The electronic signature law: between creating the future and the future of creation

HIS HONOUR JUDGE EHAB MAHER ELSONBATY

After a long wait, the E-signature and Establishment of the Information Technology Industry Development Authority Law no.15/2004 has finally been issued in Egypt, and all those who worked for this moment should be congratulated. As my doctoral thesis was in e-commerce, its issuance was obviously of great interest to me as a researcher. This brief article contains my main observations on the law.

In preparing for the law, Decree No. 209 of the Minister of Communications and Information Technology, issued on December 18, 2000, created a committee[1] made up of representatives from the Ministries of Justice, Finance, Interior, Foreign Affairs, Economy and Foreign Trade, the Ministry of State for Administrative Development, the Egyptian Central Bank, and the Cabinet Information and Decision Support Centre, in addition to legal and technical experts from academia and from the private sector.[2] The purpose of this committee was to prepare a proposal for a draft e-signature law. The committee undertook comparative studies of the experiences of other countries and international bodies, including draft laws for e-commerce and e-signatures issued by the UNCITRAL, the United States, the European Union, France, Ireland, Malaysia, and Tunis, in addition to those of other developed and developing nations. The draft law to regulate e-signatures was also reviewed by the Legislation Department at the Ministry of Justice.

Finally the E-signature and Establishment of the Information Technology Industry Development Authority Law No. 15/2004 was adopted by the parliament on Saturday, 17th April 2004.[3] This law has two perspectives: first, it allows the use of electronic documents by government, consumers and businesses. The second one is the establishment of the Information Technology Development Authority to stimulate the ICT industry in Egypt. Therefore, it is said that a supporting environment for electronic relations has been established that is supposed to ease commercial activities.[4]

The e- signature law

Articles 14-17 provides for a number of provisions. The articles are set out below:

'**Article 14**
Within the scope of civil, commercial and administrative transactions, e-signatures shall have the same determinative effect that signatures have under the provisions of the Evidence Law in the civil and commercial articles, if the creation and completion thereof come in compliance with the terms stipulated in this Law and the technical and technological rules identified in the Executive Regulations of this law.

Article 15
Within the scope of civil, commercial and administrative transactions, e-writing and electronically written messages shall have the same determinative effect that writing, official,

[1] See http://isdo-hwahab/isdo/Esignature.asp and also http://www.mcit.gov.eg/proj_link.asp, last visited on 28 June 2004.
[2] I was a member of this committee, but I did not participate often, because of my PhD work at the University of London.
[3] For an English translation of the law see http://www.bakernet.com/ecommerce/egypt-e-signature-law.doc, last visited on 2 July 2004.
[4] For more details see http://www.mcit.gov.eg/news_details.asp?newsid=71, last visited on 28 June 2004.

and unofficial messages have under the provisions of the Evidence Law in the civil and commercial articles as long as it meets the terms and regulations stipulated in this Law in compliance with the technical and technological rules identified in the Executive Regulations thereof.

Article 16
The hardcopy of the electronically written message shall have the same determinative effect on all parties to the extent that this hardcopy is conforming to the original electronically written message, and as long as the official electronically written message and the e-signature are saved on an electronic backup archiving.

Article 17
Unless stipulated in this Law or the Executive Regulations thereof, the provisions of the Evidence Law in the civil and commercial articles shall prevail in relation to proving the validity of the official and unofficial electronically written messages, e-signatures and e-writings.'

The law grants e-signatures and information written electronically or digitally the same legal status (in civil, commercial, and administrative matters) as traditional signatures and documentation recognized under the current legislation. In practice, the law would include all civil, commercial, and administrative transactions recorded and signed electronically when they are carried out according to the provisions of the draft law and its executive ordinances.[5]

In articles 19-27, the law offers the necessary protection and oversight, by requiring all agencies that offer electronic verification services or any other services related to e-signatures to obtain licenses. The law has given an absolute control for the regulator concerning the licensing either in its procedures, costs, issuing and secrecy.

In article 18 the law states that:

'**Article 18**
The e-signatures, e-writing, and electronically written messages shall have the determinative effect for evidence provided their compliance with the following:
A. The e-signature is for the signer solely
B. The signer has sole control over the electronic medium
C. Possible discovery of any modification or replacement of the data of electronically written message or e-signature.
The Executive Regulations of this Law shall set out the necessary technical and technological rules.'

