

# The EU Judicial Legal Assistance through Electronic Delivery Document with Certain Research of Blockchain

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## Abstract

Electronic service of documents is an emerging method in civil proceedings in EU member states. National procedural codes are opening up more and more to this option although the types of cases and the range of addressees eligible for this method of service varies considerably.

Expanding electronic service for delivery of judicial or extrajudicial documents in every country will be increasingly popular in the future. Our impact assessment concluded that digitalization and electronic communication offers benefits for the judiciary by simplifying and speeding up cross-border judicial proceedings and cooperation. Messages containing confidential information must be encrypted or secured in some other manner because the security, safeguards, privacy, and modification of the defects of the technology are connected with authentic and human rights.

The basic regulation of judicial electronic delivery abroad appears to be governed by the Council Regulation (EC) No 1393/2007, but this code is not clear and should be revised to be transparent and directly applied.

**Keywords:** Judicial legal assistance, Blockchain, Electronic delivery, Service of judicial legal assistance, Electronic service

## 1 Research Scope

Mutual legal assistance is highly developed in Europe, especially within the European Union (EU), so the research scope of this article is restricted to the mutual legal assistance electronic service proceedings of the EU.

The documents served by mutual legal assistance cover not only judicial but also extrajudicial servicing of documents, because the need for the service may arise in various out-of-court proceedings such as documents seeking or confirming the attendance of persons in the absence of any underlying judicial proceedings. That is why the legal assistance service is regulated in conventions that are not specified to govern legal assistance services [1].

Implementation of electronic delivery should be coordinated through many arrangements. With respect to the direct electronic service, the Council of Bars and Law Societies of Europe and the European Union of Judicial Officers raised questions related to (i) confirmation of the fact that the served person has taken note of the content, (ii) the date of service of a document, and (iii) the validity of the documents sent and their content. In addition, other factors are important, and these issues are discussed in the following sections of this article. The problems typically encountered will be explored step by step in the process of delivery served by digitalization. Finally, some suggestions for future research are addressed.

## 2 Mutual Legal Assistance Conventions and Legislation

### 2.1 Introduction

The service component of European mutual legal assistance is built on various conventions. All of the services abroad that follow European conventions are addressed in references 9 and 10 of this article. Some of these conventions are dedicated to service [2], but others are not specific to the serving process. From these conventions, we can ascertain the development of judicial mutual assistant delivery norms.

Following those conventions, the EU developed rules to consolidate the electronic service for Council Regulation (EC) No 1348/2000 and Council Regulation (EC) No 1393/2007.

Among the numerous conventions and Council Regulations, electronic delivery is regulated only by the Council Regulation (EC) No 1393/2007.

The service of mutual legal assistance documents through electronic delivery by network has been used for a long time in investigations and information exchange, but not for serving people or direct service in mutual legal assistance.

The service of mutual legal assistance documents through electronic delivery is prohibited by the formal diplomatic approach and not approved by those

conventions mentioned above and Council Regulation (EC) No 1348/2000 in Europe for sending documents from one country to another. But in the Internet of Things world, service through electronic delivery is indispensable and convenient. In this era, the service of mutual legal assistance documents through electronic delivery becomes more and more important.

## 2.2 The Emergence of Electronic Delivery in Mutual Legal Assistance

Reflecting the growing importance of electronic delivery, Council Regulation (EC) No 1393/2007 of the European Parliament had amended and repealed the Council Regulation (EC) No 1348/2000 regulating the service in member states for judicial and extrajudicial documents in civil or commercial matters (service of documents). The regulation not only prescribes the approved forms of service through electronic channels but also replaces direct delivery by postal service across borders to further provide people with greater convenience and more efficient conveyance.

Looking at all the provisions of Council Regulation (EC) No 1393/2007, electronic delivery is only regulated in Article 23. This article states that “The Commission shall draw up and update regularly a manual containing the information referred to in paragraph 1, which shall be available electronically, in particular through the European Judicial Network in Civil and Commercial Matters.” This provision gives electronic communication legal norms. However, the regulation does not mention electronic service as a possible method for the service of documents in cross-border proceedings and therefore lags behind those national systems already including such methods.

