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La formazione archivistica contemporanea

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Federico VALACCHI

Modelli, strumenti e finalità della formazione archivistica contemporanea: considerazioni introduttive

INTERVENTI

Hannelore DEKEYSER,
Prof. dr. Jos DUMORTIER

Speaking of record's preservation: avoiding terminological confusion between the archival and legal community

##

Abstract: The paper presents the synthesis of the whole issue related to the education and training in the archival and records management field: the complexity created by a series of juridical transformations, the impact of the information technology in the sector, the opportunities of cooperation among the various institutions involved, including the Schools of the State archives.

In Italia il tema della formazione è tra quelli ricorrenti nel dibattito e nella letteratura archivistica e proprio questa sua ciclica riproposizione rappresenta il principale segnale, se non di una difficoltà persistente, quanto meno della reiterata esigenza che si avverte di individuare percorsi formativi migliori di quelli disponibili, ovvero del bisogno di aggiornarli per tenerli allineati ad una realtà, quella degli archivi, costantemente in dinamica ridefinizione.

Tentare di portare un contributo originale a questa discussione non è semplice. Le aspettative sono diversificate, le idee sono molte e talvolta confuse, così come molti sono i possibili percorsi ed altrettanti i soggetti formatori. Il tema della formazione archivistica, declinato soprattutto in termini di riconoscimento dei titoli e di spendibilità dei medesimi in ambito professionale, è però davvero urgente e delicato. Se ne è avuta ulteriore dimostrazione di recente, con i ricorsi presentati in margine al concorso per dirigenti degli archivi di Stato cui ha fatto seguito un appassionato dibattito di cui si è colta l'eco sulla lista di discussione Archivi23¹.

Sicuramente, in un momento in cui una serie di problematiche congiunte genera una forte pressione sull'intero universo archivistico, mettendo in crisi modelli consolidati, gli spazi per disquisire amabilmente sui percorsi formativi sembrano esauriti. In gioco c'è la stessa sopravvivenza di un'opportunità formativa per la specifica professionalità dell'archivista. Rinviare ulteriormente la riorganizzazione del quadro formativo potrà semplicemente significare rinunciare a formare

¹ Il dibattito "disperso" nelle mail della lista è stato aggregato, con ulteriori integrazioni, su "Archiviando", il forum della sezione ANAI Lombardia all'indirizzo <http://www.archiviando.org/forum/e>, in particolare, <http://www.archiviando.org/forum/viewtopic.php?f=2&t=26>.

Hannelore DEKEYSER¹ Prof. dr. Jos DUMORTIER²

Speaking of record's preservation: avoiding terminological confusion between the archival and legal community

Abstract: Gli autori illustrano una serie di esempi relativi a documenti informativi appartenenti alla categoria dei documenti normativi mettendone in relazione la struttura con quella di riferimento identificata da InterPARES

1. Introduction

In this contribution some illustrations of the terms in which legal texts frame electronic records will be presented and contrasted with the frame of reference developed within InterPARES. The aim here is not to provide an exhaustive study of relevant legal texts, but rather to give some salient examples. Looking only at black-letter law tells only part of the story, as the true scope of the law cannot be measured until it has passed through the hands of judges. However, where statutes exist they serve as a starting point, offering (mis)guidance along the way to all who seek to apply them.

For obvious reasons, only texts with an international scope were considered. The quirks of one nation's laws cannot be held against the legal community at large, whereas the positions held in international texts reflect at least some form of consensus.

The three texts selected were drafted specifically to wean the law from its attachment to paper and embrace the opportunities offered by the information society. Though there are numerous legal texts related to the information society, many of which will reveal some aspect of the drafter's understanding of electronic records and their preservation, these specimens appear particularly telling in this respect. First on the list is the United Nations Convention on the Use of Electronic Communications in International Contracts 2005 (CEUCIC), which – being the most recent text – should reflect the current views on electronic contracts in the legal community.

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Second is the European e-Invoicing Directive, which concerns itself with the authenticity of the origin and integrity of electronic invoices.

Third and last is the European Directive on Distance Marketing of Financial Services, where the term 'durable medium' plays a central role.

As these texts will show, the terminology concerning electronic records as used by the legal community is in a state of flux. On top of this, a number of terms are not used consistently to mean the same thing. As if this weren't enough to complicate an exchange of ideas between archivists and legal experts, a number of terms are clearly false friends, meaning one thing to the former group and quite another to the latter group. Awareness of these pitfalls – and good will on either side – will hopefully smooth the way for a meaningful dialogue.

2. U.N. Convention on the Use of Electronic Communications in International Contracts 2005

The United Nations Convention on the Use of Electronic Communications in International Contracts 2005³ does not establish evidence rules as such, specifically it does not require that a record be made in any particular form⁴. The convention is intended to remove any barriers impeding the switch from paper to electronic contracting in international trade⁵. To achieve this, the functional equivalence approach is adopted.

Why look at rules governing the conclusion of contracts? Preservation of records is at least implicitly involved, as questions regarding validity and probative weight of records will by definition only crop up long after creation, some months, years or decades later.

