. 134 of 7 August 2012. AgID performs tasks to pursue the highest level of technological innovation in public administration's organisation and development. Among its tasks, AgID accredits or authorises subjects (public or private) that carry out certain digital field activities (such as electronic storage, digital certificates, time stamps, certified electronic e-mail, PagoPA system of payments to public administrations).

other data in the electronic form to a particular time, establishing evidence that the latter data existed at that time⁸.

The eIDAS Regulation provides two different time stamping mechanisms, i.e. "qualified electronic time stamp" and simple electronic time stamp. The "qualified" time stamp shall enjoy the presumption of the (i) accuracy of the date and the time it indicates and (ii) the integrity of the data to which the date and time are bound. A simple electronic time stamp does not enjoy the same legal presumption but shall not be denied legal effect and admissibility as evidence in legal proceedings solely because it is in an electronic form or because it does not meet the qualified electronic time requirements stamp⁹.

The AgID's guidelines should help set out and clarify the requirements to assess when and whether DLTs storing of information is considered a time stamping mechanism or a qualified time stamping mechanism, with the consequences deriving from there. Until adopting such guidelines, it is left to the judiciary to consider on the specific circumstances of the case at hand what kind of legal effect DLTs storing of information creates.

In conclusion, the Italian legal system explicitly recognises DLTs and smart contracts and sets forth a legislative framework governing their uses and legal effects, even though the same is currently incomplete. In this contest, the subsequent Subparagraph illustrates institutional and governmental initiatives that have been launched and aimed at better defining the legislative framework of DLTs and promoting their uses.

2.2. Institutional and governmental initiatives

The Italian Government plans to develop a strategy strictly focused on DLTs and blockchain. Several institutional actors have been active in the Italian digitalisation process, in connection to which DLTs are considered to be a relevant tool.

The Ministry of Economic Development ('MiSE') has been actively involved in blockchain and DLTs development, supporting the Italian Government in identifying a national strategy for blockchain and DLTs. The MiSE started a public consultation concerning a summary of a document drafted by appointed experts to gather comments, suggestions or other

8 Art. 3, par. 1, num. 33), eIDAS Regulation.

9 Art. 41, eIDAS Regulation. Art. 42, eIDAS Regulation, sets forth the requirements to be met for an electronic time stamp to be "qualified".

useful elements about DLTs.¹⁰ At the end of the consultation period, the Italian Government was meant to complete a national strategy draft for blockchain and DLTs, based on the comments received. However, such a national strategy is still to be adopted¹¹.

The Ministry of Economic and Finance ('MEF') set up the FinTech Coordination Committee¹² to identify objectives, define programs and implement actions to promote techno-finance development, together with

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- 10 MiSE appointed 30 experts to provide an overview of the current situation, to identify possible developments and the consequent socio-economic fallout from the introduction of solutions based on DLTs. Based on the analyses and observations made, the experts developed a document named "Proposals for an Italian strategy on technologies based on shared registers and Blockchain". The document contains the guidelines to be followed to enable the development and diffusion of the technology and define the national strategy's reference context; see the summary of the document *Proposte per la Strategia italiana in materia di tecnologie basate su registri condivisi e Blockchain. Sintesi per la consultazione pubblica*, published by MiSE and available at <<https://www.mise.gov.it/index.php/it/consultazione-blockchain#documento>> accessed 25 March 2021.
- 11 In April 2018, the 28 EU Member States founded the European Blockchain Partnership, a form of political cooperation to develop a European infrastructure for services circulating on the blockchain ('EBSI'), for further information see (n 1206); Italy participated in the first phase of the creation of EBSI infrastructure with three nodes managed respectively by Infratel Italia (the in-house company of the MiSE), Istituto Nazionale della Previdenza Sociale (INPS) and the Politecnico di Milano. Moreover, in May 2020, the use case supported by Italy on blockchain management of social security data was chosen for implementation on EBSI in 2020-2021, see *Proposte per la Strategia italiana in materia di tecnologie basate su registri condivisi e Blockchain. Sintesi per la consultazione pubblica*, published by MiSE and available at <<https://www.mise.gov.it/index.php/it/consultazione-blockchain#documento>> accessed 25 February 2021. Also, AgID and Infratel Italia are promoting, together with other entities, the IBSI (Italian Blockchain Service Infrastructure) project, which aims to test the design and development of an ecosystem-based on DLT for the delivery of digital public services, in line with the European strategy concerning EBSI, for further information see <<https://www.infratelitalia.it/archivio-news/notizie/innovazione-blockchain-nasce-l-infrastruttura-nazionale>> accessed 25 February 2021.
- 12 FinTech is considered as "a term used to describe technology-enabled innovation in financial services that could result in new business models, applications, processes or products and could have an associated material effect on financial markets and institutions and how financial services are provided", European Commission, 'Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions. FinTech Action plan: For a more competitive and innovative European financial sector' (eur-lex.europa.eu, 2018).

the introduction of FinTech regulatory sandboxes¹³. The Committee was institutionalised by Law no. 58 of 28 June 2019¹⁴, which also introduced into the national legal system a tool to allow experimentation of FinTech applications¹⁵. Through new technologies, such as artificial intelligence and DLTs, these applications can enable innovation of services and products in the financial, credit, insurance and regulated markets sectors. Conditions and methods for carrying out these experiments are regulated by the MEF. A public consultation on the draft regulation concerning the FinTech experimentation was launched by the MEF and concluded on the 31 March 2020. The draft regulation lays down rules on the composition, operating procedures and powers of the Committee and identifies the subjective and objective requirements and the methods of access to experimentation. The final regulation was adopted through MEF Decree no. 100 of 30 April 2021, published in the Official Gazette no. 157 of 2 July 2021: it is expected that several FinTech projects may increase also involving DLTs.

Furthermore, the Minister for Technological Innovation and Digital Transition of the Italian Republic was established in 2019. The Minister is placed in charge of the Department for Digital Transformation ('DTD')¹⁶. The Department for Digital Transformation is a department of the Presidency of the Council of Ministers responsible for defining policies for

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- 13 Regulatory sandboxes are referred to as experimentation related to techno-finance (FinTech) activities aimed at the pursuit, through new technologies such as artificial intelligence and distributed registers, of the innovation of services and products in the financial, credit, insurance and regulated markets, see Art. 36, par. 2-*bis*, Decree Law no. 34 of 30 April 2019, converted with amendments by Law no. 58 of 28 June 2019.
- 14 Art. 36, par. 2-*octies*, Decree Law no. 34 of 30 April 2019, converted with amendments by Law no. 58 of 28 June 2019, provides for the establishment of the FinTech Committee at the Ministry of Economy and Finance (MEF). The Committee brings together as permanent members: MEF, MiSE, the Minister for European Affairs, the Bank of Italy, Italian Supervisor on Financial Markets ('Consob'), the Institute for Insurance Supervision ('IVASS'), the Competition and Market Authority (Agcm), the Guarantor for the Protection of Personal Data, AgID and the Revenue Agency. The Fintech Coordination Committee was created initially with the signing of a memorandum of understanding between the entities above.
- 15 Decree-Law no. 34 of 30 April 2019, converted with amendments by Law no. 58 of 28 June 2019, introduced the discipline of so-called FinTech regulatory sandboxes (see Art. 36, par. 2-*bis* to 2-*septies*).
- 16 The competencies of this Minister are similar to those of the Department for Innovation and Technology (DIT) active from 2001 to 2011. The structure was established by the Decree of the President of the Council of Ministers of 19 June 2019.

the country's modernisation with digital technologies and coordinating and implementing digital transformation programs. This Minister supported projects concerning, in particular, the “Sistema Pubblico di Identità Digitale” (‘SPID’) and the “Carta d'Identità Elettronica” (‘CIE’). They are identification tools for accessing the Public Administration's online services and some services provided by private individuals¹⁷. The Minister, however, could play a role together with other institutional actors in the development of DLTs, especially within the Public Administration. The Italian legislator recently introduced rules concerning a platform for digital notifications of acts, measures, notices and communications of the Public Administration. The legislator admits the use of DLTs in implementing such a platform to ensure the authenticity, integrity, non-modifiability, readability and retrievability of IT documents made available by administrations¹⁸.

