DELOS GUIDE TO ARBITRATION PLACES (GAP)

2ND EDITION

REPORT ON THE E-SIGNATURE OF AWARDS

BY

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COMMENTARY OF MAY 2023 – GAP REFERENCES AS OF MARCH 2024

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GAP REPORT: E-SIGNATURE OF AWARDS

The question that this report addresses is whether e-signed awards would be recognized and enforced, i.e., deemed original, by the local courts in each of the represented jurisdictions. For the purposes of this report, e-signing means either electronically signed (by inserting the image of a signature, either in the form of a photo or drawing of a signature, or via a PDF signature function) or more securely digitally signed (using encrypted electronic keys authenticated by a third-party).[1]

1. Summary of the Results

The results show that there is diversity of formal requirements depending on the relevant jurisdiction. In 25% of the considered jurisdictions, awards signed through e-signature, would be accepted as originals by the local courts for the purposes of recognition and enforcement. Conversely, in 8% of the examined jurisdictions, e-signed awards would not be recognized and enforced by local courts.

In the remaining jurisdictions, responses received are less conclusive. In 25% of these jurisdictions, it is believed that an e-signed award will probably be recognized, while in 6% of the jurisdictions it is assumed that it will probably not be recognized. A further 21% reported uncertainty as to the fate of an e-signed award. In addition, it is noteworthy that in 11% of the jurisdictions, respondents made a distinction between electronically signed and digitally signed awards where electronically signed awards are assumed unacceptable while responses concerning digitally signed awards are in the affirmative. Moreover, in 6% of the jurisdictions a distinction is made between domestic and foreign awards – e-signed domestic awards are treated negatively while there is uncertainty concerning e-signed foreign awards.

Accordingly, in half of the jurisdictions examined, e-signed awards are deemed or are likely to be deemed original. In the remaining jurisdictions, there is insufficient clarity as to the fate of an e-signed award.

2. A Closer Look

A particular factor of relevance in assessing the statistics may be the status of the legislation referring to the e-signature and reference to such e-signature in the practice of the local courts of law in the considered jurisdictions.

It is notable that some respondents have opined that since e-signed awards are not regulated in their jurisdictions, as no restrictions are imposed, the awards should be deemed original. Others have used the same reasoning to conclude that there is uncertainty on whether the award would be deemed original. Moreover, lack of precedent has been considered as indicative for uncertainty in relation to the recognition of e-signed awards by some but not by others.

Some respondents have replied in the affirmative to the question on e-signed awards without distinguishing between electronically signed and digitally signed awards, yet refer to the preference for digitally signed awards. The general impression from the respondents is that digitally signed awards are on a stronger footing than electronically signed awards as to their validity. Several respondents opine that under EU regulation, for instance, electronically signed awards are unlikely to be deemed original while digitally signed awards will be.

The results also show that the uncertainty expressed in the recognition and enforcement of e-signed awards, is, *inter alia*, closely based on these awards not having been tested in courts.

Some of the justifications provided by the respondents in support of their respective position concerning whether e-signed awards are deemed original, are enumerated under headings A, B, C, D, E, and F below.

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[1] Unless the report specifies whether the signature is electronic (by inserting the image) or digital (third-party authenticated), e-signature refers to both.

A. Jurisdictions Distinguishing between Electronically Signed and Digitally Signed Awards (11.3%)

- Courts have found that the authenticity of an arbitrator's signature must be confirmed. Electronic signatures cannot be authenticated but digital signatures can.
- Awards signed electronically are not deemed original. However, the validity of digitally signed documents may be endorsed through various sets of regulations in the jurisdiction.