My earlier fear here was that the executive regulations (regulatory instruments)[6] may – while doing that setting - consider only one form of e-signature, the encrypted signature accompanied with a certification. I considered this approach would minimize the expectations of this law. My hope was that an open minded vision would be used to accept many other forms of e-signature, providing they satisfied the previous three articles that were adopted from the UNICTRAL Model Law.[7]

Public policy and the law

First, any legislation must be derived from a specific public policy, and in a country like Egypt this public policy, as I see it, must be to make Egypt the regional leader in on-line transactions and the application of the on-line world. In other words, any legislative effort must consider the best way to create an environment that encourages all those concerned (i.e. companies, consumers, manufacturers and inventors) to enter the Egyptian market. The success of the e-signature law is dependent on it being part of an integrated structure covering all areas of the on-line world. This is why it is vital that Egypt issues laws covering e-commerce, e-crime and on-line financial and economic services.

There is currently a worldwide debate over the correct legislative approach to the internet, which could be summarized in the following

[5] For more reading about the law of evidence, see Dr Gamil Alsharkawy, Evidence Law in Civil Matters, 1992. About the law of evidence of e-signature see Dr Nagwa Abu Heiba, the E-signature, Definition and Evidence, paper presented in the "the Electronic Financial Services between the Shari and the Law", the United Arab of Emirates University, 2003, page 427.
[6] Article 29 states that "The Minister with policy jurisdiction shall promulgate the executive regulations of this Law within six months of the date of its publication."
[7] See the UNCITRAL Model Law on Digital Signature with a guide for enactment 2001, available in electronic format at http://www.uncitral.org/en-index.htm

three positions:

■ No legislation for the internet

This calls for absolutely no legislative intervention in the internet on the basis that the internet is an entirely new phenomenon that will, in time, generate its own system for control that is more in appropriate to its unique nature. This is the position taken by a group of American professors, at the head of which is Lawrence Lessig.

Nevertheless there are serious criticisms to be made of this approach. First, it is a somewhat fantastical, and unrealistic, position to take. It ignores the fact that despite its modernity, the internet is still part of our world, and that by talking of a 'unique entity' there is a risk of creating a double standard, by which e-transactions are governed by rules and laws entirely different from the rest of the world.

Our current legal system is unable to tell us when the e-contract was concluded

■ No legislation for on-line transactions

The second perspective considers that there is no need for legislative intervention in on-line transactions, since the internet is no more than a technological innovation that, like all previous inventions, will submit to the legal system currently in place. This is a gross oversimplification. This position displays an ignorance of the challenges that e-transactions pose to current legal systems.

It is an example of that kind of lenient approach that as soon as difficulties arise, scampers off and buries its head in the sand, whilst imagining itself to be acting with the utmost wisdom. Most advanced legal systems have abandoned this thinking, following the wise recommendations of the United Nations Commission on International Trade Law (UNCITRAL) that issued the model e-commerce law in 1996. Countries who have followed the UN's lead include the European Union (1999), the United Kingdom (2000), Hong Kong (2000), Spain (2002), Jordan (2001), Tunis (2000) and many more besides. This is because the second approach outlined above ignores the new aspects of e-transactions. An example of this would be international e-contracts, which pose a number of challenges to civil and commercial law such as the time, subject, place and parties involved in the contract. Our current legal system is unable to tell us when the e-contract was concluded. Was it the moment the e-mail was sent accepting the deal, the moment it arrived on the server hosting the e-mail account, the moment it arrived on the computer owned by the e-mail's recipient or the moment the inbox was opened and the e-mail read? As regards the subject of the contract, our current legal system is only designed to deal with goods and services,[8] and it is unclear how it should approach e-goods that are bought and sold on-line, such as songs and computer programs. Do they constitute a special kind of goods or services? What about the place the contract is concluded? The e-contract could be between an English seller, an Egyptian buyer and the exchange could take place in Sudan. What laws do we apply in this case? Which courts have jurisdiction? The parties present another problem. How can our legal system make a ruling on the competence of the parties involved when they concluded their contract having never actually met or known each other? And what about transactions for goods that are treated differently under the law, such as cigarettes and alcohol? What about contracts and transactions made automatically by the computers themselves without human intervention? All these questions (which are presented as simply as possible), alongside all the different laws that could be applied in each case, and the contradictory classifications that would result, demonstrate the existence of issues that have to be dealt with through legislative intervention that encourages and protects all parties undertaking on-line activities in Egypt.

■ The legislative approach

This is why the third approach is more persuasive, which calls for a legislative approach to e-transactions that seeks to incorporate them into existing laws. There is no need for a new legal system reserved solely for the internet and e-transactions, but a legislative intervention that closes the gaps created by the unique nature of the on-line world. While it is clear that the extant legal system can cope, unaltered, with most aspects of e-transactions, there are some areas that need adjustment to ensure that these transactions can be properly incorporated into the laws of Egypt. It would seem that the creation of new rules would be more than enough to control certain modern machines.