In conclusion, several institutional actors have played a role in developing a better legal framework concerning DLTs and promoting their uses in the legal sector. However, the initiatives are far from being considered complete. Nonetheless, different applications of DLTs in the conduct of legal affairs have been experimented and developed, and the most relevant will be discussed in the next Subparagraph.

2.3. Applications of DLTs in the legal sector

The use of blockchain and DLTs has found remarkable development in some sectors of legal affairs. The notarial sector launched DLTs and blockchain related projects. These technologies were experimented about Alternative Dispute Resolution (‘ADR’) mechanisms, in particular within the banking sector and with specific reference to bank guarantees. No blockchain or DLTs use is made within judicial proceedings.

As anticipated, the use of blockchain has found remarkable development in the notarial sector. The notary's task is to attribute public faith to documents received¹⁹. For individual acts or prudential reasons, citizens

17 All public administrations shall integrate SPID and CIE in their information systems, as the only digital identity systems to access digital services. Thanks to SPID and CIE, access to public services becomes uniform throughout the country; for further information, see <<https://innovazione.gov.it/>> accessed 25 February 2021.

18 Art. 26, Decree-Law no. 76 of 16 July 2020, converted with amendments by Law no. 120 of 11 September 2020.

19 Art. 1, Law no. 89 of 16 February 1913.

need to recur to authentication services provided by the notaries. This authentication causes costs and the necessary intermediation of notaries in the carrying on of transactions and business. For these reasons, within the national congress of notaries held in October 2017, a project to create "Notarchain" was presented. The project consists of a blockchain in which information is not managed by anonymous subjects but by Italian notaries²⁰. This technology aims at ensuring speed, absence of costs for the citizen and diffusion on a global scale while at the same time correctly facing the potential criticalities of a decentralised register model with no checks on the accuracy of the data entered. "Notarchain" technology intends to provide the certainty of the unchangeability of the data entered. Also, it aims to provide a prior check on the parties' identity and the correctness and completeness of the data entered in the chain. Notarchain was thought for storing and managing all types of digital files, and therefore its use may be extended to many fields of application (e.g. drawings, works of Art, movable property in general).

The same blockchain technology is based on a second project presented on the same occasion with SIAE²¹, which involves managing the deposit and archiving of source codes. The latter project aims at enabling citizens to deposit with any Italian notary the source code of a new program, obtaining in real-time the insertion in a register shared with SIAE, which allows the immediate attribution of a timestamp and therefore the certainty that no one will be able to challenge its authorship in the future.

Blockchain and smart contracts were experimented by ADR mechanisms and mediation. An agreement²² between Jur, an international reference in the field of blockchain legal tech, and Teleskill On-Line Mediation, an ADR system application in agreement with the Cassa Nazionale Fo-

20 For further information see: <<https://www.notariato.it/it/content/il-notariato-presenta-%E2%80%9Cnotarchain%E2%80%9D-la-blockchain-certificata-dei-notai-e-i-registri>> accessed 25 February 2021. see also Massimo Palazzo, 'Informatica e diritto. Un dialogo necessario' (2019) 5 *Notariato*, 497; Cesare Licini, 'Il notaio dell'era digitale: riflessioni gius-economiche' (2018) 2 *Notariato* 142; Michele Nastri, 'Registri sussidiari, Blockchain: #Notaio oltre la lezione di Carnelutti' (2017) 4 *Notariato*, 369.

21 SIAE (Società Italiana degli Autori ed Editori) is the Italian copyright collecting agency.

22 For further information, see <<https://www.teleskill.it/elearning-blog/mediazione-on-line-presto-anche-su-blockchain>> accessed 25 February 2021; see also <<http://convenzioni.cassaforense.it/attivita/C3%20professionale/strumenti-informatici/mediazione-online/teleskill>> accessed 25 February 2021.

rense²³, intends to allow parties to access binding arbitration or mediation at the click of a button, resulting in significant savings in time and costs²⁴. Teleskill On-Line Mediation currently allows to conduct and define mediation on the internet, leaving the parties and the lawyers comfortably in their offices, or at home, with no need to install any software. Teleskill On-Line Mediation represents a virtual meeting room that allows the practice's management at a distance, without travel costs and optimising users' time. If the mediation is successful, Teleskill On-Line Mediation is prepared to manage the exchange of documents by signing them digitally and concludes the procedure contextually and electronically. Unfortunately, no data is publicly available on the actual use of this tool.

The Italian Institute for insurance supervision (IVASS) and CeTIF (a research center operating within the premises of the Università Cattolica of Milan) collaborated for the development of the first experimentation of blockchain technology in the insurance field, thanks to an initiative also led by ANIA, the Italian Insurers Association. The project entailed an ADR service to resolve disputes between customers and insurance companies dealing with motor liability in the pre-litigation phase. The main phases of the ADR project envisaged the exchange of the amounts entered into the platform by the counterparties for the resolution of a dispute with legal value settled based on the parameters defined for the experimentation, accepted by the client/legal representative and guaranteed by the "Trusted Smart Contract" on the blockchain (a computer protocol that facilitates the execution of the contract)²⁵. Two issues were predominant among those arising within the experimentation. The first one concerned how to reconcile the legal terms provided for by the law for the settlement of

23 The Cassa nazionale di previdenza e assistenza forense (also known as Cassa Nazionale Forense) is the Italian social security institution for lawyers. All Italian lawyers registered with the Bar must be registered and covered with such an institution.

24 Michele Giaccaglia, 'Considerazioni su blockchain e smart contracts (oltre le criptovalute)' (2019) 3 Contr. impr., 941; see also Zaccaria (n 2), which affirms that the mediation culture was created to remind us of the possibility of dialogue and doubts on the dialogue and empathy that can arise from computer automation's cold impersonality. During COVID-19 Pandemic, Law no. 70 of 25 June 2020, converting Decree-Law no. 28 of 30 April 2020, has introduced a new case of so-called "compulsory" mediation in addition to those enshrined in Legislative Decree no. 28 of 4 March 2010, by adding par. 6-ter to Art. 3 of Decree-Law no. 6 of 23 February 2020, converted with amendments by Law no. 13 of 5 March 2020.

25 For further information, see <<https://www.cetif.it/le-associazioni-avviano-la-sperimentazione-blockchain/>> accessed 25 February 2021

the dispute through mediation based on the traditional "physical mediation" – with the immediacy of blockchain technology in the agreement's execution reached. The second one concerned how to ensure that the people acting through the blockchain were correct representative of parties involved.

The use of DLTs and connected smart contracts is also increasing in the financial sectors. In recent years, the European surety market has notably grown. Estimates made by CeTIF showed that in 2019 alone, the value of the surety market in Italy, in terms of premiums and commissions, reached around €1 billion. In contrast to the European situation strongly led by banks, in the Italian market the situation is the opposite, with insurance companies accounting for more than 64% of the market²⁶. However, problems emerged given the lack of digitalization of surety process phases; indeed, the latter are completely paper-based, and this makes it difficult for the beneficiary to verify the authenticity of the surety and the information contained, thus exposing him/her to a high risk of fraud. In this respect, the Bank of Italy center of innovation, "Milan Hub" is launching together with CeTIF, a blockchain-based project concerning "digital" sureties. The project aims at significantly reducing fraud by dematerialising surety documents and providing reliable information to all supply chain actors²⁷. The project would entail the creation of a digital item called "asset" that can be transmitted and manipulated via DLT through the use of smart contracts and that describes a relevant subset of characteristics of the surety act and life cycle (e.g. references to the digital identities involved in the process, economic and temporal details, information on milestones for release, enforcement). Blockchain technology would then play a fundamental role in allowing the digitalisation of sureties managing process. The testing of

26 Source: Impact Study CeTIF – SIA.

27 For further information see <<https://www.ilsole24ore.com/art/fintech-fideiussioni-digitali-e-onboarding-primi-test-milano-hub-banca-d-italia-ADt5VaFB>> accessed 25 February 2021.

blockchain technology, conducted with leading technology partners²⁸, has been successful and should be ready for industrialisation²⁹.