B. Jurisdictions Where E-Signed Awards Are Deemed Original (24.5%)

- Arbitrators' signature is prima facie evidence of a valid certification and in general courts treat electronic signatures the same way as wet-ink signatures.
- No express regulations precluding the recognition and enforcement of e-signed awards. Electronically signed awards are deemed as copies, while digitally signed awards would be deemed original. The arbitration act requires more formalities for foreign awards, yet a federal decree mitigates these requirements thus dismissing the formalities required under the arbitration act.
- E-signatures (electronic or digital) are valid by way of statute – court decisions confirm the same.
- Existing regulations prescribe certain formality requirements for electronic signatures to be deemed valid – award signed by inserting the image of the signature are less likely to be valid. However, parties may also agree on their own form requirements for electronic signatures.
- The arbitration act prescribes party freedom in the form requirements of an award and the signature requirement of an award is not restricted to a specific form. The legislator has not imposed any specific form.
- Case law and statute confirm that electronic signatures are acceptable where there is evidence that the signor intended to authenticate the document.
- The civil code provides for the possibility to use electronic signatures. If the signature of an award complies with the requirements set forth in the civil code, the e-signed award would be valid.
- The current common practice for awards, is signature via electronic signature. Thus, digitally signed awards would also be deemed as original awards.
- Rules concerning award signature do not distinguish between e-signatures and wet-ink signatures.

C. Jurisdictions Where E-Signed Awards Are Not Deemed Original (7.5%)

- Local law requires that the original version of the award must be "signed by the arbitrator" – an e-signature would not comply.
- In practice, awards always bear the wet-ink signature, mainly because arbitral awards cannot be electronically submitted to court.
- E-signatures only accepted in relation to electronic transactions or when there is party agreement on electronic execution. Local law explicitly excludes e-signatures in relation to court proceedings and judicial announcements. Such provisions seem to be taken into consideration for arbitral proceedings, by analogy, absent a specific reference to arbitral proceedings in the local law.

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D. Jurisdictions Where E-Signed Awards Are Probably Deemed Original, Yet Uncertainty Remains (45.5%)

- There is no regulation or case law on the issue. However, courts enforce various kinds of e-signed decisions and court proceedings have become entirely digitalized.
- Unless there is party agreement to the contrary, wet-ink signatures are favoured in practice. Although, there is a tendency towards digitalization of procedures.
- By law, a court would be required to deem an e-signed award original. However, there is no precedent in this regard yet.
- While there are no precedents on the matter, in legal doctrine, e-signatures have been considered as acceptable means of signing an award.
- Legislation provides that e-signatures have the same validity as wet-ink signatures. However, this has not been tested in courts with respect to arbitral awards.
- While courts have not yet considered e-signed awards for validity, legislation provides that e-signatures meet the requirement of a valid signature provided that certain requirements are met. Digitally signed awards might be more likely to be deemed original as opposed to electronically signed awards.
- The arbitration act does not regulate the form requirement of signatures for arbitral awards. Unless there are doubts as to authenticity of the signatures, the prevailing opinion is that e-signed awards should be deemed original.
- E-signed awards are not regulated, and e-signatures are not used in practice.
- The arbitration law does not specifically define what is meant by the award must be "signed" by the tribunal. Despite the recognition of e-signatures as generally valid in law, uncertainty remains concerning arbitral awards.

E. Jurisdictions Where E-Signed Awards Are Probably Not Deemed Original (5.6%)

- Courts have not yet considered this question. The law in relation to digital signatures only prescribes these signatures in the context of international contracts and not arbitral awards. Electronic signatures are even less likely to meet the signature requirements under the arbitration law.
- Existing law does not prescribe for e-signatures with respect to arbitral awards, notwithstanding the existing regulation on e-signatures.

F. Jurisdictions Distinguishing Between E-Signed Domestic Awards and E-Signed Foreign Awards (5.6%)

- The requirement of wet-ink signatures in the context of domestic awards is expressly prescribed in law – the law is silent in relation to foreign awards. There is more certainty that a foreign award be deemed original if the e-signature is in the form of a digital signature.

Niuscha Bassiri & Professor Crenguta Leaua
11 May 2023

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The question discussed in the GAP is whether a court would consider an award that has been electronically signed (by inserting the image of a signature) or more securely digitally signed (by using encrypted electronic keys authenticated by a third-party certificate) as an original for the purposes of the recognition and enforcement of that award. This Reference Sheet provides a synthetic view of the answers provided across a large number of jurisdictions.