The law influences recordkeeping needs and practices in organisations to a great extent, however it is clear that recordkeeping is not the core business of the law. Considering the multitude of sources of law, expecting a consistent use of terminology is unrealistic. Additionally, terms are often given a meaning which is autonomous to the legal domain. While lawmakers and judges may feel their definition makes sense in the legal system, when communicating with outsiders this may lead to confusion and misunderstanding.

The term 'record' is not used in the CEUCIC. Instead, no less than three terms are defined to determine the subject matter of the convention:

- (a) 'Communication' – means any statement, declaration, demand, notice or request, including an offer and the acceptance of an offer, that the parties are required to make or choose to make in connection with the formation or performance of a contract;

³ Convention adopted by the General Assembly on 23 November 2005. Text and status available at <http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html>

⁴ Art. 9 para. 1 United Nations Convention on the Use of Electronic Communications in International Contracts 2005 (hereafter CEUCIC), November 23d, 2005. Available at <<http://www.uncitral.org/>>

⁵ Art. 8 para. 1 CEUCIC

(b) 'Electronic communication' – means any communication that the parties make by means of data messages;

(c) 'Data message' – means information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, but not limited to, electronic data interchange, electronic mail, telegram, telex or teletcopy;

Most, if not all, 'electronic communications' will be electronic records. The text also refers to the notion of a 'writing' in the provision on requirements of form. The function of a 'writing' is to ensure that the information contained therein is accessible so as to be usable for subsequent reference⁶. Both definitions are compatible with the definition of a record as any document made or received and set aside in the course of a practical activity⁷.

The term 'authentic' is used once in the CEUCIC:

"DONE at New York, this twenty-third day of November, 2005, in a single original, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally *authentic*".

The term 'authentic' is used here in the sense of 'authoritative'⁸. Translations into other languages may be made, but exist for the user's convenience only. In cases where the interpretation of the convention is disputed, the judge must base his verdict on an authentic language version.

The draft Explanatory Notes to the CEUCIC uses the term 'authentic' exactly twice. First, they explain that "[t]he depositary is entrusted with the custody of the *authentic texts* of the Convention and of any full powers delivered to the depositary, and performs a number of administrative services in connection therewith, such as preparing *certified copies* of the original text"⁹. Again, one can assume that the sense 'authoritative' is meant here, though the InterPARES definition is wholly appropriate in this context. Secondly, the draft Explanatory Notes state that the CEUCIC does not provide an authentic interpretation of any other international convention, treaty or agreement¹⁰. In this instance, the term 'authentic' can only be taken to mean 'authoritative'.

The term 'authenticity' does occur now and again in the preparatory works of the CEUCIC, however it is highly doubtful that it is used precisely as defined in InterPARES. For one, the term is most often used in connection with determin-

⁶ Art. 9 para. 2 CEUCIC

⁷ InterPARES I, Authenticity Task Force Report, p. 1.

⁸ According to the Merriam-Webster dictionary, this meaning is obsolete, however in legal circles this meaning is very much current. In multilingual countries differences between equally authentic language versions of the same law are a never-ending source of debate.

⁹ Legal aspects of electronic commerce: Explanatory note on the Convention on the Use of Electronic Communications in International Contracts (hereafter Draft Explanatory Notes), UNCITRAL, A/CN.9/608, Add. 4, para. 2. Available at <<http://www.uncitral.org/>>

¹⁰ Draft Explanatory Notes, Add. 4, para. 39. The Convention does not interpret, it amends.

ing the origin of documents, primarily through the use of signatures¹¹. Secondly, authenticity is considered a quality separate from integrity¹².

The term 'authentication' doesn't occur in the CEUCIC even once, though it is used countless times in the draft Explanatory Notes and in the preparatory works. Quite clearly, the term is not used in accordance with the InterPARES definition¹³. In the legal context 'authentication' has taken the meaning of a method to identify the originator of a document, primarily through the use of signatures. Providing for functional equivalence between electronic authentication methods and hand-written signatures is one of the stated goals of the CEUCIC¹⁴.

In this light the discussion on whether to include rules of attribution independent from the signature requirements provision is interesting, especially since such rules would be called upon to determine the origin of a document in the absence of signatures and in cases of forged signatures¹⁵.

Unfortunately, there is ample room for doubt. What exactly is the "authenticated legal act" to which cursory reference is made in the draft Explanatory Notes?¹⁶ Is it merely a synonym for "signed writing" or "signed original" – which are mentioned in the same breath – or does it denote a notarized document or notarial deed? In the former case, the legal-technical sense is used, in the latter case the archival definition is used.

