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# Legal aspects of electronic commerce

## Proposal by the Government of Spain

## Note by the Secretariat

Within the framework of preparations for the forty-fifth session of Working Group IV (Electronic Commerce), the Government of Spain has submitted to the Secretariat the attached document.

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# Annex

## Future work of Working Group IV (Electronic Commerce): electronic transferable records

In view of the decision adopted at the forty-fourth session of the Commission with respect to Working Group IV (Electronic Commerce), the delegation of Spain would like to suggest some possible areas of work with a view to facilitating decision-making by the Group during the initial stages of its work. The objective of this working paper is therefore not, for the time being, to submit a non-negotiable formal proposal but simply to identify the issues that, in the view of the delegation of Spain, might be highlighted as relevant when the Group takes up the work entrusted to it, that is, work on electronic transferable records. In the paragraphs that follow, the opinion of the delegation of Spain with regard to some aspects of the issues under consideration is set out.

### 1. Common features of national regimes applicable to negotiable or transferable documents

Taking as a starting point the basic objective of developing an instrument that enables or helps States to draw up legislation on electronic transferable records, the delegation of Spain considers it of vital importance to identify precisely what the point of departure and the focus of the Group's work should be. Doing so will, inter alia, make it possible to determine the content and scope that the instrument should ultimately have. There is no reason why the principles to be applied in carrying out this task should differ from — and indeed they should not differ from — those observed by UNCITRAL when drawing up previous instruments in the area of electronic commerce. In particular, regulation of the electronic equivalent of paper-based negotiable or transferable documents should be based on the identification of the functions that paper as a medium, and the elements arising from its use, fulfil within the framework of the legal regime applicable to them, in order to thus determine, in compliance with the policy guided by the principle of functional equivalence, how electronic means can fulfil the same functions as paper and thus achieve recognition as having equal legal effect.

The features referred to, since they are dependent upon a physical medium such as paper, relate strictly to the formal aspects of transactions that centre around the issuance and use of such documents. In that regard, the delegation of Spain is of the view that, as on past occasions when addressing issues in this area, the work to be undertaken and the expected result must focus on the purely procedural aspects of the phenomenon under consideration. As can be seen, the process described requires the analysis of what those features are under national legal regimes, since any attempt at harmonization in this area must take into account the extent to which national laws are already harmonized with respect to some or all of the aspects of potential relevance.

#### (a) Negotiable or transferable documents

In order to ensure consistency with the approach proposed, a step that must first be taken is to clarify the meaning of the term "transferable records". This will

make it possible, inter alia, to delimit the scope of the work and the scope of application of the instrument developed. This clarification is necessary not only because the meaning of the term may differ depending on the legal tradition concerned but also because of the different ways in which the various types of negotiable document have evolved both in commercial practice and in legislation, and because of the way in which that evolution has come to influence formal issues.

In that regard, the delegation of Spain considers that the work should focus on transferable documents, identified as documents as yet in paper form and therefore dependent on that medium. Documents of this kind are usually issued individually, such as promissory notes, bills of exchange or documents of title to goods. In reality, the types of document that fall within that category inevitably depend on the practice and national legislation of each country. The key factor in that regard is strict dependence on the medium of paper and the consequent need to eliminate obstacles to the use of paper and electronic means for the same purposes and with the same effects. Some of the documents originally categorized in legislation as negotiable or transferable documents are no longer dependent on that medium, since a number of instruments have for some time provided for the representation of those documents in data sets in electronic form, such as registry entries. This is most often the case with regard to negotiable securities issued en masse (and perhaps grouped into series or categories), such as stocks, bonds and financial instruments in general. For reasons unrelated to the advent of the electronic communication network and more closely linked to the functioning of organized or official secondary markets, securities of this kind, which many years ago were also paper-based, can be in electronic form (electronic records and registry entries), and consequently their transfer, transmission or negotiation can also be carried out by electronic means. Thus, given that systems for the issuance and negotiation of instruments or securities of this kind by electronic means are already in place in every country, such documents or securities should be set aside from the immediate objectives of Working Group IV.