In conclusion, some sector of legal affairs showed individual activism in the implementation of DLTs and blockchain-related projects. Economic operators and professionals, in some instances together with trade associations and Supervisory Authorities, are willing to experiment and develop DLTs in order to gain their benefits and face correctly potential criticalities. Although some achievements have been so far collected, the process is currently at its starting phases and yet not consolidated.

Having ascertained the above regarding DLTs, the present chapter goes on examining in the next Paragraph how digital tools are affecting judicial proceeding in civil law matters.

3. *Legal Tech and dispute resolutions*

This Paragraph explores the Italian e-justice experience of developing the Processo Civile Telematico ('PCT'), that is the civil trial on-line. The term PCT substantially means the set of dispositions intended to adapt the procedural rules (in their specific fields of operation) to the new technologies³⁰. The PCT project represents a critical e-Government plan in Italy, aiming fundamentally at simplifying formalities, including notification, in the judicial proceeding³¹.

28 According to the CeTIF website, more than thirty organisations from the insurance, banking and financial markets sectors, the Public Administration and businesses, as well as associations and institutions - including the Guardia di Finanza – took part in experimentation phase of the national "Fideiussioni Digitali" project promoted by CeTIF, in collaboration with the Bank of Italy and IVASS and other economic operators; for further information see <<https://www.cetif.it/fideiussioni-digitali-oltre-30-realta-italiane-insieme-per-il-progetto-di-cetif-universita-cattolica-sia-e-reply>> accessed 25 February 2021.

29 Another initiative of Bank of Italy Milan Hub, together with CeTIF, currently in the testing phase, is called O-KYC (that stands for: Onboarding - Know Your Customer), which aims to simplify, streamline and reduce, through DLT/blockchain technology, the time and costs of the customer onboarding process, allowing the control of personal data by the citizen/user, with advantages for customers in terms of simplified processes and data processing by banks, public authorities, utilities and telephone companies; for further information see (n 1223).

30 Claudio Consolo, *Spiegazioni di diritto processuale civile*, (2nd ed., Giappichelli 2014) II, 393.

31 Vito Amendolagine, 'Percorsi di giurisprudenza - il processo civile telematico a cinque anni dalla sua introduzione' (2020) 1 *Giurisprudenza Italiana*, 211; The

The PCT has been the result of various legislative interventions over time³². The first discipline was introduced by the Decree of the President of the Republic no. 123 of 13 February 2001 ('D.P.R. 123/2001')³³. Other regulations followed³⁴, including the Legislative Decree no. 82 of 7 March 2005 (the 'Digital Administration Code') that sets forth rules concerning computer documents' legal effects³⁵.

PCT project was developed by the IT Department of the Ministry of Justice since 2001: the PCT strives to increase the availability of online services through a two-way data and document interchange communication system. It provides applications to allow interoperability among a considerable number and variety of external users (lawyers, experts, public administrations officials, citizens, private companies executives, etc.), and courts' internal users (judges, clerks, etc.) involved in civil cases, using a high-security PKI architecture with up-to-date technical features compliant with specific legal provisions and general legislation on the matter, Davide Carnevali, 'Great Success that Was on the Brink of Failure: The Case of a Techno-Legal Assemblage in the "Civil Trial On-Line" System in Italy' (2019) 8(2) EQPAM, 21-35.

- 32 A summary is provided by Francesca. Ferrari, 'Il processo civile telematico' in Lotario Dittich (ed) *Diritto Processuale Civile* (Utet Giuridica, 2019) I, 1245.
- 33 Named "Regulation on the use of computerised and telematic tools in civil proceedings, in administrative proceedings and in proceedings before the jurisdictional sections of the Court of Auditors". Then, Art. 51, Decree-Law no. 112 of 25 June 2008, converted with amendments by Law no. 133 of 6 August 2008, provided that "notifications referred to in the first paragraph of Art. 170 of the Code of Civil Procedure, notification referred to in the first paragraph of Article 192 of the Code of Civil Procedure and any other communication to the consultant shall be effected by electronic means to the electronic address communicated pursuant to Art. 7 of Regulation referred to in Presidential Decree no. 123 of 13 February 2001", while Art. 4 of Decree-Law no. 193 of 29 December 2009, converted with amendments by Law no. 24 of 22 February 2010, established, among other things, that communications and notifications by telematic means in civil and criminal proceedings shall be made by certified electronic mail.
- 34 See Decree-Law no. 179 of 18 October 2012, converted, with amendments, by Law no. 221 of 17 December 2012 ('Decree Law 179/2012'), and Decree-Law no. 90 of 24 June 2014, converted with amendments by Law no. 114 of 11 August 2014.
- 35 Decree of the Minister of Justice no. 44 of 21 February 2011, named "Regulation on the technical rules for the adoption of information and communication technologies in civil and criminal proceedings" ('d.m. 44/2011') and its implementing provisions shall also be taken into account, in particular the Order of the Director-General for Automated Information Systems of the Ministry of Justice of 16 April 2014, named "Technical specifications provided for in Article 34 par. 1 of the Decree of the Minister of Justice dated 21 February 2011 no. 44" ('Technical specifications of 16 April 2014').

The PCT offers subjects the possibility of managing the various procedural activities in dematerialised form, allowing: (i) the notification and communication of judicial and procedural documents through certified electronic mail³⁶; (ii) the filing of procedural documents and documentary shreds of evidence in telematic mode; (iii) the creation of computer trial dossier; (iv) the creation of procedural documents or copies thereof in digital format; and (v) through the telematic transaction, the payment of the fees due for access to justice services³⁷.

It is undeniable that some procedural institutions are undergoing a veritable palingenesis that forces a rethinking of the same, as a result of the application of the new technologies³⁸.

The PCT produces some practical benefits that may simplify access to justice and lawyers' provision of services³⁹.

However, after few years from the adoption of the PCT, exponents of the legal sector highlighted some critical issues for aspects concerning its underlying mechanism⁴⁰ and interpretation of its rules⁴¹. Furthermore, the

36 According to Art. 1, par. 1, lett. v-bis), Digital Administration Code, certified electronic e-mail means "a communication system capable of attesting the sending and delivery of an e-mail and providing third-party receipts"; see also Art. 1, par. 1, lett. g), Decree of the President of the Republic no. 68 of 11 February 2005.

37 Art. 30, d.m. 44/2011.

38 Giuseppe Ruffini, 'Il Processo Civile di fronte alla svolta telematica' (2019) 4-5 Riv. dir. proc 973.

39 In particular, it: helps to avoid long queues for the filing of documents at the Court's Registry; allows implementing paperless and environmentally friendly procedures; according to some, ensures the certainty of filing documents at the Registry; makes it possible to extract copies from the computer trial dossier, guaranteeing certification even for personal notifications and also judges' orders are easily downloaded; notifications take place between lawyers without the intermediation of other subjects (such as postal agents), and lawyers can make several deposits of documents at Courts located in different districts without the need to move.

