Yaolong, Zhu & Hang, Lu, 'China's digital signatures: What you need to know about the virtue that Covid turned into a necessity', page 19-21.

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'China's digital signatures: What you need to know about the virtue that Covid turned into a necessity'

Social distancing has become a familiar phenomenon worldwide to contain with the spread of Covid 19. Despite an increasing number of people being trapped at home, economic activities cannot stop. This means contracts and other legally valid documents that might have been signed by hand must now be signed electronically. For many electronic contract signing platforms, we are entering a golden age.

According to the relevant provisions in mainland Chinese contract law the parties can conclude contracts in written, oral and other forms. The written form refers to paper contracts, letters and data messages (including telegraph, telex, fax, electronic data exchanges and e-mail). The validity of digital contracts, meanwhile, lies in the nature of its electronic signature. In what follows, we set out a brief explanation of the legal practice of electronic signatures in the People's Republic of China.

The legal practice of electronic signatures in mainland China: The meaning, validity and scope of electronic signatures

Since 2004, mainland China has had special legislation on electronic signatures under the Electronic Signature Law of the People's Republic of China (ESL). Additionally, the Ministry of Commerce issued the Regulations on Online Contracting Process for Electronic Contracts (Draft for Comments) (ROCPEC) in 2012. Although it has not yet been formally adopted, it still has certain guiding significance in current legal practice.

According to Article 2 of the ESL, electronic signatures referred to and the data contained in the electronic form and attached to the signatory's identity indicate that the signatory approves the content. The signature's essence is data and the full variety of data that can identify the signatory – passwords, secret keys, bank U shields and so on – can be considered part of an electronic signature.

According to Article 14 of the ESL, reliable electronic signatures have the same legal effect as handwritten signatures or stamps. Article 3 stipulates: "For those documents [where] parties agree to use electronic signatures or data messages, their legal effect is not denied solely because the form of electronic signature and data message ... used." Article 3.1 of the ROCPEC also recommends that contracting parties use electronic signatures to conclude contracts. A contract concluded with a reliable electronic signature can thus be established and effective according to Chinese law.

The ESL also stipulates that electronic signatures are not applicable in certain situations, including the suspension of water supply, heating, gas or other public utility services, marriages, adoptions, inheritance and other personal civil matters or situations prescribed by laws and administrative regulations. Therefore, it is prudent to note that electronic signatures are not applicable in establishing legal relationships in these cases.

What makes for a reliable electronic signature?

According to Article 13 of the ESL, an electronic signature that meets the following concurrent conditions is regarded as a reliable electronic signature: (1) The creation data used by the electronic signature belongs exclusively to the signatory; (2) The electronic signature creation data is controlled only by the signatory at the moment of signing; (3) Any changes to the electronic signature after signing

can be traced; (4) Any changes to the content and form of the data message after signing is traceable. Hence, the law establishes three standards for a reliable electronic signature: exclusivity, control and identifiable changes. At the same time, Article 16 of the ESL also stipulates: "If electronic signatures require third-party certification, the parties should come to the legally established electronic certification service providers to seek certification services."

In Zhongwei Company v. Zhang Junying, case No. (2018) Yu 0103 Min Chu 12194, Chongqing Fumin bank and Zhang Junying signed the personal loan contract online using an electronic signature on the Shenzhen Fadada Network Technology Co., Ltd website. In the court, Fadada provided a certification report of the signing process, clarifying that the digital signatures of all parties in the formation of the e Loan contracts were authentic and not changeable. Fadada also submitted the digital certificate service agreement to prove that it had the right to use the digital certificate products of the Shenzhen CA company, the electronic authentication service provider approved by the Ministry of Industry and Information Technology of the People's Republic of China. Fadada also obtained the password license for the use of electronic authentication services issued by the State Password Administration, and had the right to use commercial passwords in its electronic authentication service system. This chain of evidence was enough to prove that the individual loan contract between Chongqing Fumin bank and Zhang Junying was authentic. Therefore, the court holds that the individual loan contract was the true intention of both parties, and, as its content did not violate any laws or regulations, it should be valid.

Accordingly, parties who have used a certified electronic signature can request a certification service provider to provide a certification report of the signing process. The same is true of qualification documents to prove that the certification service provider's qualifications during a lawsuit. However, the party claiming a signature is valid without adopting the certified electronic signature has a much heavier burden of proof. It must ensure that it has the necessary conditions for storing and presenting the electronic signature, and needs to provide a series of supporting pieces of evidence.

Therefore, to obtain a reliable electronic signature, the fastest and most efficient way is to sign the relevant electronic contract through a qualified third-party electronic certification service platform. There are dozens of electronic certification service providers approved by the Ministry of Industry and Information Technology in mainland China. Furthermore, many platforms use the qualifications of these providers to sign electronic contracts. Signing an electronic contract has never been as simple, fast and cost-effective as it is today.

Proof of the reliability of electronic signatures

According to the provisions of Article 91 of the Interpretation of the Supreme People's Court on the Application of the 'Civil Procedure Law of the People's Republic of China', parties claiming the existence of a legal relationship bear the burden of proof for the basic facts that give rise to the legal relationship. Therefore, the party claiming the establishment of an electronic contract bears the burden of proof for the electronic signature's authenticity.

With respect to enforceability, electronic contracts and paper contracts are the same. Establishing a paper contract requires specific qualified parties to confirm its specific content. The same is true for electronic contracts. This is also reflected in the three characteristics of reliable electronic signatures;

the exclusivity of the data produced when the electronic signature is signed determines the specific eligible parties. Likewise, the identifiability of changes to the data message after signing determines the contract's content. As long as these characteristics of reliable electronic signatures are proven then so is the contractual relationship's origin.

If this evidence is insufficient, judicial practice has also established auxiliary criteria, including principles of personal behavior, the rules of the evidence chain and the rules of actual performance.

The rules of personal behavior are that as long as an operator uses a password to conduct the transaction in the electronic transaction, the transaction is deemed to have been performed by the password holder. The logic here is that transaction passwords holders have strict storage and confidentiality obligations. Leaked passwords caused by an electronic trading system are improbable. Of course, in situations where the transaction system's security level is too low and it is hacked, or when the holder's password is stolen and has been reported in time, personal behavior rules do not apply.

With regard to the evidence chain, in cases where the direct evidence is insufficient, the parties should provide as much indirect evidence as possible. This includes various operational traces stored on the Internet and servers that form a chain of interlocking evidence.

Finally, the rules of actual performance are provided by Article 37 of the Contract Law. This is a means of identifying obligations based on what actions the parties have taken after a contract has been concluded but before it is signed or stamped.

In cases where the reliability of the electronic signature is in question, pointing to what parties have done with regard to fulfilling contractual terms and conditions offers further evidence towards proving the establishment of a contract.

The end of ink

As the on-demand Internet industry, powered by smartphones and tablets, matures, paper documents (which, on top of everything, are unfriendly to the environment) will gradually be replaced by electronic contracts. The skillful application of this technology will make us better prepared and adaptable to life in the future.

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