**(b) Elements of the protocol characteristic of transferable records**

Negotiable or transferable documents, as is known, are characterized by the fact that they provide a mechanism for the transfer of rights that is alternative to the ordinary assignment regime, based on the specific way in which the document is drawn up and the specific nature of its content and consequently on the transfer of the document in the manner and according to the procedure established by law. That manner and that procedure are based on the transfer of possession, together, in certain cases, with the addition of certain information to the document. A logical consequence of this mechanism is that the owner of the document and thus of the rights incorporated in that document must prove and assert that ownership through the possession and presentation of a formally correct document. From this mechanism, which is based on the application of the regime for the transfer of movable property to intangible property, such as personal rights, other legislative consequences arise that relate to the substantive regime specifically governing such transfers of documents and rights and that, although based on the specific formal and physical elements (possession) of the protocol, transcend those elements. In most cases, therefore, the two essential parts of the mechanism provided for by law are the documentary nature (and the paper-based form) of transferable documents and their possession.

### 2. Legislation that currently provides for the issuance and use of electronic transferable records

There are already some examples of existing legislation that provides for and regulates the issuance and transfer of electronic transferable records. While such examples — some from national legislation, others from international instruments — are few, they provide useful models that should be taken into account.

#### (a) The uniqueness of the record

The first such example can be found in the UNCITRAL Model Law on Electronic Commerce and, by extension, in the national laws in which the relevant provisions of the Model Law have been incorporated. In part two of the Model Law, specifically article 17, specific reference is made to contracts of carriage and to the documents that can be issued pursuant to such contracts in order to regulate situations in which, in particular, rights can be transferred under the contract of carriage through the transfer of documents. In such cases, in which the Model Law provides specifically for the use of negotiable transport documents, such as bills of lading, the regulation provided by the Model Law is based on the guarantee of the uniqueness of the document in order to ensure that there is only one possible holder and owner of that document, as in the case of paper documents.

#### (b) Legislation based on control of the record as equivalent to possession

A second example, with a somewhat different and more fully developed approach, can be found in the United States of America: in the Uniform Electronic Transactions Act and the Uniform Commercial Code — more precisely, in both cases, in the laws that have incorporated the solutions provided by those instruments in this specific area — and in the Electronic Signatures in Global and National Commerce Act (ESIGN).[1] Among international instruments, a parallel approach is set out in the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea of 2008 (the “Rotterdam Rules”).

Article 16 of the Uniform Electronic Transactions Act regulates the conditions under which electronic transferable records may be issued for the same purposes and with the same effect as records issued on paper. The provisions of the Act apply specifically to promissory notes and documents of title to goods. Article 7 of the Uniform Commercial Code, meanwhile, regulates documents of title to goods that are issued electronically and in negotiable form. The Electronic Signatures in Global and National Commerce Act restricts the scope of its application in this specific area (see section 7021 of the United States Code) to promissory notes issued in connection with a loan secured by a right in rem in immovable property, but has the same structure and approach as the previous examples. The Rotterdam Rules regulate, in a subsidiary manner and within the framework of the main subject matter — contracts for the international carriage of goods wholly or partly by sea — negotiable electronic transport records in electronic form.

The framework used in all of the above examples is based on the identification of a functional equivalent to possession that in legislation is referred to as “control” or “exclusive control” of the record, on the basis of which the mechanism or

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[1] United States Code Annotated, Title 15, chapter 96; see section 7001 et seq.

protocol for the transfer of the electronic record and of the rights incorporated in it is determined. Thus, under that mechanism, in order to transfer the record, the transfer of control (or exclusive control) of the record is necessary, while in order to exercise the rights incorporated in the record, proof of possession — in the form of proof of control of the document — is required.

In all of the examples given, control, as a functional equivalent of possession, is characterized by the fact that it fulfils the same function and serves the same purpose, that is, to identify reliably the owner of the record. The requisite criteria for establishing control of an electronic transferable record are thus (albeit in a different manner under each of the legislative instruments indicated) defined by reference to the capacity of the technology and the system used in the relevant communications to fulfil that function in a sufficiently reliable manner.

In determining what constitutes control of the record, it is important to bear clearly in mind that, in transactions entered into and carried out by electronic means, any exchange or transfer of intangible assets, such as electronic transferable records, will be based on the exchange of information between the parties through the electronic communication network. This means that control will be based purely on the exchange of information that, in most cases, will be written information. One of the various consequences of this is that control, as a reliable indicator of ownership, covers both the functions that in the world of paper we associate with information written in the record (identification of the owner by means of formal requirements such as endorsement) and the functions that we attribute to possession.