40 For example, it has been highlighted that, when filing a procedural document within an already formed computer dossier trial, PCT cannot allow direct uploading through remote access. In such cases, telematic filing occurs through the transmission of a certified electronic mail message to the address of the Court's clerk. Therefore, the Court's clerk's activity is indispensable for the insertion of documents in the computer trial dossier, see Ruffini, (n 38). Indeed, only when the Court's clerk accepts the filing, the document enters the computer dossier and become visible to the other party and the judge, see Ministry of Justice Directorate General Circular of 23 October 2015, par. 5.

41 Critical issues have been highlighted concerning the judiciary's formalistic approach in the interpretation of the rules governing the PCT. For example, notifi-

incomplete digitalisation of the procedure has been considered to be a problem. Indeed, it has been highlighted that, as a general rule, the parties continue to have the right to file their introductory acts and attached documents in paper format at the Registry; similarly, the judge has the right to file his measures in paper format⁴². It is then a practice often adopted by lawyers at a local level to handle a “courtesy copy” (i.e. in paper format) of the procedural documents to the judge, in addition to the telematic filing of the computer version of the documents⁴³.

In civil matters, Italy has been considered to have relatively highly developed IT facilities⁴⁴. Notwithstanding this, there is still a problem with the length of civil proceedings⁴⁵. Therefore, the explanation for these results may lie in the structural difficulties with which Italy is faced. Judicial time is dependent on specific procedural features, which may account for some delay in the processing of cases⁴⁶, not necessarily connected with the application of digital tools to judicial proceedings.

cations of procedural acts can be made at certified electronic mail (PEC) addresses resulting from public lists identified by the law in this respect. Therefore, the Italian Supreme Court ruled that notifications made to a PEC address referable - depending on the cases - to the party personally or to the defender, but different from the one entered in the public lists are always declared null and void by the judiciary, see Cassazione civile, sec. III, 8 February 2019, n. 3709. The consequence is that even when the notification is made at a PEC address indicated by the party personally or by the defender, it shall always be null and void if different from that resulting from public lists, see Ruffini, (n 38).

- 42 Ministry of Justice Directorate General Circular of 23 October 2015, par. 2; furthermore, Art. 16-*bis*, par. 9, Decree-Law 179/2012 states that the judge may order the filing of hard copies of individual acts and documents for specific reasons.
- 43 Ministry of Justice Directorate General Circular of 23 October 2015, par. 4. Also, PCT has not been implemented for disputes before “Giudice di Pace”, which is an honorary judge competent for civil disputes that do not overcome a certain amount of value, see Cassazione Civile, Sec. II, 29 September 2020, n. 20575.
- 44 Council of Europe European Commission for the efficiency of justice (‘CEPEJ’), ‘European judicial systems – Efficiency and quality of justice’ (CEPEJ, 2016), 60.
- 45 In 2016, it amounted to 1.4 years in the first instance, 2.7 years in the second instance and four years in the third, European Commission, ‘Country Report Italy 2018 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances’ (eur-lex.europa.eu, 2018) 46.
- 46 CEPEJ. See also European Commission, (n 45); CEPEJ ‘Length of court proceedings in the member states of the Council of Europe based on the case-law of the European Court of Human Rights’ (CEPEJ, 2018). However, according to (n 1240), the situation is slowly improving with the implementation of Italy’s reforms in this concern. On the 5th December 2019, the Italian Council of Ministers approved a draft law entitled “Draft bill delegating authority to the

In conclusion, PCT is a developed reality in Italy. It provides beneficial effects but some exponents highlighted critical issues following its implementation. PCT rules were substantially affected during the COVID-19 pandemic, as better described below in Paragraph 3; it should be then assessed how PCT functioning will be definitely shaped for the future and correctly face critical issues still emerging, in order to ensure the proper functioning of the process and achieve better results.

The following Subparagraphs present a more detailed overview of the functioning of certain aspects of the PCT.

3.1. *Notifications of procedural documents by electronic means*

The PCT refers to certified electronic mail as the "place" of communication through which the addressee can be reached with reasonable legal certainty and technological ease⁴⁷.

Art. 4 of Decree-Law no. 193 of 29 December 2009⁴⁸, indeed, sets forth that communications and notifications by telematic means in civil proceedings shall be made by PEC. Transmission of documents through PEC is considered equivalent to notification by mail, and the date and time of transmission and receipt of a document may be relied upon against third parties⁴⁹.

Therefore, notifications can nowadays be carried out directly by lawyers⁵⁰. They can send a PEC message to the addressee whose PEC address appears in the public lists identified by the law⁵¹. The lawyer can

government for the efficiency of the civil process and for the revision of the regulation of alternative dispute resolution systems": the bill has been submitted to the Senate for discussion at no. 1662 and its under consideration

47 Ferrari (n 32) 1278. In this sense, Art. 1, par. 1, lett. n-ter), Digital Administration Code, defines digital domicile as "an electronic address elected at a certified electronic mail service or a qualified certified electronic delivery service", as defined by eIDAS Regulation, "valid for the purposes of electronic communications having legal value".

48 Converted with amendments by Law no. 24 of 22 February 2010.

49 Art. 48, Digital Administration Code.

50 Art. 3-bis, Law no. 53 of 21 January 1994.

51 These are the General Register of Electronic Addresses managed by the Ministry of Justice ('ReGIndE'), the National Index of Digital Domiciles of Companies and Professionals ('INI-PEC register'), the Register of Companies, the Register of Public Administrations ('PA register') and the National Index of Digital Domiciles of Natural Persons and other private law entities not required to be registered in

notify his acts (i.e. writ of summons) and acts of a judicial nature (i.e. judgments, orders)⁵². In case the document to be notified does not consist of a computer document, the lawyer can extract a computer copy of the original document on an analogue medium, certifying that it conforms to the original document and proceed by sending it through PEC.

The PEC contains the document to be notified in .pdf format, any power of attorney in .pdf format, the notification report prepared on a separate computer document and signed with a digital signature. The procedural documents notified together with the receipt of acceptance and delivery will be part of the “telematic bag” to file in the Court’s Registry, as better explained below.

Notification by PEC shall be completed for (i) the notifying party, at the moment when the receipt of acceptance is generated by the PEC service’s operator and (ii) the addressee, at the moment when the delivery receipt is generated by the PEC service’s operator ⁵³.

In all cases in which the lawyer has to provide proof of notification, and it is not possible to provide such proof by electronic means, the lawyer can extract an analog copy of the PEC message and the receipt of acceptance and delivery. The lawyer attests the conformity with the documents from which they are taken under Art. 23 of the Digital Administration Code⁵⁴.

Furthermore, when the law provides that notifications of acts to the lawyer are to be performed, at the request of the party, at the Registry of the judicial office, notifications by the means mentioned above can be made only when it is not possible, for reasons attributable to the addressee, to execute them at the PEC address shown in public lists⁵⁵. In order to

professional registers or in the register of companies, see Art. 16-ter, Decree-Law no. 179/2012; Ruffini (n 1234), note 15; see the changes made by Decree-Law no. 179/2012, which introduced Art. 3-bis to the Digital Administration Code providing for the “digital domicile of the citizen”.

52 Art. 3-bis, par. 2, of Law no. 53 of 21 January 1994, as amended under art. 16-undecies, Decree-Law 179/2012.

53 Art. 3-bis, par. 3 to Law no. 53 of 21 January 1994. See also Decree of the President of the Republic no. 68 of 11 February 2005, which sets forth rules governing the use of certified electronic mail. For timely executed notifications, according to Art. 16-septies, Decree-Law 179/2012, telematic notifications shall be subject to Art. 147 of the Code of Civil Procedure; therefore, if notification occurs after 9 p.m., it shall be deemed to have been made at 7 a.m. on the following day.