The information below is presented in summary form. Additional detail is available in the GAP chapters, to which you can click through via the hyperlinked jurisdiction names. Please note that the information presented in this reference sheet does not constitute legal advice and the contributing law firms and Delos Dispute Resolution decline any and all responsibility. How a court would consider the electronic or digital signature of an award in the context of recognition and enforcement proceedings can be a highly technical subject, with multiple exceptions and variations, and you should accordingly consider seeking legal advice.

Jurisdiction	Deemed original?	Commentary
Algeria, by Bennani & Associés	Yes	Yes, a court will consider an award that has been electronically signed or digitally signed as an original for the purposes of recognition and enforcement.
Angola, by Miranda & Associados	Uncertain	This issue has never been assessed by Angolan courts. In the present context, there is no legal certainty on the legal effects of electronic signatures in Angola.
Argentina, by Bomchil	Probably yes	Even though there is no provision under the Argentinian international commercial arbitration law on this issue, an award that has been electronically signed or digitally signed may be considered original for the purposes of recognition and enforcement. There is no case law on this issue yet, but the fact that Argentine courts are enforcing all types of electronically signed decisions and given that the court proceedings have become entirely digitalised, it is reasonable to assume that awards – either electronically signed or digitally signed – will be accepted for the purposes of recognition and enforcement in the near future.
Australia, by Squire Patton Boggs	Yes	Australian courts will typically treat an arbitrator's signature or certification as *prima facie* evidence of valid certification, which must be disproved by the challenging party. In other contexts, Australian courts have treated electronic signatures the same way as wet-ink signatures.
Austria, by Knoetzl	Electronically signed awards – no Digitally signed awards – yes	According to the Austrian Supreme Court, the authenticity of the arbitrators' signatures needs to be confirmed or, where a certified copy of the original award is provided, this copy must show the confirmation of the authenticity of the arbitrators' signatures. The electronic copy of a signature cannot be authenticated. Therefore, even though there are no court decisions dealing specifically with this issue, courts would most likely not consider awards where only the image of a signature is inserted as originals for the purposes of recognition and enforcement. As regards digitally signed awards, the digital signature can only be authenticated if it fulfils the requirements of a qualified electronic signature issued by a trusted service provider under the Austrian Signature and Trusted Services Act, which implements the EU Regulation No. 910/2014 of 23 July 2014.
Belgium, by Fieldfisher	No	For the purposes of enforcement, Belgian law provides that the petitioner must file the original award or a certified copy. The original version of the award must be "*signed by the arbitrator*" in order to be recognised as valid. This means that the

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Jurisdiction	Deemed original?	Commentary
		arbitrator must provide his/her handwritten signature on the document. Inserting the image of a signature would not comply with this requirement, nor would a digital signature.
Benin, by Ọya	Probably yes	Awards electronically signed: if the parties expressly provided for it, the court might be more likely to consider it. If the parties had not mentioned anything about the electronic signature, the practice favours handwritten signatures, although there is a slight tendency towards digitization in the applicable procedural provisions. Awards digitally signed: same answer.
Brazil, by TozziniFreire Advogados	Yes	In both hypotheses (electronic and digital signature), the award would be recognized as enforceable by state courts. Concerning electronically signed awards, although there are no mandatory laws or rules in Brazil precluding the recognition and enforcement of an arbitral award signed manually and then scanned and assembled into one electronic file, it would be considered a copy, not an original document. Courts do not usually require the original document to enforce it. Regarding digitally signed awards, Brazilian law deems them as original and enforceable (nowadays, most court proceedings are digital, governed by Federal Law No. 11.419/2006, with awards, interlocutory decisions and claims digitally signed by judges and lawyers). However, the recognition of a foreign arbitral award, according to the Brazilian arbitration law, must contain "*the original of the arbitral award or a duly certified copy, authenticated by the Brazilian consulate and accompanied by an official translation*" (Article 37, I). Nevertheless, the Federal Decree No. 8,660/2016 establishes something different. This Decree internalized the Convention of Abolishing the Requirement of Legalisation for Foreign Public Documents (Hague, 5 October 1961) and it has been cited in the Superior Tribunal of Justice's decisions. In at least two Articles, the Federal Decree mitigates formalities concerning the authentications of documents (Articles. 2 and 3). In light of this, several decisions of the Superior Tribunal of Justice have dismissed this formality, applying the above-mentioned Federal Decree No. 8,660/2016.
Bulgaria, by Kambourov & Partners	Electronically signed awards – no Digitally signed awards – yes	Under Bulgarian law, a document may be signed either by a handwritten signature or electronically. An award signed by inserting the image of a signature is not 'signed' pursuant to the requirements of Bulgarian law. As a result, an award that bears an image of a signature of the arbitrators may not qualify as 'signed' according to the requirements of Article 41 of the Arbitration Act and cannot be enforced. As regards 'electronic signature' (*i.e.*, digital signatures for present purposes), Bulgarian law explicitly regulates this in the Electronic Document and Electronic Certification Services Act, and its validity is further endorsed by the Civil Procedure Code. The 'electronic signature' is defined as an "*electronic signature*

