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ADDENDUM TO THE NOTE

from:	Office for Official Publications of the European Communities
to :	Working Party on Legal Data Processing
Subject :	European Forum of Official Gazettes
	- Electronic publication of legislation: Methods of authentification of the texts

Delegations will find hereafter a document prepared for the meeting of the European Forum of Official Gazettes on the Electronic publication of legislation: Methods of authentification of the texts. (Copenhagen, 8-9 September 2005)

Electronic publication of legislation: Methods of authentification of the texts

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Electronic publication of legislation: methods of authentication of the texts

Interim Report of the Forum Working Group on Authenticity

On the background of the work

⇨ **Discussion on the authenticity of electronic legal texts in various fora, e.g. the EU Council WP on Legal Data Processing, the Council of Europe and OECD**

⇨ **reports have been published on the projects in several countries, e.g. Austria, Belgium and France**

⇨ **in a document of the EU Council WP on the concept of LINE (Legal Information Network in Europe), it was noted that**

⇨ **"public pressure to have authentic electronic versions available is strongly felt, both at Community and national levels, and raises the crucial question of methods to ensure the legal status and authenticity of a text distributed by electronic means."**

On the participants in the working group

⇨ **The methods of authentication of the texts in legal electronic gazettes have been discussed by delegates from:**

⇨ **Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, Portugal and Spain**

⇨ **the national reports and meeting reports are available at the Forum website**

On the present situation

⇨ **In most countries, the paper version of law is the only authentic one** - Laws and regulations enter into force when the text appears printed in paper

⇨ **The electronic texts are being widely used, therefore the pressure to have authentic electronic versions available**

⇨ **The budgetary issue: the number of subscribers of paper copies is decreasing in all member states; paper copies are expensive, electronic copies can be held available free-of-charge**

⇨ The countries are in different phases:
  ⇨ planning and studying authenticity
  ⇨ starting authenticity projects
  ⇨ implementing authentification of legal acts
  ⇨ broad experience, looking for new challenges

The electronic Legal Gazette can be

⇨ **authentic, with digital authentication and chain of confidence**

⇨ **legally valid, but not authentic**

⇨ **authentic, but not legally valid (when paper versions are the only valid ones)**

⇨ **legally valid, but not legally binding (declaratory validity, based on tradition or administrative decisions)**

⇨ **legally binding, but not necessarily authentic**

⇨ **official versions, with or without digital signatures**

⇨ **unofficial, unauthentic, for information purposes only**

Contents of the first report of the WP

⇨ **1) Definition of the key concepts (authenticity, authentic electronic texts, legally valid, official version of law)**

⇨ **2) Experiences of the member states in the authentication of electronic Legal Gazettes**

⇨ **3) Review of the developments and future possibilities:**
  ⇨ **Institutional and legislative aspects**
  ⇨ **Administrative aspects**
  ⇨ **Workflow aspects**
  ⇨ **Technical aspects**

⇨ **4) Prospects of European co-operation in the authentification**

On the key concepts

⇨ **Authenticity**

⇨ **Chain of confidence**

⇨ **Digital or electronic signature**

⇨ **Legally valid electronic document**

⇨ **Legally binding electronic document**

⇨ **Official electronic version**
⇨ **Exact reproduction (Belgium: reproductions exactes)**
⇨ **Certified printout (Austria: beglaubigte Ausdrucke)**

Authenticity - variations

⇨ **Authenticity: in dictionaries it is defined as the quality of being authentic or of established authority for truth and correctness. Authenticity also refers to genuineness; the quality of being genuine or not corrupted from the original. In the electronic context and digital materials authenticity means that the digital material is what it purports to be. In the case of electronic Legal Gazettes, it refers to the trustworthiness of the electronic document as a document.**

⇨ **Authentication: the *process* of verifying that a document or message is authentic and that is had not been altered in route from the distribution to the recipient(s).**

The chain of confidence

⇨ **A chain of confidence (chaine de confiance)**

⇨ **is a reliable process of producing electronic documents, which can be authentic and official.**

⇨ **Usually the chain of confidence utilizes certification and digital signatures. It is important that there are methods for the diagnosis and verification of the integrity of the process and of the different phases.**