The circumstances described above have naturally been taken into account by legislators in all of the cases that we have used as examples. One of the clearest indicators of this is that the legislation referred to presupposes, relatively implicitly, that parties to transactions in which an electronic transferable record can be used will agree on the system and ultimately the technology to be used for the issuance and use of that record. Thus, a key factor influencing whether or not the issuance and transfer of an electronic transferable record is recognized as valid is the technology required for the transfer, the degree of availability of that technology on the market, the architecture and the protocol or mechanism which it logically entails in practice and, as already mentioned, the degree of reliability that it achieves in fulfilling the function indicated, namely the identification, at all times, of the owner of the transferable record.

Services relating to the use of electronic transferable records of various kinds are already available on the market, in some cases provided for under the aforementioned legislation. Those services are typically outsourced, that is, they are services provided by third parties distinct from the parties that wish to use electronic transferable records in their transactions (and that are therefore the service users). These entities act not only as service providers but also as trusted third parties to the extent that the value of the service provided and its distribution on the market depend, among other variables, on the reliability of the systems that they use and on the reputation that they are able to build up on the basis of that reliability. It is difficult for the users of such services to be able to determine to the necessary extent the reliability of the technology used and whether there is any guarantee that the features of that technology ensure, to a reasonable degree, the existence of the document, the originality of the information that it contains, the authenticity of both the document and any signatures that it may bear, the integrity

of the communications exchanged in connection with its use and the identity of its issuer and owner (and that of any other persons that may be referred to in the document in connection with their involvement, at whatever stage, in its circulation). The role of such entities is therefore that of trusted intermediaries as third parties removed from the transactions in which their services may be used. This aspect should be taken into account by practitioners responsible for applying relevant legislation (judges, for example) and thus for deciding whether control of the document exists and whether the entity that claims to have such control is therefore the owner of the record, since that determination should be correct only if the communication system used ensures to a reasonable extent that the transferable record has the requisite qualities and if that system reliably identifies the owner of that record. The concept of reliability is therefore of vital importance in this and other areas of electronic commerce law (digital signatures; originality of the document).

### 3. Systems used in practice for the issuance and transfer of electronic transferable records

All existing systems for providing services of this kind (like the systems that preceded them) satisfy, in different ways, the requirements indicated. Thus, they are based on the creation of information management systems designed to enable users to verify, by means of technology and communications, the conditions that by law must be met in order for the desired legal effects to be recognized. In some cases, the systems are specifically designed to fulfil that purpose and are consequently available commercially with the aim of enabling users to issue and negotiate electronic transferable records. In other cases, the systems are not yet traded for that purpose but may be used to issue and transfer electronic transferable records.

According to one of the types of classification typically used to differentiate these systems, a distinction is made between registry systems and token systems. This classification is based on the logical and protocol-related structure and architecture of each such system. In all cases, the systems in question are information management systems designed for a specific purpose: the issuance and transfer of electronic transferable records under conditions that satisfy the requirements of the law (the main requirement being that the owner and holder of the record should be reliably identified).

Registry systems are based on the creation of information systems with a registry-based structure. In such registries, which follow the same approach as other registry-based information structures for the assignment of title or ownership rights, the record appears showing the identity of the owner. Transfers of the record and of ownership of the record (with all the consequences that such transfers might entail) take the form of whatever transactions the users have agreed upon either under the system or previously, outside the system, but in all cases involve change of ownership reflected in the register specified by the person authorized for that purpose, that is, the transferring owner. From the legal perspective, such systems are capable of satisfying the control requirement, since the technology on which they are based, being sufficiently reliable, ensures the identification of a sole owner of the record (and of the rights incorporated in that record) at any time. They are also based on the creation of closed environments for centralized multilateral

communications that in turn are firmly based on security measures designed to verify the identify of users and to ensure the integrity of communications.

Token systems are based on an approach that in essence may be described as parallel to that followed in the world of paper; it too is based on the identification of original and unique documents (as is the case in registry systems) that can be recognized as such by the software used to process them and can therefore be transmitted from one information system to another without losing any of the aforementioned qualities. In this way, it is possible to replicate in the electronic environment the approach followed in the physical world, in which the transfer of a negotiable document involves the transfer of the document itself: in the case of a paper document, possession of that document is transferred; in the case of an electronic document, control of the document is transferred (if the system used meets the control requirement, where applicable).[2]

