

Title : « *From authentication to electronic signature : which legal framework for international electronic communications ?* »

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Abstract

In the age of digital networks, authentication methods have become a key issue in accessing websites, contents or in signing transactions. Therefore, the need for trust is nowadays an established principle among the e-commerce players that should lead to better identification and relevant allocation of operations to specified persons. Thus, issues of authentication and digital signature become crucial elements of international electronic communications. In this context, the principle of mutual recognition of these methods still often lack effectiveness. To ensure proper management of legal risks, particularly in cases of dispute, the digital identity of each participant must be reported or verified as required by the nature of the needs and the level of reliability demanded. This realization induces economic actors to submit to new security requirements for their activities, particularly through the methods and identity authentication in digital form. Moreover, the phenomenon of accountability on the Internet has recently received some confirmation from cases law, with the introduction of the requirement for strong authentication, for example in the context of accessing online bank accounts. The concept of identification, in turn, raises many issues related to risk of denial of electronic legal transactions or fraudulent use of networks (e.g. identity theft). Similarly, as the difficulty of understanding of digital identity that eludes today to fully define and she sees only covered by legislation relating to online identity theft or the current project (still hypothetical) of the French Electronic National Identity Card. Finally, regarding the electronic signature, it helps to manifest the will of the signatory to consent to the document, but as a means of authentication, it must also guarantee its identity, while confirming the integrity of the signed document. Various methods have been developed over the years to achieve these goals, each designed to meet different expectations, to assure different levels of security, depending on different technical requirements. Among these, the conditions bound to the safety during the issue of electronic certificates and electronic signature products find all their interests in front of the need for secure identification protocols and confidentiality data streams. These various means of authentication are increasingly taken into account by both the French legislator and by financial

institutions. In particular, the provisions and practical applications in the banking sector in the fight against money laundering or the on line games of chance (including poker) with the adoption of the new law in 2010 are recent illustrations.

To ensure international cooperation and a true e-commerce development, it is essential that the UNCITRAL adopts international legal rules relating in particular to authentication of persons and objects (e.g. software, websites), the signature of legal persons, mutual recognition of electronic signatures and certificates by different countries through harmonization of security measures adopted for such storage and data hosting or acceptance of signatures and certificates in international operations.

In this context, of a need for secure electronic transactions, for authentication, signature of legal persons, the digital identity management and federation identity have become major issues in the digitalized economy. This is reflected particularly by the establishment for the time scale of some countries, of means of digital identity, signature and authentication for access devices to many online services (public and private) through specifically labeled tools such as IdéNum (France, work in process) and SuisseID (Switzerland, launched in 2010).