What to think of the statement a little further on that "[i]n general, notions such as 'evidence' and 'intent of the parties to bind themselves' are to be tied to the

¹¹ "The requirement that an electronic signature needs to be 'as reliable as appropriate' should not lead a court or trier of fact to invalidate the entire contract on the ground that the electronic signature was not appropriately reliable if there is no dispute about the *identity of the person signing or the fact of signing*, that is no question as to *authenticity of the electronic signature*"; Draft Explanatory Notes, Add. 2, para. 36. See also Report of the United Nations Commission on International Trade Law on the work of its thirty-eighth session (hereafter Final UNCITRAL report), UNCITRAL, A/60/17, July 26th, 2005, nr. 65 ff. and Report of the Working Group on Electronic Commerce on the Work of its Forty-Fourth Session (hereafter Final Working Group Report), UNCITRAL, A/CN.9/571, November 8th, 2004, nr. 127 ff. Available at <<http://www.uncitral.org/>>

¹² A report entitled *Possible future work in the area of electronic commerce* prepared by the UNCITRAL Secretariat asks "how to ensure the authenticity and integrity of the electronic invoice", UNCITRAL, A/CN.9/604, nr. 29

¹³ "Authentication is understood as a declaration of a record authenticity at a specific point in time by a juridical person entrusted with the authority to make such a declaration". InterPARES I, Authenticity Task Force Report, p. 2.

¹⁴ See art. 9 para. 3 CEUCIC with the accompanying comments in the draft Explanatory Notes, para. 13-14 and Add. 2, para. 19 ff. See Add. 2, para. 26 specifically, which states that the CEUCIC establishes the general conditions under which electronic communications would be regarded as authenticated with sufficient credibility and would be enforceable in the face of signature requirements, continuing to add that two main functions of the signature are to identify the originator of an electronic communication and to indicate his intent with regard to the communication.

¹⁵ [4], p. 139 ff.

¹⁶ Explanatory Notes, Add. 2, nr. 17.

more general issues of reliability and authentication of the data and should not be included in the definition of a 'writing'¹⁷. Basically, it means that there are many writings – or records if you will – out there, but only some have any evidentiary or binding value. Legal value is said to depend on 'authentication of the data', amongst other factors. Clearly, both the legal-technical meaning (identification of the originator) and the archival meaning (declaration of authenticity) fit in this statement. The point is, that if lawyers understand one thing, and recordkeepers another, one cannot hold a meaningful dialogue.

The identity of the record is not explicitly considered by the CEUCIC. An obvious reason is that the CEUCIC is intended to remove legal barriers impeding the switch from paper to electronic contracting. Record identity is largely off the legal radar where paper records are concerned, therefore there is no legal barrier to remove. At heart, record identity is a matter of fact. Is the record evidence of an online offering or am I looking at the final mockup of a new webdesign? Is the record a contract concluded between a Mr. Jones and a Mrs. Smith or is it part of the demo of an online contracting application?

In Common law countries, where a system of pre-trial discovery is in place, there seems to be some awareness on the issue of document identifiability. In Continental law countries, the topic seems to be glossed over more readily, by the law and legal scholars alike.

The lack of immediate incentive to deal with record identity, doesn't mean it is not an issue that deserves special attention in the electronic environment, if not because of a theoretical difference between establishing the identity of a paper versus a record identity, but precisely because of the difference in practice.

The concept of record identity sheds some light on the trouble business is experiencing in developing an electronic alternative for negotiable instruments. Such instruments comprise bills of exchange, promissory notes, consignment notes, bills of lading, warehouse receipts or any transferable document or instrument that entitles the bearer or beneficiary to claim the delivery of goods or the payment of a sum of money. In the paper world, only the original document – of the appropriate form, with the necessary signatures and/or seals – can be traded or used to claim the value it represents. The properties of paper make it easy to *identify* the record as being an original or a copy, the core function of the original in this case being its uniqueness¹⁸. Conceiving of the distinction between 'original' and 'copy' in the electronic environment in a meaningful way is difficult. Analysing the problem in terms of record identity seems more promising. The CEUCIC neatly avoids the issue by excluding these documents from its scope¹⁹. Interestingly, the use of a

¹⁷ *Ibidem*.

¹⁸ Final UNCITRAL Report, nr. 72.

¹⁹ Art. 2 para. 2 CEUCIC; Final UNCITRAL Report, nr. 27.

central registry for electronic negotiable instruments is put forward as a workable solution, though at the same time the hope is expressed that a technical solution will be found²⁰.

Integrity of records is given plenty of attention in the CEUCIC, if only in the context of requirements to preserve an 'original'. Unlike in the Model Law on Electronic Commerce, the CEUCIC does not contain a more general provision on retention of electronic communications²¹. Initially, no functional equivalence rule for the retention of 'originals' was included at all. The drafters considered this to be more an issue regarding evidence in court proceedings and in exchanges with the public administration, rather than in commercial exchanges²². When the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention) was drawn into the scope of the CEUCIC, an electronic alternative for originals had to be found, since the New York Convention requires the presentation of the physical "original" arbitration agreement or a certified copy thereof in order to apply²³. The drafters recognized the usefulness of such a provision beyond the limited field of arbitration agreements, as requirements concerning original form exist in other regulations as well.