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Jurisdiction	Deemed original?	Commentary
		within the meaning of Article 3, Item 10 of Regulation (EU) No. 910/2014". Consequently, any award signed by electronic signature that qualifies under the Regulation (EU) No. 910/2014 shall for all purposes be considered a 'signed' document. Therefore, it fulfils the formal requirements for validity of Bulgarian law and shall be enforceable. There are no reported cases dealing with this issue yet.
Canada, by Borden Ladner Gervais (BLG)	Yes	Each province in Canada has adopted a statute whereby electronic signatures are valid. Under these acts, an electronic signature can be any information that a person adopts or creates as a means of signing a document. Accordingly, a court will consider a document signed if (a) the person inserts an image of their signature or (b) the person authenticates the document with their encrypted key. Notwithstanding these acts, Canadian common law recognises electronic signatures as valid.
China (Mainland), by Herbert Smith Freehills	Yes	Under the People's Republic of China Electronic Signature Law, if an electronic signature meets all of the conditions below, it shall be deemed as a reliable electronic signature: (1) the creation data of the electronic signature is owned exclusively by the electronic signatory at the time of signing; (2) the creation data of the electronic signature is controlled only by the electronic signatory at the time of signing; (3) any alteration to the electronic signature after signing can be detected; and (4) any alteration to the contents and form of a data message can be detected. The parties may also choose to use an electronic signature which meets the conditions of reliability they have agreed to. A reliable electronic signature shall have the same legal effect as a seal or signature by hand. An award that has been electronically signed by inserting the image of a signature is less likely to satisfy the conditions above. In addition, according to Article 94 of Several Provisions of the Supreme People's Court on Evidence in Civil Proceedings (Revised in 2019), unless there is sufficient evidence to the contrary, the court may confirm the authenticity of electronic data if the data is provided or confirmed by a neutral third-party platform that records and stores the electronic data (for example where encrypted electronic keys are authenticated by a third-party certificate). For such a signature, the courts are likely to confirm its authenticity and consider it as an original.
Côte d'Ivoire, by Dogue - Abbé Yao & Associés	Yes	According to Article 19 of OHADA Uniform Act on Arbitration Law ("**UAA**"), the arbitral award shall be made in accordance with the procedure and form agreed by the parties. It follows from this that the OHADA legislator does not impose any