Official electronic documents

⇨ **Official electronic version is a version of the law published in electronic form and having similar status as the paper version of law. The status of the electronic version can be based on a specific act, administrative procedure or other authorization.**

⇨ **The official electronic version can be equal to the paper version of the legal gazette or (in some countries) the electronic version can be the only official version**

Legally valid electronic documents

⇨ **A legally valid electronic document**

⇨ **is an electronic document accepted by courts, chambers of commerce and public authorities in a similar way as a paper document (with waterlabels, stamps, etc.)**

⇨ **The validity is usually based on the certain authentication symbols of the electronic document, including seals, certification, watermarks, letterhead, date and all kinds of metadata except signature .**

⇨ **In addition, the validity is evaluated by the authority of source, by referring authority and originality of the source of information (what the document is, where it came from; what its content is, etc.)**

Authenticity - variations

⇨ **Declaratory authenticity: authenticity of electronic version defined by national law**

⇨ **Authenticity by workflow**

⇨ **Authenticity by digital signature**

⇨ **Authenticity by secure server/protocol**

⇨ **Authenticity by digital reproduction**

⇨ **Authenticity by a mixture of these**

Declaratory authenticity

⇨ **The easiest approach to authenticity is declaratory authenticity:**

⇨ **the authenticity of electronic version is defined either by 1) national law**

⇨ **"the electronic version has the same legal status as the paper version"**

⇨ **2) or by declaration, tradition or administrative principle:**

⇨ **the declaration can be based on the competence and authority of the publisher or on general reliability of the source**

Authenticity by workflow or by chain of confidence

⇨ **Authenticity by workflow is demanding:**

⇨ **the integrity of the electronic act is secured in a work process from the first draft to the final text published in the Legal Gazette**

⇨ **capturing the data from source and transferring the data within one work-flow or between separate work-flows (ministries-parliament)**

⇨ **important aspects: standardised document format, reliable process**

⇨ **the chain of confidence may cover only a part of the production process**

Authenticity by digital signature

⇨ **Authenticity by digital or electronic signature ensures the reliability of any single electronic document**

⇨ **A digital signature can be used by someone to authenticate the identity of the sender of a message or of the signer of a document (e.g. act of parliament). It can also be used to ensure that the original content of the message or document that has been conveyed is unchanged.**

⇨ **Authenticity by certification means the matching of electronic signatures (server signatures or individual signatures)**

⇨ **Additional benefits: it is easily transportable, cannot be easily repudiated, and can be time-stamped.**

Authenticity by secure server/protocol

⇨ **Authenticity by secure server or secure protocol ensures the reliability of any electronic document source**

⇨ **A secure server provides secure connections and the data in the in-transit process between the user and the server is encrypted. A secure protocol (e.g. HTTPS) can be used to protect the transfer of data from a secure server, with security protocol such as SSL, TLS or PCT.**

Experiences in authenticity

The first experiences
- ⇨ Belgium 1.1.2003: electronic version is not authentic, but it is the only version widely available (five paper copies are authentic); in addition **a helpdesk with free of charge access described in the law**
- ⇨ Austria 1.1.2004: only an electronic version, which is authentic, is available. In addition, non-authentic electronic versions (html/pdf)
- ⇨ France 1.7.2004: the paper and electronic versions are equally authentic
- ⇨ Estonia: 23.1.2001: the paper and electronic versions are equal; 1.1.2006: electronic version the only authentic one

Pros and cons of authenticity

⇨ **Declaratory authenticity:**

⇨ **+ based on authority, not techniques**

⇨ **+ emphasizes the reliability of the source (organisation/institution)**

⇨ **- no method of verification of authenticity**

⇨ **- the protection of documents may be insufficient (technical threats)**

Pros and cons of authenticity

⇨ **Authenticity by workflow:**

⇨ **+ based on processes, not techniques**
⇨ **+ emphasizes the reliability of the sources (organisation/institution)**

⇨ **- the complete workflow in central government is expensive**
⇨ **- vulnerable to technical threats (especially if several separate workflows)**

Pros and cons of authenticity

Authenticity by digital signature:

⇨ **+ easy to verify the authenticity**
⇨ **+ cheap to use**

⇨ **- requires management of certification**
⇨ **- vulnerable to technical threats**