Art. 9

4. Where the law requires that a communication or a contract should be made available or retained in its original form, or provides consequences for the absence of an original, that requirement is met in relation to an electronic communication if:

- (a) There exists a reliable assurance as to the integrity of the information it contains from the time when it was first generated in its final form, as an electronic communication or otherwise; and
 - (b) Where it is required that the information it contains be made available, that information is capable of being displayed to the person to whom it is to be made available.
5. For the purposes of paragraph 4 (a):

- (a) The criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change that arises in the normal course of communication, storage and display; and
- (b) The standard of reliability required shall be assessed in the light of the purpose for which the information was generated and in the light of all the relevant circumstances.

The understanding of integrity, as put forward by the CEUCIC, essentially corresponds with the definition used in the InterPARES project. The focus in art. 9

²⁰ Possible future work in the area of electronic commerce, UNCITRAL, A/CN.9/604, nr. 32 ff. Cf. Art. 10 MLEC. [4], p. 138 ff. and 172.

²² Report of the Working Group on Electronic Commerce on the work of its forty-second session, UNCITRAL, A/CN.9/546, December 8th, 2003, nr. 53.

²³ Final Working Group Report, nr. 129-135. [5], p. 288.

para. 4 b lies on the integrity of the information conveyed and not on the electronic communication as it existed at a particular point in time. The significance of this approach lies in the allowance it makes for migration or conversion operations. The draft Explanatory Notes point out that the provision is intended to encompass digitisation of paper documents²⁴, thus it stands to reason that conversion operations from one electronic format to another are covered as well.

Objections were raised against the flexible reliability standard which allows for an assessment of integrity on a case-by-case basis, claiming this does not offer an adequate level of legal certainty²⁵. However, the integrity of a record is inherently a matter of fact which can only be evaluated case-by-case. This is true in the paper world, where the trustworthiness of the record's custodian is considered or forensic analysis is performed on the record (dating of the ink and paper, graphological analysis...²⁶) From the introduction of digital signature technology, the legal world seems to have picked up the idea that guaranteeing the integrity of electronic records is a piece of cake. Partly, this is the result of a misunderstanding between technical experts and legal policymakers. Computing checksums is indeed very simple, and it will tell you whether a string of bits has remained intact or not. However, this is not exactly the same as figuring out whether the content of a record has remained unaltered, in spite of modifications in the bit string. Since legal significance is accorded to record content and not a bit string per se, the CEUCIC has its focus on the right object. Likewise, the Working Group rightly recognizes the need for a flexible case-by-case approach to integrity, by expressly rejecting the idea that an absolute assurance of integrity of information is needed if electronic communications are to fulfill the function of original paper documents²⁷.

The exception confirming rules is found in the following passage:

Paragraphs 4 and 5 emphasize the importance of the integrity of the information for its originality and sets out criteria to be taken into account when assessing integrity by reference to systematic recording of the information, assurance that the information was recorded without lacunae and protection of the data against alteration. It links the concept of originality to a method of authentication and puts the focus on the method of authentication to be followed in order to meet the requirement. It is based on the following elements: a simple criterion as to 'integrity' of the data; a description of the elements to be taken into account in assessing the integrity; and an element of flexibility in the form of a reference to the surrounding circumstances²⁸.

²⁴ Draft Explanatory Notes Add. 2 nr. 41.

²⁵ Final Working Group Report, nr. 131.

²⁶ For a historical example, see [6].

²⁷ Final Working Group Report nr. 133.

²⁸ Explanatory Notes Add. 2 nr. 38 ff.

Though the text speaks of 'method of authentication', it is difficult to see how it could mean 'method to identify the originator of a document' in this context. The provision quite clearly deals with integrity, not with origin, nor with identity of the record.

From the CEUCIC we can infer the following in regard to an exchange between legal experts and archivists:

- the term 'record' should cause little difficulty, as it corresponds well with the terms '(electronic) communication' and 'writing'.
- the concept 'record identity' lives beneath the surface, thus an explanation from an archivist's viewpoint is desirable.
- the term 'authentic' has at least one legal meaning which should be distinguished explicitly from the archival definition.
- the term 'authentication' has become almost inextricably linked with electronic signatures, or more generally with any method to identify the originator of a document. This is only one aspect of authentication, as it is understood by archivists.
- the term 'authenticity' is not consistently used to refer to the 'quality of being authentic', often it appears to refer to 'the quality of being authenticated'. As indicated above, both of these terms are 'false friends'.
- the term 'integrity', which in the CEUCIC focuses on the content, matches the archival definition. Integrity is considered the main functional requirement to be ensured by an 'original' in the legal sense.

3. *Authenticity of origin and integrity of contents – the European e-Invoicing Directive*

"Invoices sent by electronic means shall be accepted by Member States provided that the *authenticity of the origin and integrity of the contents* are guaranteed"²⁹.