54 Art. 9, par. 1-ter, to Law no. 53 of 21 January 1994.

55 Art. 16-sexies, Decree-Law 179/2012.

avoid that, in the presence of a digital address in the public lists, notification to the lawyer is made at the Registry and not by PEC⁵⁶.

Following the same approach, Art. 16 of Decree-Law 179/2012 sets forth that, in civil proceedings, communications and notifications by the clerk's office shall be made exclusively by electronic means to the PEC address appearing in public lists or any case accessible to public administrations. Also, it provides that notification to persons required by law to have a PEC address and who have not provided or communicated such an address is made by filing the documents with the Court's Registry. The same procedures shall be adopted in non-delivery of the PEC message for reasons attributable to the addressee. Lastly, the party whose PEC address is not included in a public list but appears in Court in person may indicate the PEC address at which he/she wishes to receive communications and notifications relating to the proceedings. These dispositions are meant to ensure that communications and notifications are always executed by PEC, apart from specific circumstances.

3.2. *Filing of procedural documents and evidence by electronic means*

According to Art. 16-*bis*, Decree-Law 179/2012, in civil proceedings, filing of procedural acts and documents by lawyers of the parties that have already appeared before the Court shall take place exclusively by telematic means, in compliance with the rules and regulations concerning the signing, transmission and receipt of electronic documents⁵⁷. However, the President of the Court may authorise the filing of the mentioned documents by non-telematic means when the computer systems of the justice domain are not functioning, and there is an urgent need.

For documents other than those just mentioned, it is possible but not mandatory to proceed with their telematic filling; this would be the case for the introductory acts and the first act of defense of a civil proceeding⁵⁸. The Supreme Court of Cassation has specified that the digital signature

56 Ruffini (n 38).

57 The same is provided for civil appeal proceedings, as enshrined in Art. 16, par. 9-*ter*, Decree-Law 179/2012, even though a different initial date of application of the disposition was established. Regarding proceedings before the Court of Cassation (i.e., Italian Supreme Court), see Art. 16, par. 10 and Art. 16-*bis*, par. 4-*bis*, Decree-Law 179/2012.

58 Art. 16, par. 1-*bis*, Decree-Law 179/2012.

- like the signing of the document in paper format - is a requirement of validity for the judgment's introductory act⁵⁹.

Telematic filing is carried out using the transmission of a PEC message to the PEC address of the judicial office, thus making the activity of the Court's clerk indispensable for the insertion of documents in the computer dossier of the trial⁶⁰.

The telematic deposit takes place through the packaging of a "telematic bag" to be sent, as an attachment, to the PEC address of the relevant Court's clerk. The envelope contains the procedural documents, the eventual attachments and, eventually, an XLM file⁶¹. Procedural documents shall be in .pdf format and obtained "by transforming a textual document, without restrictions on the operations of selecting and copying parts"⁶². Also, scanning of images is not permitted, and a file shall also accompany the documents in XML format that contains all the information of the registration note if any⁶³. Attachments shall observe formats allowed⁶⁴. The documents are signed with a digital signature or qualified electronic signature⁶⁵.

59 Cassazione Civile, Sec. VI, 8 June 2017, n. 14338.

60 Art. 14, Technical specifications of 16 April 2014.

61 Once the telematic envelope has been created with the appropriate software and sent via PEC, four separate receipts are generated, which the party will receive following the sending of the message: (i) receipt of acceptance, which certifies that the message has reached its destination at the PEC system operator; (ii) delivery receipt, which certifies that the message has reached the addressee's e-mail operator (the same is relevant for the completion of the filing and should be kept in computer format to provide proof of filing); (iii) receipt of the outcome of the automatic controls which are inherent to the formal checks of the filing carried out by the operator of the telematic services of the Ministry of Justice; (iv) receipt of acquisition by the Court's clerk which certifies the outcome of the check carried out by the receiving clerk's office.

62 Art. 12, Technical Specifications of 16 April 2014.

63 Art. 12, Technical Specifications of 16 April 2014.

64 Art. 13, Technical specifications of 16 April 2014.

65 CADES and PADES digital signatures are both accepted and equivalent according to Art. 12, par. 2, Technical specifications of 16 April 2014; see also Cassazione, Sezioni unite, 27 April 2018, n. 10266. Also, Art. 16-bis, par. 9-octies, Decree-Law 179/2012, provides that "*party documents and court orders filed electronically shall be drafted in summary form*"; furthermore, according to Art. 4, par. 1-bis, Decree of the Minister of Justice no. 55 of 10 March 2014, fees for lawyers in judicial proceedings shall, as a rule, be further increased by 30 per cent: the additional fee is due where the documents filed by electronic means are drawn up using information technology techniques designed to facilitate their consultation or use.

Filing by telematic means shall be deemed to have been made when the receipt for delivery is generated by the PEC service operator of the Ministry of Justice. Also, it shall be deemed to have been timely affected when the receipt for delivery is generated before the end of the day on which it is due⁶⁶.

3.3. *Computer trial dossier*

Computer trial dossier is defined as the computer version of the trial dossier, containing the trial documents as computer documents or computer copies of the same documents if they have been filed on paper, under the Digital Administration Code⁶⁷.

The keeping and conservation of the computer trial dossier is among the tasks assigned to the Court's clerk and is equivalent to the keeping and conservation of the trial dossier on paper⁶⁸. The presence of the computer trial dossier does not entail the elimination of the trial dossier on paper. Indeed, notwithstanding the obligation to file certain procedural documents through telematic means as seen above, the clerk's office may need to form and keep the paper files by the methods provided for by the laws, given that the law provides for cases in which the parties still have the right to file documents in paper format. Similarly, there are cases in which the judge has the right to file his measures in paper format⁶⁹.

The computer dossier management system is part of the Ministry of Justice document system dedicated to the storage and retrieval of all computer documents. In this regard, the Ministry of Justice is in charge of managing proceedings using information and communication technologies, collecting in a computer dossier the acts, documents, annexes, receipts of PEC and data of the proceedings themselves whoever formed them, or computer copies of the same acts when they have been filed on paper⁷⁰.

66 Art. 16-*bis*, par. 7, Decree-Law no. 179/2012; see also Art. 155, par. 4 and 5 of the Italian Code of Civil Procedure.

67 Art. 2, par. 1, lett. h), d.m. 44/2011.

68 Art. 9, par. 3, d.m. 44/2011.

69 Ministry of Justice Directorate General Circular of 23 October 2015, par. 2.

70 Art. 9, d.m. 44/2011.

3.4. Creation of computer document

A computer document is defined as an electronic document containing the electronic representation of acts, facts or data which are legally relevant⁷¹ and is different from an analog document, which is the non-computer representation of such information⁷².

Therefore, in addition to the written and oral forms of procedural documents, there is also the digital form, a *tertium genus* not precisely corresponding to the written or oral form, based on the use of a different language, intelligible only through a computer, obtained by converting electrical impulses into binary data⁷³.

Computer documents comprise documents in digital format (digital native documents) obtained through the transformation into .pdf format of a textual document created through a word processor, but also computer copies, mere or by image, of procedural documents in analog format (analog native documents): the former obtained through the complete transcription of the analog document through a word processor and then transformation of the file into .pdf; and the latter obtained through the scanning of the analog document.

The computer document satisfies the requirement of written form and has the efficacy envisaged by Art. 2702, Italian Civil Code⁷⁴, when it bears a digital signature⁷⁵, another type of qualified electronic signature⁷⁶ or an advanced electronic signature⁷⁷ or, in any case, is formed, after computer identification of its author. The latter identification must be done through a process having the requirements established by AgID, pursuant to Art. 71

71 Computer document represents a species of the broader genus of electronic documents, Ferrari, (n 1228); Art. 3, par. 1, num. 35), eIDAS Regulation, states that electronic document means any content stored in electronic form, in particular text or sound, visual or audiovisual recording.