Pros and cons of authenticity

⇨ **Authenticity by secure server/protocol:**

⇨ **+ easy to utilise (standard protocols)**

⇨ **+ fairly cheap to use**

⇨ **-   requires IT-expertise and management of servers**

⇨ **-   vulnerable to technical threats**

Reliability and authenticity

Most users are content with **relative authenticity** - based on the trustworthiness of the institution, publisher or website

⇨ French study in April 2005 (Juriconnexion):

⇨ - using authentic version of Legal Gazette: 6%,

⇨ - using non-authentic PDF document of Legifrance: 63%

⇨ similar results in Austria

Dans le cas d'une réponse négative à cette dernière question, cela a-t-il entravé l'activité professionnelle de votre structure ?	6%	57%	37%	- (enfin j'espère :-)) peut être qu'un jour prochain je me mordrai les doigts de ne pas avoir utilisé le JO authentique, j'imagine que nombre d'utilisateurs sont comme moi, et n'utilisent pas de JO authentique, quelle sécurité juridique) - OUI et NON. Nous utilisons d'autres ressources électroniques, mais il est regrettable de ne pouvoir accéder à ce JO authhentique.
Qu'utilisez-vous pour prouver à vos interlocuteurs le caractère officiel du texte extrait du JO que vous présentez par voie électronique (messagerie, intranet, etc.)	-	-	-	- Je n'ai pas encore eu à le faire. Je pense que je donnerais l'adresse + un lien vers le site du JO. Seule la version du texte qui s'affiche à l'écran, et en aucun cas la version imprimée de la page du site, est authentique. Cela suppose que mon lecteur ait un accès à internet et au site authentifié du JO. - Pour le moment les usagers utilisent la version imprimée du JO et nous n'avons pas encore eu de demande de présentation par voie électronique. - En général mes interlocuteurs internes me font confiance sur le point de l'origine des textes
- la version authentique récupérée sur le site du JO ?	6%	77%	17%	
- la numérisation de la version papier du JO ?	34%	51%	15%	
- l'adresse URL du document dans Legifrance ?	37%	52%	11%	- Bien que je n'en sois pas sûre !
- la version PDF du document issue de Legifrance ?	63%	28%	9%	Note du rédacteur : Réponses données y compris lorsque la personne a réussi à installer la clé
- une autre édition du document venant d'un site public ?	6%	83%	11%	- Sauf cas exceptionnel doc ancien ou pb dans la connexion
- une autre édition du document venant d'un site privé ?	0%	85%	15%	- Sauf cas exceptionnel doc ancien ou pb dans la connexion
- la version authentique récupérée sur le site du JO, mais non AUTHENTIFIEE	20%	69%	11%	Note du rédacteur : Concernant ceux qui pensent utiliser la version « authentique du JO » ... sans avoir réussi à installer le système d'authentification

Questionnaire envoyé sur la liste de discussion proposée par l'association Juriconnexion (1000 abonnés dont la plupart ne sont pas adhérents de l'association) : répartition des 35 réponses reçues à ce jour

Description de la population des répondeurs : documentalistes de cabinets d'avocats ou de banques, juristes d'administration centrale, fonctionnaires territoriaux, bibliothécaires publics, juristes d'entreprises

Examples on the status of electronic legislation

Country	Authentic	Official	Legally binding	Legally valid
Austria	X	X	X	X
Belgium		X		X
France	X	X	X	X
England		X		X
Estonia	X	X		X

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Legislative aspects
of authenticity

The challenges of the Constitution and Acts of
Parliament: **The authentification of electronic
acts may require amendment of
Constitutional Acts or Acts of Parliament**

⇨ **In Austria, the article 49 of the Constitution was amended in
order to make progress in the electronic publishing**

⇨ **In Belgium, the Constitution gives the legislator
responsibility for deciding how laws, orders and regulations
are published:**

  ⇨ **Same situation in many countries - the Constitution is not
  a hindrance to authentication of electronic Legal Gazettes**

Administrative aspects

⇨ The budgetary motivation of authenticity:
⇨ **In several countries there is budgetary pressure to promote
authenticity of electronic publications, because the
production cost is higher than the income from subscription
fees**

⇨ Consolidation
⇨ **Should there be authentic consolidated texts in electronic
form**
⇨ **How can the consolidated texts be authenticated (if
consolidation is not part of the legislative process)**

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Electronic, with paper copies

⇨ In each country paper versions still exist:

⇨ Belgium five copies, Austria one signed original and four certified paper copies, Estonia five copies

⇨ The public access to legislation by the citizens may still be a challenge

⇨ The electronic version is not necessarily sufficient (but there are no clear precedents by courts)

⇨ Customer support and guidance of citizens may be required (telephone services, help-desk, legislative indexes, etc.)