For once, the law uses the term 'authenticity' in connection with electronic records, still it is blatantly obvious that the term is not used in the sense given to it in the InterPARES context. Clearly, "authenticity of the origin" refers to a quality distinct from integrity, more precisely to certainty about record provenance³⁰. Pre-

²⁹ Art. 22(3)(c) second paragraph, Directive 77/388/EEC, as modified by Council Directive 2001/115/EC of 20 December 2001 with a view to simplifying, modernising and harmonising the conditions laid down for invoicing in respect of value added tax (hereafter e-Invoicing Directive), Official Journal L 15, January 17th, 2002, p. 24-28. A strikingly similar phrase was used in a report entitled 'Possible future work in the area of electronic commerce' prepared by the UNCITRAL Secretariat, UNCITRAL, A/CN.9/604, nr. 29

³⁰ "[A]uthenticity of the invoice origin must be guaranteed, so that the recipient of the invoice can be sure that it really did come from the person who appears to have issued it". Explanatory Memorandum to the Proposal for a Council Directive amending Directive 77/388/EEC with a view to simplifying, modernising and harmonising the conditions laid down for invoicing in respect of value added tax (hereafter Explanatory Memorandum to the Proposed e-Invoicing Directive), COM(2000)650, p. 10. Available at <http://ec.europa.eu/prelex/>.

sumably, the drafters wanted to avoid the term 'authentication', as that has become inextricably linked with signatures in the legal mind³¹. Invoices were traditionally not signed in the past, nor may this be required by law in the future³². Other formulations might have been "accuracy of the origin", "identity of the origin" or even simply "the origin".

On a conceptual level, this piece of legislation is in no way incompatible with the InterPARES findings. Record integrity is covered, record identity is partly covered, the rest is implicitly assumed. Once we arrive at the operational level, things become much more muddled.

The directive provides for three methods of e-invoicing, with a view to guaranteeing the authenticity of the origin and the integrity of the contents.

The first method is by applying an advanced electronic signature (AES) or a qualified electronic signature (QES) to the invoice.

The second method is by using EDI, insofar as there is an agreement on the protocol between the partners that organizes the necessary security measures.

The third method is any other compliant method any Member State might wish to recognize.

Little can be said about the third method, except that this is hardly harmonization of regulation on the EU-level. Through this loophole, businesses can attempt to persuade their governments to allow simpler invoicing schemes (e.g. exchange of invoices by e-mail).

The second method is consistent with a functional equivalence approach, though not exactly technologically neutral. An invoice is a record created and exchanged in the course of business, which must be preserved as evidence of transaction for a number of years. The reason EDI even made it into the directive is undoubtedly due to the lobbying of large businesses, who have invested in EDI systems over leased lines. Arguably, the origin and integrity of invoices is sufficiently guaranteed during transmission over leased lines, if not necessarily after their delivery³³. EDI is defined broadly as "the electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI message". This definition isn't limited to dedicated systems communicating over leased lines, it also covers automated systems which exchange messages over the internet in an XML format. In the latter case, there is no inherent security from a shielded communication line, therefore other means to ensure compliance must be implemented³⁴.

The first method departs entirely from the functional equivalence approach and

³¹ Unfortunately, the preparatory works of EU directives rarely provide much explanation about the reasoning behind regulatory initiatives.

³² Art. 22 (3)(b) para. 3 Directive 77/388/EEC as modified the e-Invoicing Directive.

³³ [7], p. 215.

³⁴ [7], p. 215 ff.

can hardly qualify as technologically neutral. The reference to electronic signatures as defined by the E-Sign Directive is baffling. Member states may not demand that invoices be signed, by hand or electronically, however they must accept electronic invoices sporting an advanced or qualified electronic signature as compliant. The only logical conclusion one can draw is that – in this context at least – the AES and QES refer to a specific kind of technology, namely cryptographic seals, and not to the functional equivalent of handwritten signatures³⁵. The legal chicanery is perhaps not so much of interest, but the assumption that cryptographic seals alone are enough to ensure the origin and integrity of an electronic record for any length of time is telling. The same assumption no doubt underlies the Electronic Signatures Directive³⁶.

Experts have warned against the fallacies of this assumption in the past³⁷, now the cracks are starting to show in practice. Efforts to create electronic notarial deeds in France and Belgium have yet to lead to any practical result.³⁸ A notable exception is perhaps the Alsace-Moselle land register (*Livre foncier*)³⁹. Belgium, like Estland,

³⁵ Explanatory Memorandum to the Proposed e-Invoicing Directive, COM(2000)650, p. 9.

³⁶ Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures, Official Journal L 013, January 19th, 2000, p. 12-20.

³⁷ To name but one, see [1].

³⁸ In France, the notion 'acte authentique électronique' (electronic deed) was introduced into article 1317 of the Civil Code in 2000 (Law n. 2000-230 of 13 March 2000, *Journal Officiel* of 14 March 2005). After 5 years of careful deliberation, the legal framework for electronic notarial deeds was finally completed by decree (Decree n. 2005-973 of 10 August 2005, *Journal Officiel* of 11 August 2005). The *Conseil Supérieur du notariat* (High Council of Notaries) is responsible for implementing the necessary technology, in particular a central archive for electronic records (Minutier central électronique des Notaires de France). Bernard Reynis, president of the Conseil Supérieur du notariat, is confident the archive will be ready to accept the first electronic records in the beginning of 2007 (Conseil Supérieur du notariat, Press release of 26 October 2006). Technical details about the inner workings of the archive, specifically how electronic signatures will be dealt with, do not appear to be available to the public. A hint is given by the decree, which provides that electronic deeds do not lose their status of 'original record' after migration, which suggests the electronic signature will not necessarily be preserved (article 28 of Decree n. 71-941 of 26 November 1971, as modified by Decree n. 2005-973). Belgium has introduced the notion of electronic deeds into its Civil Code in 2003 (Law of 11 March 2003, *Moniteur Belge* of 17 March 2003). Further steps, both legally and technically, are necessary.