72 Art. 1, par. 1, lett. p) and p-bis), Digital Administration Code.

73 Ruffini (n 38).

74 Art. 2702, Italian Civil Code, “A private deed shall constitute full evidence, up to the point of perjury, of the provenance of the declarations of the person who signed it, if the person against whom the deed is produced acknowledges the signature or if it is legally recognised as having been signed”.

75 Art. 1, par. 1, lett. s), Digital Administration Code.

76 Art. 3, par. 1, num. 12), eIDAS Regulation.

77 Art. 3, par. 1, num. 11), eIDAS Regulation.

of the Digital Administration Code⁷⁸ to guarantee security, integrity and non-modifiability of the document and, manifestly and unequivocally, the traceability back to the author⁷⁹. The use of the qualified electronic or digital signature device shall be presumed to be attributable to the electronic signature holder unless he proves otherwise⁸⁰. In all other cases, the suitability of the computer document to satisfy the requirement of written form and its probative value is freely assessable in Court, provided that the date and time of formation of the electronic document may be relied on against third parties if they are affixed under the Guidelines⁸¹.

A computer copy of an analog document is defined as a computer document whose content is identical to that of the analog document from which it is taken, while a computer image copy of an analog document means a computer document whose content and form are identical to those of the analog document from which it is taken⁸². In civil proceedings, the Italian legislator deems it necessary to carry out an authentication procedure to recognise the copies' validity in question. Indeed, according to Art. 16-*decies*, Decree-Law 179/2012, when proceeding with the filing of computer copy, including an image copy, of a party's procedural document or of a court order which has been drawn upon an analog medium and is held in the original or a certified copy, it shall be certified that the copy corresponds to the original document⁸³.

78 AgID, *Linee Guida sulla formazione, gestione e conservazione dei documenti informatici*, September 2020, which shall be applicable from 7 June 2021, available at <https://www.agid.gov.it/it/linee-guida>, accessed 25 February 2021.

79 Art. 20, par. 1-*bis*, Digital Administration Code.

80 Art. 20, par. 1-*ter*, Digital Administration Code.

81 Art. 20, par. 1-*bis*, Digital Administration Code; see also Art. 20, par. 1-*quarter*, Digital Administration Code, according to which the provisions relating to the filing of documents by electronic means under the PCT legal framework shall remain unaffected.

82 Art. 1, par. 1, lett. i-*bis*) and i-*ter*), Digital Administration Code; see also Art. 1, par. 1, lett. i-*quater*), Digital Administration Code, according to which computer copy of a computer document is a computer document having the same content as the document from which it is taken on computer support with a different sequence of binary values.

83 See in this respect Art. 16-*undecies*, Decree-Law 179/2012. Also, concerning computer copies, Art. 22, Digital Administrative Code, establishes that computer documents containing copies of public deeds, private deeds and documents in general, including administrative deeds and documents of any kind initially drawn upon an analogue medium, sent or issued by authorised public depositories and public officials, shall have a full effect within the meaning of Artt. 2714 and 2715 of the Italian Civil Code. This effect arises if the above documents are drawn up

3.5. *Communication of the sentence and access to consultation services*

As provided for in Art. 133, Italian Code of Civil Procedure, the judgment shall be made public by lodging it at the Registry of the Court that delivered it and the Court's clerk shall notify the parties within five days, through a note containing the full text of the judgment. Such communication⁸⁴ can be executed through a PEC message to the parties, even though it does not have any effect on starting the time limits for appeals⁸⁵.

Among its many functions, the PCT also allows users to consult information regarding civil proceedings at any judicial office, allowing them to know in real-time the status and course of the proceedings and the computer trial dossier documentary content. Access to consultation services takes place through an access point or the portal of telematic services⁸⁶. The portal of telematic services consists of a "public area" and a "reserved area". Only qualified users - lawyers, judges, court clerks, etc. - will be able to access the reserved services area after identification through a cryptographic token. The qualified users can consult, therefore, the status of the proceedings and have access to register data and other information. Besides, citizens and other users can access the public area without having to authenticate themselves. These non-qualified users can consult anonymously and impartially the data of the procedure and other information of the Registry, in compliance with the data protection legal framework⁸⁷.

under Art. 20, par. 1-*bis*, first sentence, Digital Administration Code. At the same time, it establishes that computer image copies of documents originally generated on an analogue medium shall have the same probatory effect as the originals from which they are extracted. This effect arises if their conformity is certified by a notary public or other public official authorised to do so per the Guidelines. If not certified, such copies of original documents originally generated on an analogue medium under the Guidelines shall have the same probatory effect as the originals from which they are taken if their conformity with the original is not expressly disavowed.

84 For a distinction between communications and notifications under Italian civil procedure law, see Ferrari (n 1228) 1277, note 81.

85 In the same line of reasoning, see Cassazione Civile, Sec. IV, 5 November 2014, n. 23526.

86 Artt. 22 and ss., d.m. 44/2011

87 Artt. 5 and 6, Technical specifications of 16 April 2014.

4. Civil judicial proceedings during epidemiological emergency

Dispositions adopted by the Italian legislator to face the outbreak of the COVID-19 pandemic have deeply affected judicial proceedings and access to justice, including civil proceedings. The legislator has enacted several legislations that constitutes a real and autonomous normative body: the so-called civil procedural law of the epidemiological emergency⁸⁸.

Such rules increased the application of digital tools to civil judicial proceedings to correctly face and break down COVID-19 spread among the population. It is questionable whether some of the new dispositions would become definitive dispositions governing civil proceedings.

More in detail, Art. 83 Decree-Law no. 18 of 17 March 2020, converted, with amendments, by Law no. 27 of 24 April 2020 ('Decree-Law 18/2020'), introduced different emergency civil proceedings, alternative to the ordinary one (i.e., in person-hearing). These proceedings are (i) the conduct of civil hearings by remote connections⁸⁹ (in such cases, the judge may also be connected from a place other than the judicial office⁹⁰) and (ii) the conduct of civil hearings by exchanging and filing electronically written notes containing only the parties' requests and conclusions⁹¹. The first proceeding is applicable for hearings that do not require the presence of subjects other than the parties and court auxiliaries, while the second one is applicable for hearings that do not require the presence of subjects other than the lawyers⁹².

Art. 221 of Decree-Law no 34 of 19 May 2020, converted, with amendments, by Law n. 77 of 17 July 2020 ('Decree-Law 34/2020'), modified the emergency proceedings just mentioned, setting more clearly their functioning. The judge has the faculty to decide which civil proceedings is to be adopted (ordinary in-presence hearing, telematic exchange of written notes

88 Roberto Masoni, 'Diritto processuale civile dell'emergenza epidemiologica (a seguito della conversione in legge del decreto ristori)', (2021) Giust. civ., available at <<https://giustiziavivile.com>> accessed 25 February 2021.

89 Art. 83, par. 7, lett. f), Decree-Law 18/2020.

90 Art. 23, par. 7, Decree-Law no. 137 of 28 October 2020, converted with amendments by Law no. 176 of 18 December 2020.

91 Art. 83, par. 7, lett. h), Decree-Law 18/2020.

92 Art. 23, par. 6, Decree-Law n. 137 of 28 October 2020 (converted, with amendments, by Law n. 127 of 18 December 2020) extends the applicability of the last-mentioned proceeding to proceedings concerning mutual separation agreement and joint petition for divorce. These proceedings would otherwise be out of the provision's scope, since the parties are required to participate in the relative hearings.

or remote hearings)⁹³, provided that for civil hearings through a remote connection, the prior consent of the parties is also necessary⁹⁴. It has also been established that, in civil proceedings, collective judicial deliberations may be adopted through remote connections. The Court's clerk may issue an enforceable copy of a judgment in the form of an informatic document on the application of the party in whose favor the judgment was given⁹⁵.