## 3 Concerns with Electronic Service in Judicial Legal Assistance

Service is usually conducted through e-mail (e.g., in Germany, Denmark, Portugal, Czech Republic, and Estonia), Facebook, Twitter, specified platforms, ICT (Information and Communication Technology) systems, OAM (Officially Appointed Mechanism), facsimile, or similar methods.

The service via an e-mail by participating countries always requires a return e-signature for confirmation of receipt by the addressee. Skill in applying the e-signature may be difficult for older people not adept at operating a computer.

Even in some situations, using an ordinary method such as e-mail or the ICT platform does not guarantee that the transfer or receipt by the addressee is always successful. It may happen that the recipient overlooks the message transmitted by the parties or through the court because normal e-mail accounts are usually being used for many other purposes and the addressee might underestimate the legal significance of judicial service

of documents received this way [3]. When the e-mail is received by the computer, a receipt is returned immediately to the sender. If the e-mail is opened by a non-recipient sharing the computer, the e-signature confirmation of receipt is still automatically returned to the sender. Sometimes the addressee does not receive the e-mail due to filtering software or an antivirus program that removes the letter but a delivery notification is automatically sent to the sender via the electronic platform or special system. Consequently, verification that the e-signature was sent by the intended person is not possible. In contrast, in a traditional service such as postal delivery, the recipient or an agent is required to sign the receipt in person and thus the handwritten signature on paper certifies who received the letter. Therefore, a key function of the handwritten signature in person cannot be done by e-mail. This is clearly a deficiency of electronic delivery. However, the receipt date of delivery through post or other traditional methods may be different than the date of the handwritten signature, so the authenticity of the signature and the date of receipt must be verified. But with electronic transmission, the receipt date is automatically provided through the e-mail or other electronic system, thus delivery via e-service using technology offers a neutral way to authenticate date of receipt.

Furthermore, electronic service may only be permitted as a possible medium of service and communication between the parties and with the court when consent is given before the proceeding is initiated. According to the principle of the procedure based on court law, the kind of legislative approach will affect the effectiveness of e-mail delivery. Some countries, such as Estonia and France, recognize that service is confirmed when the documents are opened to be read and a receipt is automatically returned to the sender, but other countries have determined that service is confirmed when the documents are received by the mailbox or outlook system. These are examples of the different legislative approaches taken by various countries. Different kinds of legislation govern the various legal effects. Therefore, a more unified regulation is needed.

Despite the e-mail service in mutual legal assistance, each member state of the European Union seems to have developed its own IT system without considering the possibility of making it compatible with the systems of other countries. Discrepancies in the digital platform may result in the letter not reaching the recipient, or the receipt not being delivered to the sender. So, it is necessary to build an officially appointed mechanism that ensures a unified regulation of electronic delivery.

Without a uniform system, in certain countries, all legal persons and businesses are required to have a digital account and can, therefore, be served by e-service (e.g., in the Czech Republic), while in other

countries (e.g., Italy) all public bodies, businesses, and professionals are required to have a digital account, and for still others (e.g., Lithuania), only certain categories of organizations are required to do so. A uniform regulation should include preregistration with secure log-in credentials and encryption protocols, an e-signature function, and other certificates. Only certain actors would be required to have an account within the platforms and be eligible for electronic services, such as lawyers, judges, clerks, bailiffs, but sometimes also private preregistered users. Participation should be voluntary and require prior consent. For elder persons who lack computer skills, they may ask others for assistance in handling the account, creating a risk for leaks of their personal information and the security of the letter may also be affected. Another weakness is if the intended recipient fails to create a mandatory account, a constructive service or a physical method would need to be employed, which requires a foreign person appointed as an authorized representative in the country or other requirements, a situation that might push the person far away from ordinary experience without mandatory legal representation and might compromise justice.

Because of the above-mentioned concerns, the provision of Article 23 of Council Regulation (EC) No 1393/2007 does not directly address electronic delivery.