³⁹ The land register is held by the magistrates' court and publicizes rights to immovable property in the Alsace-Moselle region. Inscriptions in the land register are presumed to be accurate and makes the published right opposable to the thirds parties. The land register has been successfully computerized and judges now file inscriptions electronically. Each judge has been given a biometric smart card with which he or she can digitally sign records. Most significant aspect of the electronic land registry is the fact that elaborate technical and procedural measures have been put in place to ensure the integrity and authorship of the records, measures of which digital signatures are only one. The land registry's website (<<http://www.livrefoncier.fr>>) does not elucidate this fact, however it surfaced in the InterPARES 2 case study 'Computerization of Alsace-Moselle's Land Registry', see specifically the case study final report p. 22 ff.

has issued electronic identity cards to its citizens, giving everyone the means to create qualified electronic signatures. Though these rollouts are too recent to draw final conclusions, there is at present little evidence to suggest a revolution is near.

From the e-Invoicing Directive we can infer the following in regard to an exchange between legal experts and archivists:

- the term 'record' should cause little difficulty, as electronic invoices are an obvious example of records.
- 'record identity' is only understood implicitly, thus an explanation from an archivist's viewpoint is desirable.
- the legal notion 'authenticity of the origin' does not mix well with the archival notion 'authenticity'.
- on the surface, the term 'integrity' means the same to archivists and legal experts, however the prominent position given to digital signature technology suggests otherwise.

4. A durable medium – the European Directive on Distance Marketing of Financial Services

The term 'durable medium' was first introduced in EU law in 1997 in the Distance Selling Directive, where it was meant to pave the way for e-commerce⁴⁰. Hence the 'durable medium' was introduced as an alternative to a 'writing'. Nowhere does the directive explain what a 'durable medium' is, however the recitals point out that the drafters wanted to address the ephemeral nature of electronic information, insofar as it has not been fixed on a "permanent medium"⁴¹. As is so often the case with EU legislation, the preparatory works shed little light on what the drafters had in mind.

The juxtaposition of 'writing' with 'durable medium' indicates that the drafters implicitly understand a writing to be information on paper⁴². As examples of alternative durable media, microfilm and microfiche are strong candidates, though considering the consumer context these are hardly practicable solutions, nor are they conducive to e-commerce. Declaring any electronic medium as 'durable' is problematic at best. More importantly, the durability of any particular medium is besides the point, it's the preservation of the electronic record on it that matters.

Clever lawyers will argue that there is no need to cling to the literal interpretation of consumers in respect of distance contracts (hereafter Distance Selling Directive), Official Journal L 144, June 4th, 1997, p. 19-27.

⁴¹ Recital 13 of the Distance Selling Directive states: "Whereas information disseminated by certain electronic technologies is often ephemeral in nature insofar as it is not received on a permanent medium";

⁴² The term 'writing' is used ambiguously throughout the Directive, sometimes denoting a text fixed on paper (art. 5 (1), first paragraph), other times denoting just a textual message affixed to a medium (art. 5 (1), second paragraph, first indent and art. 11(3)(a)).

tion of 'durable medium', but rather to take guidance from the law's spirit. The aim is to ensure that the consumer is given a record, either in physical or electronic form, which is available and accessible to him. This is exactly the direction taken by a follow-up Directive on Distance Marketing of Financial Services, where a durable medium is defined as "any instrument which enables the consumer to store information addressed personally to him in a way accessible for future reference for a period of time adequate for the purposes of the information and which allows the unchanged reproduction of the information stored"⁴³. The way 'durable medium' is recast in this definition shows how ill suited this term is. As any digital archivist will tell you, having a reliable medium is a critical factor in preservation, but it is insufficient of itself.

The various wordings proposed for the definition of 'durable medium' throughout its legislative history are worth taking a look at. It reveals that the drafters, and by extension the legal community at large, share many – if not all – concerns with the archival community. It also reveals the lack of a stable frame of reference, in the sense that electronic records emerge as a moving target, continuously slipping from the drafters' grasp.

The initial proposal from the European Commission defined the term as follows⁴⁴:

- "'durable medium' means any instrument enabling the consumer to store information, without himself having to record this information, and in particular floppy disks, CD-ROMs, and the hard drive of the consumer's computer on which electronic mail is stored".

This definition shows no sign of awareness that the medium is not the only issue in digital preservation. Floppy discs can safely be called obsolete today, with respect to CD-ROMs and DVDs it is just a matter of time. The durability of a particular consumer's hard drive is open to debate⁴⁵. This approach to digital preservation can only be called naive and was fortunately abandoned later on. Yet, the Economic and Social Committee in its opinion on the proposal called for "a more technical and exhaustive definition"⁴⁶.