The chain of confidence

⇨ **The differences in the member states**

  ⇨ **How easy/difficult is to the carry out reforms on the work-flow of central administration in the member states**

  ⇨ **How can the integrity of legislative texts be ensured during the legislative process**

Chain of confidence

Country	Source	Database	Web server	End user
A	X	X	X	
B	X	X		
C		X	X	X
D	X	X	X	

Work-flow aspects

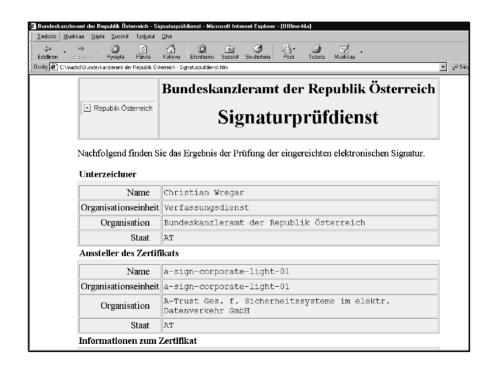**Very few experiences:**

⇨ **Austria: project e-Recht and MOA (Module for Online Applications, with modern security technology), different types of workflow for laws, regulations and treaties**

⇨ **France: a chain of confidence in the publishing process (not in the Government work-flow as such)**

Austrian Act on Legal Gazette

- §8: Securing the authenticity and integrity
- (1) The documents, which contain legislation which can be announced, must have a format, which ensures the upward-compatibility. They must be produced in a reliable process and provided with an electronic signature.
- (2) The documents may not be changed after production of the signature any longer and, as soon as they are released to the inquiry, they may not be deleted.
- (3) Of each document at least three backup copies and four certified printouts are to be provided. One backup copy and a certified printout are to be delivered to Austrian public records and to the Austrian national library for archiving. A certified copy is to be submitted to the Parliament library.

Technical aspects

⇨ **The different document formats:**

　⇨ **html, pdf, tiff, XML, XHTML**

⇨ **Experiences:**

　⇨ **Belgium: html and pdf**

　⇨ **France: pdf**

　⇨ **Austria: XML and XHTML, with XMLDSig-Elements (digital signature)**

　⇨ **OPOCE / UN: tiff**

Current projects and plans in member states

⇨ **The goal is to start with electronic-only Legal Gazette 1.1.2006**

⇨ **Our aim is to provide internet readers exact electronic copies of that authentic version. This requires a web site appropriately protected to prevent attacks or non-authorized activities and to guarantee the accessibility at any time.**

⇨ **To build a hardware mechanism (such as firewall) to protect our website against hackers; to secure and authenticate our website, so that everyone knows that is connected to the website of the National Printing House and not another "anonymous" site.**

⇨ **Main changes will include consolidated versions of acts published electronically, and local governments' acts published only electronically**

⇨ **To publish authentic electronic acts, with electronic signatures, starting in 2006**

Challenges and problems

⇨ **The generation gap: In general, it will be younger people who prove themselves competent in the new medium. In that respect, the change in method is linked to a hierarchical change.**

⇨ **Possible problems may be the lack of required IT-knowledge of the producers, certificates are US-based,**

⇨ **Danger of court precedents, archiving policy.**

⇨ **Piracy of electronic publications seems to us to be less a legal problem than a problem for the authorities' public image.**

⇨ **How can customers and others, outside the firewall, trust communications such as the Official Gazette and lega databases?**

E-law - trends towards 2015

Quality

Consolidated E-law with digital signature

Increased security

E-law (word/pdf/html/Xml)

Increased utilization of texts

Paper version

Information function

Law   **Authenticity**