Under the present circumstances, an impact assessment determined that the effectiveness of the proposed regulation would be improved, mainly by reducing the costs and delays of the e-service abroad. However, responding to past concerns, the European Commission highlighted two modifications [4]. “(1) Mandatory electronic communication between the agencies and the facilitation of electronic. These improvements would increase the efficiency and speed of proceedings, and reduce the burden on people and businesses. (2) The impact assessment concluded that benefits would result from using electronic communication for digitalization of the judiciary, by simplifying and speeding up cross-border judicial procedures and judicial cooperation.” In other words, many practical issues could be solved through an e-service, such as the cost of establishing and maintaining the digital platform, time regulated to allow for instant delivery, and documentation of receipt by letting the system send a receipt when the document is received and read by the addressee. Those elements are easily solved, but the following problems are more challenging.

### 3.1 Privacy

The judicial documents transmitted pursuant to this proposed regulation should be treated within the scope of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 for the protection of individuals regarding the processing of personal data and the free movement of such data [5], and of Directive 2002/58/EC of the European Parliament and

of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).

The elderly or persons with disabilities who are not able to use computers will be excluded from access to privacy protection and other safety matters because they have to ask someone for help in preregistering and using a digital account to consent when delivered through an electronic service or a digital specified platform.

Regulation (EU) 2016/679 is the European Union’s new General Data Protection Regulation (GDPR) that regulates the protection of personal data when an individual uses personal data outside the private sphere, such as for socio-cultural or financial activities, then the data protection law has to be respected.

There is no special norm for mutual legal delivery, nor are norms specified for electronic delivery in the Regulation (EU) 2016/679. Whereas Article 23 of Regulation (EU) 2016/679 stipulates that “Transfers should only be allowed where the conditions of this Regulation for a transfer to third countries are met,” [6] this provision may be applied to mutual legal assistance.

In line with the goal of developing better regulation guidelines, it is important to assess the operation of the instrument in relation to the five key mandatory evaluation criteria: effectiveness, efficiency, relevance, coherence, and (EU added) value. The main conclusions of REFIT (Commission’s Regulatory Fitness and Performance Programme) recommend strengthening the protection of privacy through an alignment with the General Data Protection Regulation, to ensure that exceptions to the “consent” rule for cookies are possible provided that they do not create any privacy risk, and to address national implementation problems and facilitate the exchange of best practices.

Another common problem is the size of letters in the text of contracts are usually very small and difficult to read. If you don’t pay close attention, it’s easy to overlook the small print and simply agree to all of the contents in the contract. Moreover, the computer option is generally unknown, so it is easy to be misled. The General Data Protection Regulation (GDPR), applied as of May 2018 should increase awareness and prompt action to ensure the security and integrity of databases, to ensure swift reactions to breaches of privacy in the judiciary; and to allay persistent threats to cybersecurity in the public sector.

In the EU, GDPR applies to any privacy problem arising from digitalization except the processing of personal data of deceased persons or of legal entities. The rules also don’t apply to data processed by an individual for purely personal reasons or for activities carried out in one’s home, provided there is no connection to a professional or commercial activity. In addition to those conditions, the relevant mutual legal

assistance must be applied to GDPR, and then the issues of privacy would be resolved. In other words, the legislation of privacy protection in performing electronic service of mutual legal assistant may proceed according to the specification of GDPR.

### 3.2 Safety

It is important to guarantee the safe electronic communication and exchange of documents between the users of a decentralized IT system, in which the transaction process provides for automatic recording of all steps in the workflow and ensures that only authorized participants with verified credentials may use the system [7].

According to the proposal made to the Commission's Regulatory Fitness and Performance Programme (REFIT), the safety checks need to be strengthened [8]. How might this work? REFIT sets up a framework of judicial cooperation aligned with the digital single market strategy. It would help improve the speed and efficiency of cross-border proceedings by reducing the time spent on sending documents between agencies and by reducing reliance on paper-based communication. This would ensure safe electronic communication and exchange of documents between the users of the decentralized IT system, and it would provide for automatic recording of all steps of the workflow. It would also have security features to ensure that only authorized participants with verified identities may use the system.