⁴³ Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002 concerning the distance marketing of consumer financial services (hereafter Distance Marketing of Financial Services), Official Journal L 271, October 9th, 2002, pp. 16-24.

⁴⁴ Proposal for a Directive of the European Parliament and of the Council concerning the distance marketing of consumer financial services, COM(1998)468, Official Journal C 385, December 11th, 1998, p. 10-17.

⁴⁵ Demoulin – in her legal analysis of the term 'durable medium' – characterizes hard drives as a 'théâtre for unexplained phenomena' ("le disque dur d'un ordinateur est quelquefois le théâtre de phénomènes inexplicables") and floppy discs as 'unpredictable' ('imprévisible'). CD-ROMs she accepts as *uncontestably durable*, though impractical in online commerce. [2], p. 369 ff.

⁴⁶ Opinion of the Economic and Social Committee on the proposal for a European Parliament and Council Directive concerning the distance marketing of consumer financial services, ESC/1999/458, OJ C 169, June 16th, 1999, p. 43-48, para. 2.8.

The European Parliament proposed some noteworthy amendments⁴⁷, all of which were rejected by the Commission subsequently:

- “‘durable medium’ means any instrument enabling the consumer to store *and/or print* information, without himself having to record this information, and in particular floppy disks, CD-ROMs, and the hard drive of the consumer’s computer on which electronic mail is stored;
- *the medium must be such as to allow the information stored to be printed by the consumer and rendered into permanent form;*
- *the durable medium may be used only if it can be proved to be secure against any form of manipulation, in particular with regard to content and the contracting parties;*”

The Parliament, seemingly, has little faith in digital preservation by consumers and wanted to enshrine the hard copy strategy as a positive right. Undoubtedly a valid concern, though it is rather odd to first define what a durable medium is, only to provide an escape route towards a genuine permanent form. The second addition voices another valid concern, namely the integrity of the recorded information, though again there is the misplaced focus on the medium. Between the lines one can read that not the medium, but the information recorded on it is of primary importance.

The Commission brushed away these amendments citing the implications it would have on electronic commerce⁴⁸. One can only surmise that a ‘durable medium’ was becoming too tall an order for many businesses, especially considering the proposal to lay the burden of proof of compliance on their shoulders⁴⁹. By way of compromise, a limited ‘right to a hard copy’ was subsequently reintroduced by the Council⁵⁰.

On a side note, the Commission’s amended proposal now speaks of “on paper or on another durable medium”, thus no longer opposing ‘durable medium’ with ‘writing’. This improvement made it into the enacted Directive⁵¹.

⁴⁷ Parliamentary report on the proposal for a European Parliament and of Council Directive concerning the distance marketing of consumer financial services, A4-0190/99, OJ C 279, October 1st, 1999, p. 197-207.

⁴⁸ Amended proposal for a European Parliament and of Council Directive concerning the distance marketing of consumer financial services, COM(1999)385, OJ C 177E, June 27th, 2000, p. 21-27. See in particular the accompanying Explanatory Memorandum, p. 4, available through <<http://ec.europa.eu/prelex>>

⁴⁹ Proposed art. 13 of the Commission’s initial proposal (COM(1998)468). In the final version of the Directive, the reversal of the burden of proof is an option Member States may choose to implement.

⁵⁰ Art. 5(3) provides as follows: “at any time during the contractual relationship the consumer is entitled, at his request, to receive the contractual terms and conditions on paper.” Introduced in Common position (EC) No 16/2002 adopted by the Council on 19 December 2001 with a view to adopting Directive 2002/.../EC of the European Parliament and of the Council of... concerning the distance marketing of consumer financial services, OJ C 58 E, March 5th, 2002, pp. 32-43 (37).

⁵¹ Art. 5(1) and art. 6(6) Distance Marketing of Financial Services.

The definition as it is found in the directive today, was drafted by the Council of the European Union⁵²:

“durable medium” means any instrument which enables the consumer to store information addressed personally to him in a way accessible for future reference for a period of time adequate for the purposes of the information and which allows the unchanged reproduction of the information stored.

A major improvement over previous drafts is the technological neutrality of the provision. The list of examples has been relegated to the recitals, where they merely serve as examples⁵³.

The criteria listed – accessibility and integrity of the contents – explicitly shift the focus to where it belongs: the preservation of electronic records. All the more reason to regret that the term ‘durable medium’ was not abandoned entirely, as it distracts the attention from what really matters⁵⁴. Strictly speaking, a digital medium is by definition inaccessible, no one can read a CD-ROM without a suitable information system to read it with. Likewise, reproduction – on screen, on paper or on another medium – is generally not something a medium is capable of. Literal interpretation aside, the term tempts citizens, businesses and lawmakers to ask the wrong questions. When considering whether or not a text message received on my cell phone is on a durable medium or not⁵⁵, should I be looking at the probable life-span of the memory chip or the memory size? Should I not be more concerned by the fact that I cannot transfer the text message into my records management system?⁵⁶ The directive itself falls into this trap, when it categorically classifies floppy discs, CD-ROMs and DVDs as durable media. A reliable storage medium is a necessary, but not a sufficient condition for record preservation. Ironically, the directive dispels websites as not durable in principle, though an online archival facility is probably the most realistic solution for the preservation of records by consumers.