[8] This issue is discussed in relation to cryptographic key pairs in Stephen Mason *Electronic Signatures in Law* (LexisNexis Butterworths, 2003) paragraphs 6.62 to 6.67.

Finally, the biggest evidence of the accuracy of this view is that the UNCITRAL, drafted at the end of 2004, a Draft Convention on the Use of Electronic Communications in International Contracts to be adopted in July of 2005.

There is no doubt that one of the best things about this new law - in accordance with the model law, prepared by the United Nations Commission on International Trade Law (UNCITRAL)(2001) - is that it is the first attempt to tackle the internet and legislate for e-content, affording it the same status as paper documents. However it will not be able to achieve its desired goals without a similar organization of the matters noted above. The following point is worth making: if one of the aims of the Egyptian law is to encourage different parties to undertake on-line activities here in Egypt, then why is it that the Communications Ministry's website does not contain even a summary of the new law - let alone the full text - in either English or Arabic? It would help foreign investors understand what Egypt has achieved.

Treatment of the e-signature and the way the law has been issued.

By concentrating on encrypted signatures, it has almost eliminated the very concept of e-signature before it has had a chance to be used. In my opinion, and that of many legal experts, the concept of the e-signature should not be limited to a numerical signature accompanied by a verification certificate accessible to those licensed to read it (i.e. an encrypted signature), but should include the full range of e-signatures; i.e. the signature at the end of an e-mail or a handwritten signature, scanned and interpolated into the e-text. In other words, all the various forms of signature that ensure the signatory's mark can be verifiably distinguished as theirs, in accordance with article 18 of the law.

This is because - as I noted by the different legislations and experiments in various countries - it is unlikely that companies and consumers will be interested in the numerical encrypted signature. As far as companies are concerned, they already have systems in place for exchanging information between themselves (e.g. the use of the SWIFT system between banks or different forms of Intranet), so they are unlikely to be tempted by a new system that is both riskier and more costly. I can see no reason why the consumer, either, would want to purchase such verification certificates when the cost of his on-line purchases, even if they increased, would still be less than a certificate that they would be forced to renew on a regular basis.

We now come to the Agency for the Development of the Information Technology Industry, created in articles 2 to 13 of the law. The legislative framework in which this agency is to work is relevant, since the current legal system of Egypt, as pointed out previously, does not cover the new aspects of this industry and its transactions. The agency has been given wide-ranging powers over on-line activities and e-issues, without this authority having any clear basis in law.

The law gave the agency wide-ranging powers, from monitoring to dispute resolution, but these powers are vaguely defined and broadly impractical. There needs to be a law regulating various fields within e-commerce. For example, article 4/A-C of the new law maintains that the regulator has the authority to:

A. "Issue and renew certificates required for operating e-signature services and other on-line activities in accordance with the relevant laws and regulations." In the absence of an e-commerce law, what are such laws and regulations governing such e-transactions?

B. "Receive complaints related to e-signatures, e-transactions and other IT activities and take necessary action." How will the agency determine the legitimacy of these on-line activities? What are the laws and regulations governing e-transactions? How can one determine the legitimacy, and limits of, any actions taken by ADITA?

The government hopes that the use of e-signatures will support a transformation to a paper-free world in which property and interests are protected, the quality of administrative work improved, government services brought in line with the demands of the modern world and finally, will improve Egypt's competitiveness in a commercial world where electronic transactions are ubiquitous. I have already expressed my concern about the effect this law will have in an environment where different state bodies are unable to cooperate, and where the government is

unwilling to adopt other more necessary and important codes: an e-commerce law, and an well-tailored regulatory mechanism for this law.

Leaving these criticisms aside, I would like to emphasize once again that this law must be one part of an integrated legislative structure generating an environment that allows Egypt to compete in the world of technology and the internet. Alongside e-commerce, e-crime and financial and economic services, this structure must incorporate domain names and their generic names. In addition the implementation list must be prepared and formulated with precision and broad-mindedness. The creation and implementation of an overarching legislative structure is a matter of sufficient complexity to require its own study. ■

His Honour Judge Ehab Maher Elsonbaty is a Judge of South Sinai Court in Egypt, Ministry of Justice Office for International and Culture Co-operation, and Egyptian correspondent.

ehabelsonbaty@hotmail.com
e.elsonbaty@qmul.ac.uk