## 4 Blockchain Protects Security

The blockchain theory has become popular in recent years in discussions of security and privacy matters. This theory may offer helpful guidance in the electronic practice of legal assistance to address security issues in the transmission process.

The basic theory behind blockchain is that each user has two keys, a public key and a private one. The public key can be known to others, while the private key is known only to oneself and a one-time address is used to receive a letter or message. When A wants to send a message to or trade with B, A needs to use B's public key to encrypt the transaction, and this encrypted message or transaction can only be unlocked by using B's private key [9]. Let's say that A refers to the judicial institute and B refers to the addressee, lawyers, or the parties of litigation. During the process, under blockchain theory, the privacy of the contents of documents and safeguarding the security of the communication would be ensured.

Through the cryptographic hash checksum method, it can be ensured that the transaction data will not be copied, and thus privacy is protected.

Both old and new materials are difficult to change. It is also possible to confirm whether information has

been tampered with from outside. Therefore, such a system is more stable in terms of security protection and does not require a high investment.

Recently, news reports have increasingly documented that hackers steal databases that use blockchain to process files. However, instances of exchange or data hacking do not indicate that blockchain is unsafe because the exchange is not built on the blockchain.

### 4.1 Blockchain Protects Privacy

All we need to be concerned about with privacy in the chain is that everyone knows there is a delivery coming from the court or judicial institute to be served to someone, but no one knows who that person is because the addressee is composed of digital numbers that cannot be linked to an individual. Therefore, there is no risk to privacy.

Additionally, not everyone can see the information or record on the blockchain. The application of blockchain is divided into three major types [10].

- Public blockchain: Everyone has access to all the information, and anyone can initiate a transaction. Participants in the consensus process can maintain the security of the database by means of cryptography.
- Federated blockchain: The participating nodes are preselected, the blocks are not arbitrarily expanded, and the network between the nodes is even pre-defined to ensure security.
- Private blockchain: Only individual users have the capacity to participate in nodes and all data usage has strict permission control.
- The Judiciary or the Department can use these three types to control the disclosure of information so that privacy is protected.

No one can open an e-letter without a private key unless someone with a private key shares that information or asks someone else to open the e-letter on behalf of the recipient; therefore the aforementioned problem of who received it can be specified. Thus, privacy is protected.

The theory of hashcash algorithm, elliptic curve digital signature algorithm, and various hash functions provided by blockchain can solve the problem of delivery errors because these functions ensure that the data or documents cannot be falsified in electronic transmission. In this way, the data will not leak and privacy is protected.

Although everybody in the chain would know there is a delivery coming from the court or judicial institute to be served to someone, no one knows who the person is because the addressee is identified by digital numbers and cannot be named. Therefore, there is no risk to privacy

### 4.2 Blockchains Reduce Cost

Under the theory of blockchain, there is no need for exclusive lines or backup investment to prevent sudden

system crashes, so costs would be contained.

The unified platform is not required for delivery through blockchain, nor is there a need to specify a platform to execute the process to achieve the same effect. So, again, the cost would be reduced.

## 5 Conclusion

Expanding electronic service for delivery of judicial or extra-judicial documents for all countries will gain popularity in the future. The impact assessment concluded that benefits would result from using electronic communication for digitalization of the judiciary, by simplifying and speeding up cross-border judicial procedures and judicial cooperation. Messages containing confidential information must be encrypted or secured in some other manner to ensure that the security, safeguards, and privacy are protected, thus modifying any defects of the technology in connection with authentic and human rights.

The basic regulation of judicial electronic delivery abroad seems to be governed by the Council Regulation (EC) No 1393/2007, but it is not clear and should be revised to be more transparent and directly applied.

The legislation of GDPR concerned with the security, safeguards, and privacy of electronic service, and the method would be better served through a blockchain system as suggested above.

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## Biography



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