Pragmatists may – rightly so – protest that in practice very few consumer con-

⁵² Common position (EC) No 16/2002 adopted by the Council on 19 December 2001 with a view to adopting Directive 2002/.../EC of the European Parliament and of the Council of ... concerning the distance marketing of consumer financial services, OJ C 58 E, March 5th, 2002, pp. 32-43.

⁵³ Recital 20 of the Directive on Distance Marketing of Financial Services states: “Durable mediums include in particular floppy discs, CD-ROMs, DVDs and the hard drive of the consumer’s computer on which the electronic mail is stored, but they do not include Internet websites unless they fulfil the criteria contained in the definition of a durable medium.”

⁵⁴ [2], p. 364 and 375.

⁵⁵ A question raised in the First Annual Progress Report on European Contract Law and the Acquis Review, COM(2005)456, p. 9, available through <<http://ec.europa.eu/prelex>>

⁵⁶ Granted, this example will be obsolete in a few years time, as increasingly mobile phones are fully equipped to transfer information to other devices.

tracts have any relevance beyond a couple of years, thus the media listed are likely to ensure accessibility and integrity long enough to suit in this context⁵⁷. Still the term is out there, misguiding consumers and businesses alike, not to mention lawmakers. Moreover, it is extremely unlikely that the notion will remain confined to only the Business-to-Consumer context⁵⁸. This mess could have been easily avoided by simply clarifying that 'a writing' could mean either a document in paper or electronic form, as was done in a number of other texts.

There are reasons to hope that this particular legal concept will only be with us temporarily. Notably, the CEUCIC does not refer to the notion 'durable medium' at all. At one point in the preparatory works, reference is made to durability, namely in the context of all the possible functions fulfilled by a 'writing': Durability is applied – rightly so – to the information contained in the writing, and not to the medium incorporating the writing, as in the examples above. Durability was dropped as a requirement because it was deemed to harsh a standard, considering the CEUCIC only sought to define a lowest common denominator for all 'writings' regardless of the specific context. Basically this boils down to information capable of being reproduced and read, which the CEUCIC drafters expressed as information "accessible so as to be usable for subsequent reference"⁵⁹.

From the Distance Selling and Distance Marketing of Financial Services Directives we can infer the following in regard to an exchange between legal experts and archivists:

- the legal term 'writing' is sometimes used in the narrow sense of paper documents,
- 'record identity' is not considered explicitly, thus an explanation from an archivist's viewpoint is desirable,
- the legal term 'durable medium' is a misnomer for an electronic record,
- the term 'integrity' means the same to archivists and legal experts, however among the latter there seems to be confusion as to what is the object of integrity.

5. Conclusion

Records are the bread and butter of the legal community, which explains the large number of texts dealing with the creation and – to a lesser extent – the preservation of records. The legal community shares many – if not all – concerns regard-

ing digital preservation with the archival community. The lack of a stable frame of reference with regard to electronic records hampers the discussion considerably, not only among legal experts but also with experts from other disciplines.

From the legal text samples analysed here, a number of inferences can be made. First observation is that though the term 'record' is not used as such, records are the subject matter of the analysed texts. Thus, common ground should be easy to find between the legal and archival disciplines, however the lack of stability in legal terminology risks causing confusion. Cases in point are the ambiguous and inconsistent use of the term 'writing' and the introduction of new terms, e.g. '(electronic) communication' and 'durable medium'. The texts analysed here suggest that more complex records (interactive systems, databases, etc.) are still largely uncharted waters in the legal community.

A second observation is that record identity is simply not conceptualised, though in day-to-day legal practice it must play a role of note, in particular when searching for and evaluating evidence. As indicated above, record identity offers an interesting perspective on the problems business is experiencing in developing an electronic alternative for negotiable instruments. This is only one example where a dialogue between archivists and legal experts would be beneficial. Unlike record identity, record integrity is a concept which legal experts are very familiar with, though the contours of this notion are less sharply defined than in the archival context. Point of discussion is most certainly the strong reliance on digital signature technology displayed by lawmakers.

The greatest risk of misunderstanding and confusion lies in the terms 'authentic', 'authenticity' and 'authentication'. While archivists have pinned down these terms to a closely defined meaning, in the legal community they not only have multiple legal-technical meanings tied to particular contexts, they are also used inconsistently and indiscriminately in more general discussions.

Much like in cultural exchange, one can hope that awareness of the differences in language, perception and practice will smooth the way for a meaningful dialogue between the archival and legal communities.

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⁵⁷ See for instance [3], p. 33.

⁵⁸ On the EU-level, the term was found its way into – amongst others – the Directive on Insurance Mediation, which applies both to transactions with consumers and other businesses. (Directive 2002/92/EC of the European Parliament and of the Council of 9 December 2002 on insurance mediation, Official Journal L 9, January 15th, 2003, 3-10. How prolific the term has been in the EU Member states is hard to tell.

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