In conclusion, the epidemiological emergency forced the legislator to adopt rules facing the criticalities of the COVID-19 pandemic and ensure continuity to the functioning of the justice system. Such rules increased the application of digital tools to civil judicial proceedings but were enacted on an exceptional basis.

5. *Alternative dispute resolution systems*

In addition to civil judicial proceedings, digital tools are also used in ADR systems in financial sectors. Obviously, ADR systems are alternative and not substitute to the ordinary proceeding⁹⁶: decisions taken by ADR systems are not binding, since they do not preclude the client/consumer who has initiated the procedure from going to Court. If ADR systems are compared to the ordinary proceeding, they are less likely to guarantee respect for the rule of law and due process⁹⁷.

About consumer disputes, in particular, the regulatory framework at the European Union level comprises EU Directive no. 11/2013, which was

93 Masoni (n 88).

94 Art. 221, par. 4 and 7 of Decree-Law 34/2020.

95 Art. 23, par. 9 and 9-bis, Decree-Law n. 137 of 28 October 2020 (converted, with amendments, by Law n. 127 of 18 December 2020). Another essential provision enables lawyers, in civil proceedings before the Court of Cassation, to file documents electronically, see Art. 221, par. 5, Decree-Law n. 34 of 19 May 2020 converted, with amendments, by Law n. 77 of 17 July 2020: Decree 27 January 2021 of the Ministry of Justice allows the electronic filing of procedural documents by the parties' lawyers as from the 31st March 2021.

96 The qualification of such systems as "alternative" is because they aim to resolve disputes outside the courtroom, thus opposing the jurisdiction traditionally exercised by the State, Pietro Sirena, 'I sistemi di ADR nel settore bancario e finanziario' (2018) 9 Nuova giur. civ. comm., 1370.

97 *ibid.*

then supplemented by EU Regulation no. 524/2013 concerning online ADR systems (Regulation on consumer ODR)⁹⁸.

At a national level, regulatory dispositions within the banking sector, adopted by the Bank of Italy, and within the financial markets sector, adopted by Consob, established ADR systems that provide clients of intermediaries with online tools accessible on the website, through which they can submit and manage complaints in case of disputes. Such ADR systems have so far succeeded in granting clients accessible, rapid and less expensive redressing methods⁹⁹. They can, therefore, provide examples of the benefits that digitalisation of dispute resolutions can bring.

Regarding the banking sector, Law no. 262 of 28 December 2005¹⁰⁰ established that all banks and credit institutions operating on the national territory are obliged to adhere to the Arbitro Bancario Finanziario ('ABF')¹⁰¹. The same law entrusted the supervisory authority, i.e., the Bank of Italy, to provide the infrastructures (logistic and organisational) necessary for the functioning of the territorial colleges constituting the ABF.

Proceedings before ABF are regulated more specifically by Comitato Interministeriale per il Credito ed il Risparmio (CICR) Decision no. 275 of 29 July 2008 and by Bank of Italy Provisions on out-of-court dispute resolution schemes of 18 June 2009.

98 In the event of disputes involving a foreign intermediary established in the territory of the European Union and arising from banking or financial markets contracts of sale or services concluded online, the Italian consumer client may file an appeal through the ODR platform, pursuant to Regulation 524/2013, see Bank of Italy provisions of 18 June 2009, Section VII, par. 2.

99 Initially, the Arbitro Bancario Finanziario ('ABF') consisted of three territorial colleges (Rome, Milan and Naples). Due to the high number of disputes brought before the ABF, it became necessary to set up another four panels, based in Turin, Bologna, Bari and Palermo.

100 See also Art. 128-*bis* of Legislative Decree no. 385 of 1 September 1993 ('Italian Consolidated Law on Banking'); the ABF was then set-up in 2009. Its functioning has been recently amended by Bank of Italy, Measure of 12 August 2020.

101 Pursuant to Legislative Decree no. 28 of 4 March 2010 and Decree-Law no. 50 of 24 April 2017 (converted by Law no. 96 of 21 June 2017), starting the procedure before the ABF constitutes - as an alternative to recourse to the mediation procedure governed by the same decree - a condition for the admissibility of legal proceedings relating to banking and financial markets contracts, within the limits and conditions laid down by these provisions.

Clients shall use the ABF¹⁰² online portal to submit their complaint¹⁰³. To accessing the portal, users shall firstly register themselves, clicking on "Reserved Area" at the ABF website¹⁰⁴; users shall fill in all the fields and, in particular, enter an e-mail address and a mobile phone number on which they will receive notifications and messages updating them on the status of their complaint.

The portal is a simple and interactive tool that assists users in submitting their complaints through a guided procedure and allows them to manage the whole procedure by himself/herself. Users can file an appeal by themselves or on behalf of other subjects using the sample power of attorney available on the ABF website¹⁰⁵. The online portal will assist users in filling in the complaint¹⁰⁶, and in the completion of the requested

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- 102 ABF joins the Fin-Net network. The Fin-Net network has been promoted by the European Commission since 2001, in implementation of its Recommendation of 30 March 1998. This network is among national ADR systems, which are active in financial intermediation sector within the European Economic Area (the EU countries and Iceland, Liechtenstein and Norway). Such network comprises out-of-court dispute resolution bodies operating in banking, financial markets and insurance sectors and established in the above Area. It allows consumers to contact their national ADR system, which, using the information support provided by the network itself, puts them in touch - if it exists - with the equivalent system in the country where the intermediary operates; see Bank of Italy Provisions of 18 June 2009, Section VII, par. 1; see also Sirena (n 96).
- 103 See Bank of Italy provisions of 18 June 2009, Section VI; for further information, consult the guide for using the ABF portal available at <<https://www.arbitrobancariofinanziario.it/presentare-ricorso/index.html>> accessed 25 February 2021.
- 104 For further information see the ABF website at <<https://www.arbitrobancariofinanziario.it/homepage/index.html>> accessed 25 February 2021.
- 105 The complaint can also be submitted by the customer association of which the customer is a member, see Bank of Italy provisions of 18 June 2009, Section VI, par. 1.
- 106 Once registered and logged into the portal, users can proceed by clicking on "create your appeal" bottom in their reserved area. Users have to make sure they have all the necessary documentation (e.g., the identification document of the person or company for whom the complaint is being submitted; the documentation useful for the complaint, which includes, in particular, the complaint sent to the intermediary: recourse to the ABF presupposes the transmission of a prior complaint to the intermediary, see Bank of Italy provisions of 18 June 2009, Section VI, par. 1), copy of the signed agreement, account statements, the receipt for payment of contribution to the ABF.

actions¹⁰⁷. Files that may be attached shall observe formats allowed¹⁰⁸; for example, "video" files are not accepted in support of the complaint and cannot be uploaded to the portal¹⁰⁹. The complaint will be finalised and submitted by clicking on the bottom "transmit the appeal".

Through the online portal, users can perform all the relevant activities concerning the complaint, which are in particular: (i) monitor the status of his/her complaint; (ii) respond to requests for additional documentation sent by the ABF¹¹⁰; (iii) receive and send documentation; (iv) renounce the complaint or inform the ABF on reaching an agreement with the intermediary; (v) receive the intermediary's counterarguments and reply to them; and (vi) request support and contact the ABF.

Once the procedure is finalised, the complaint dossier¹¹¹ will be submitted to the ABF panel in charge of resolving the dispute¹¹², which may also meet by videoconference¹¹³. The decision of the ABF will be communicated through the online portal¹¹⁴.

107 The guided procedure requires the user to provide the necessary information (e.g., the name of the intermediary) and to give a description of the dispute and the reason for the complaint in a specific box; users are then required to upload the documents necessary to submit the complaint. For further information, consult the guide for using the ABF portal available at <<https://www.arbitrobancariofinanziario.it/presentare-ricorso/index.html>> accessed 25 February 2021.