In both cases, regardless of its architecture and the structure in which it results, the approach of the protocol followed by the parties under these systems to produce legal effects would be the same, since, in order for an electronic transferable record (recognized as original and authentic) to be transferred, control of that record must be transferred. Also in both cases, the determination of the existence of the record, its qualities and its effects, as well as its ownership and transfer, are based on the exchange of information. The verification of such qualities and facts is in turn based on the intervention of trusted third parties. Although such entities can intervene in each case in a different way, they act as trusted intermediaries in the verification of the reliability of the system, of the technology that that system uses and, by extension, of the information exchanged. The building of trust is one of the cornerstones of this overall approach, whether viewed from the technical, commercial or service-sector or legal perspective. In many cases, trust-building mechanisms do not differ greatly from those with which we are already familiar in other areas (particularly those relating to electronic signatures), and can be established in alternative structures to which, depending on the role of the service providers themselves as trusted third parties (particularly in view of the persons who might acquire an electronic transferable record), other intermediaries and layers of trust can be added, such as certifying or audit entities or possibly the public sector.

## 4. Scope and objective of the work to be carried out

All of the above observations and comments have been made with the aim of helping to determine the scope and objectives of the work to be carried out by Working Group IV. Consideration of the limited legislation in this area, the experience acquired in the interpretation and application of that legislation and commercial practice conducted in accordance with it serve as an initial indication of

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[2] The so-called “digital objects infrastructure” is consistent with that approach. It is based on the creation and use of “digital objects”, unique and differentiated data sets that can be recognized as such through use of the necessary software, which in turn is based on a system of unique numbering codes that are applied at all times both to the digital objects and to the repositories in which those objects might be located. The codes are assigned by the authorities responsible for their administration (a central registry and a peripheral or decentralized structure).

the issues that might be addressed by such a body as UNCITRAL and the manner in which they might be addressed.

There are a number of points that, in the view of the delegation of Spain, must be resolved during the initial phase of the Working Group's work. Those points include, but are not limited to, the following:

(a) In accordance with the ultimate and overall objective of providing States with the means or instruments to approve legislation on electronic transferable records, the nature of the instrument or instruments to be created should be studied. There are a number of possibilities in that regard. It is the understanding of the delegation of Spain that one option of interest is the preparation of model legislation (a model law or a supplement to the Model Law on Electronic Commerce), particularly in view of the lack of relevant legislation in Spain and indeed in the majority of States. However, other possibilities should also be considered by the Working Group when it convenes.

(b) The issues that such an instrument should address include the following:

- The type of documents to which it might apply.
- The nature and scope of the provisions and principles set out in the final instrument and the relationship of those provisions and principles to existing substantive legislative provisions that constitute the regime governing paper-based negotiable documents. In view of existing instruments and standards in the area of electronic commerce, the option preferred by the delegation of Spain is to restrict the scope of the work and of the instrument finally produced to purely procedural and formal issues in order to ensure consistency with the substantive principles of existing national legislation.
- The provisions that are to govern the issuance and transfer of electronic transferable records, including:
    - Requirements for their valid and effective issuance;
    - Requirements for their valid and effective transfer to a new owner or negotiation;
    - Requirements with regard to proof of ownership of the record, that is, proof of possession;
    - Whether the standards or principles ultimately identified and agreed upon are based on a known concept, such as control of the record, or a different concept, the content and defining elements of that concept;
    - The requirements and standards to be applied in order to withdraw or cancel the record at the time of its termination; and
    - Procedural issues relating to the specific regime governing negotiable or transferable documents and exercise of the rights incorporated in those documents in the context of litigation, and the regulation of those issues with respect to documents issued in electronic form.

- The possible implications of intervention by trusted third parties, whether or not in connection with providers of services relating to the issuance and use of transferable or non-transferable electronic records, and the role that such parties should play. Issues relating to the status of service providers, certifying entities or any trusted intermediary potentially encompass a number of aspects. Those aspects that might be the subject of the work to be undertaken by Working Group IV should be examined. Two issues that the delegation of Spain considers to be of interest are the following:
  - The study of possible models for regulation of the market for such services (for example, those based on the creation of a basic "public trust system" and on a certain degree of public control) with the aim of establishing clear criteria for the application of the standards developed; and
  - Study of the liability potentially faced by such entities and the measures that by law can be taken in order to ensure the optimal regulation of such liability in terms of efficiency and effectiveness.
- The requirements for the cross-border recognition of electronic transferable records, strictly in relation to procedural or formal issues specific to the provisions of electronic commerce law.