108 Files allowed are the following:

doc, .docx, .pdf, .xls, .xlsx, .rtf, .txt, .jpg, .jpeg, .tiff, .bmp, .pmg.

109 In addition, it will not be possible to transmit documentation containing special categories of personal data or data relating to criminal convictions and offences (provided for in Artt. 9 and 10 of EU Regulation no. 679/2016) through the ABF Portal. After submitting the complaint online, users will still be able to send relevant documentation to the PEC address of the Bank of Italy branch where the relevant technical secretariat operates; for further information, consult the guide for using the ABF portal available at (n 1299).

110 The Panel in charge of resolving the dispute can request further evidence from the parties, see Bank of Italy provisions of 18 June 2009, Section VI, par. 2.

111 A technical secretariat is in charge of compiling the complaint dossier, see Bank of Italy provisions of 18 June 2009, Section IV.

112 Each panel consists of five members, operating on a territorial basis, see Bank of Italy provisions of 18 June 2009, Section III, par. 1 and 2.

113 The Panel is duly constituted with the presence of all five of its members: if necessary, the member appointed as President arranges for the panel meeting to be held by videoconference, with the connection from one of the Bank of Italy's branches, see Bank of Italy provisions of 18 June 2009, Section III, par. 4.

114 Relevant decisions are published online on the ABF's website, see Bank of Italy provisions of 18 June 2009, Section IV, par. 2; notice of the intermediary's failure to comply or lack of cooperation is published online on the ABF website for

Filing a complaint in paper copy to the ABF is possible only under specific circumstances¹¹⁵; the ABF will not accept complaint filed in paper copy under circumstances other than those expressly provided for.

Based on the ABF model, the Arbitro per le Controversie Finanziarie (ACF) was established in 2016 concerning disputes in the financial markets sector. Thus, ACF is competent for disputes concerning investors¹¹⁶ and financial intermediaries (including banks) within the realm of the provision of investment services and activities, while ABF is competent for disputes involving customers and (also) banks about the provision of banking services and activities.

Provisions regulating the submitting of complaints to the ACF almost replicate those governing the submission to the ABF¹¹⁷. In particular, Consob Resolution no. 19602 of 4 May 2016 and Consob Resolution no. 19700 of 3 August 2016 are to be taken into account¹¹⁸.

Users are required to register themselves firstly at the ACF website¹¹⁹. Then, submit the complaint by accessing the "reserved area" on the same; the procedure is free (no contribution is needed in comparison to ABF procedure) and takes place exclusively online following the guided procedure once entered in the reserved area. All documents shall be uploaded only in PDF or image format¹²⁰.

Users can monitor their complaint, access and view the complaint dossier, receive and transmit communication and documentation online

five years and prominently on the home page of the intermediary's website for 6 months, see Bank of Italy provisions of 18 June 2009, Section VI, par. 4.

115 These are the following: (i) when the complaint is made against two or more intermediaries at the same time; (ii) when the complaint is made against a foreign intermediary operating in Italy under the freedom to provide services; (iii) when the complaint is made against a loan guarantee consortium, according to Art. 112, par. 1, Italian Consolidated Law on Banking. When a complaint is filed in paper copy, the complaint form may be filed, together with all the relevant documents, by mail or fax to the competent technical secretariat or any other Bank of Italy branch. The complaint may also be presented in person at one of the Bank of Italy branches open to the public.

116 Retail investors, according to Art. 2, par. 1, lett. g), of the Regulation concerning ACF, adopted by Consob Resolution no. 19602 of 4 May 2016.

117 Even in such cases, a pre-condition to starting the procedure is that a prior complaint has been submitted to the intermediary, see Art. 10, Regulation concerning ACF, adopted by Consob Resolution no. 19602 of 4 May 2016.

118 For further information, consult the practical guide available at (n 103).

119 For further information, see <<https://www.acf.consob.it>> accessed 25 February 2021.

120 For further information, consult the practical guide available at (n 103).

by accessing their reserved area at the ACF website. Users are informed of each stage of the complaint and the inclusion of documents in the complaint dossier through the pec/mail address they have indicated when registering themselves at the ACF website.

The panel in charge of solving the dispute can also meet through teleconferencing or videoconferencing remote connection systems¹²¹.

Based on the favorable experience already gained in the banking and financial markets sector, an ADR body ('Insurance Arbitrator') is to be established for the insurance sector to match the significant results achieved by ABF and ACF in ensuring an accessible, rapid and less expensive redressing methods for customers¹²². However, the approval of the regulation of this new ADR is still pending.

In conclusion, ADR systems in financial sectors are examples of applying digital tools in dispute resolutions and the benefits these can bring. It should be pointed out that ADR systems are not subject to the same procedural and constitutional safeguards characterizing ordinary judicial proceedings; therefore, it seems more comfortable for ADR systems to reconcile the application of digital tools with rights granted to the parties involved in the dispute.

6. *Conclusive remarks*

The Italian legal system explicitly recognises DLTs and smart contracts and sets-up a legislative framework governing their uses and their legal effects, even though the same is currently incomplete. The legal definition of DLTs and smart contracts has been criticised on the assumption that it violates the principle of technological neutrality, and that it provides

121 See Art. 7, Resolution no. 19700 of 3 August 2016. If the panel accepts the complaint made by the investor, it will indicate the action to be taken by the intermediary, specifying a time limit within which such actions shall be executed. If the intermediary does not comply with the decision, notice will be given on the ACF website, in two national newspapers and on the home page of the intermediary's website, see Art. 16, Regulation concerning ACF, adopted by Consob Resolution no. 19602 of 4 May 2016.

122 Art. 187.1 of Legislative Decree n. 209 of 7 September 2005, as recently introduced by Legislative Decree n. 187 of 30 December 2020. The provision sets forth that insurance companies and insurance distributors shall adhere to alternative resolution systems for settling disputes with customers concerning insurance services arising from all insurance contracts, without any exclusions. In agreement with the Minister of Justice, a decree by the MiSE should set up these systems.

for additional requirements for the fulfilment of the written form. The AgID guidelines should help setting out and clarifying the DLTs legal framework.

Specific sectors of the legal affairs showed individual activism in the implementation of DLTs and blockchain-related projects in comparison to others. Some projects have been dropped and others are still in use and object of further development. In general terms, the process is currently at its starting phases and yet to be consolidated. However, some achievements have been so far collected.

Furthermore, Italy has been considered to have relatively highly developed IT facilities about digital tools applied to civil court proceedings. Notwithstanding this, criticisms have highlighted for the complexity of certain aspects of the system underlying the PCT and the formalistic interpretation of its rules adopted by the judiciary. Besides, the epidemiological emergency due to COVID-19 forced the legislator to adopt rules which increased the application of digital tools to civil judicial proceedings; it is not sure whether and how eventually they will shape on a definitive basis the PCT.

Lastly, ADR systems in financial sectors are seen as encouraging experiences in terms of applying digital tools in dispute resolutions and the benefits these can bring; on this basis, a similar ADR system will also be established also in the insurance sector. It may be appropriate to exploit such experiences to identify digital tools that can grant parties rights and the proper functioning of dispute resolution mechanisms also in other sectors¹²³.

123 EU Commissioner for Justice Didier Reynders stated recently that “Italy has to deal with very long trials [...] There are ways to use digital tools to improve the situation. We believe that in the recovery plans it is necessary to invest in the digitalization of justice”; further information available at <<https://24plus.ilsole24ore.com/art/il-commissario-ue-giustizia-reynders-processi-troppo-lunghi-l-italia-in-vesta-strumenti-digitali-ADAwiyLB>> accessed 25 February 2021.