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Jurisdiction	Deemed original?	Commentary
		specific form. Furthermore, UAA Article 21 which deals with the obligation of signature of the arbitral award by the arbitrators does not prescribe the forms in which such signature must be drawn up. Therefore, any legally permissible form of signature that is not vitiated by forgery can be accepted.
Cyprus, by Christos Georgiades & Associates	Probably not	Very unlikely to be considered as an original.
Dominican Republic, by Jimenez Peña	Probably yes	It is likely that electronically signed and digitally signed awards would be considered an original for the purposes of recognition and enforcement.
Egypt, by Zulficar & Partners	No	In practice, arbitral awards always bear the actual signature of arbitrators. Although, Egypt enacted Law No. 15 of 2004 for Digital Signatures, but it has not been implemented yet in relation to the signing of arbitral awards. Courts are still accustomed to receiving actually signed awards. The award must be authenticated and cannot be electronically signed or submitted electronically to the court.
England & Wales (UK), by White & Case	Yes	English law has evolved to recognise various forms of electronic signatures. English case law confirms that electronic signatures are capable of satisfying a statutory requirement for a document to be signed where there is evidence that the signatory intended to authenticate the document. Section 7 of the Electronic Communications Act 2000 also recognises the validity of electronic signatures. Both case law and statute would therefore recognise the validity of an award signed electronically or digitally. Whatever the form of electronic signature used, what is important is that the signatory intended to authenticate the award. That said, it is crucial to consider how secure or trustworthy electronic signatures are. A digital signature, using encrypted electronic keys authenticated by a third-party certificate, may be more appropriate.
Ethiopia, by Aman Assefa & Associates	Probably yes	By law, a court would be required to consider electronically signed or digitally encrypted signature of arbitrators as originals, although the practice in this regard is yet to unfold and there is no published precedent on this matter.
Finland, by Castrén & Snellman	Probably yes	There are no precedents on whether an electronically signed or digitally signed award would be accepted for the purposes of recognition and enforcement. However, in legal doctrine, such signatures have been considered acceptable means of signing an award and we consider it more likely than not that an electronically or digitally signed award would be accepted as an enforceable award.
France, by August Debouzy	Yes	Electronically signed awards would be considered valid only if the requirements set forth under Article 1367 of the Civil Code are complied with. It implies that the signature should be verified through a reliable identification process. As such, an

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Jurisdiction	Deemed original?	Commentary
		award signed by inserting the image of a signature is very unlikely to be considered valid under French law, unless it is proven that such signature has been verified through a reliable identification process. As regards the enforcement of an electronically signed award, French law only requires that the originals of the award and the arbitration agreement (or copies complying with requirements necessary for their authenticity) be submitted to the judge. As such, French law does not require any specific form of the award and/or its signature but the applicant would still have to prove that the presented documents are indeed originals.
The Gambia, by Farage Andrews Law Practice	Uncertain	There are no restrictions as to the procedure.
Germany, by CMS Hasche Sigle	Domestic awards – no Foreign awards – uncertain	It is disputed whether an electronically signed or digitally signed award is to be considered as an original for the purposes of recognition and enforcement under German law. Pursuant to the still prevailing view, neither form of an electronic signature meets the requirement of a signature made in writing pursuant to § 1054 (1) of the Civil Code of Procedure. By contrast, some authors argue that an electronic signature using encrypted electronic keys authenticated by a third-party certificate which qualifies as qualified electronic signature pursuant to Article 25 (2) of the EU Regulation 910/2014 (as is the case for decisions by state courts) should be considered as complying with the form requirements of § 1054 (1) of the Civil Code of Procedure. However, a court would not consider an award that has been electronically signed by inserting the image of a signature or by using encrypted electronic keys authenticated by a third-party certificate as an original for the purposes of recognition and enforcement if the award has been rendered in Germany and, therefore, the form requirement of § 1054 (1) of the Civil Code of Procedure applies. If the award has been rendered in a country other than Germany, § 1054 of the Civil Code of Procedure does not apply. Pursuant to § 1061 (1) of the Civil Code of Procedure, the recognition and enforcement of foreign arbitral awards is governed by the New York Convention and other treaties on the recognition and enforcement of arbitral awards if they provide more favorable terms. The recognition of a foreign award that has been signed electronically is subject to the requirements of Article IV of the New York Convention or national laws that provide more favorable terms. Article IV of the New York Convention requires the submission of the duly authenticated original award or a duly certified copy thereof but makes no specific requirements regarding the form of the signature of an arbitral award. However, it should be noted that despite § 1061 (1) of the Civil Code of Procedure, some German

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Jurisdiction	Deemed original?	Commentary
		courts require foreign arbitral awards to meet the formal requirement of a signature made in writing pursuant to § 1054 (1) of the Civil Code of Procedure. Therefore, it is advisable to ensure that the award is signed in writing and not electronically if the award is to be enforced in Germany.
Greece, by KLC Law Firm	Domestic awards – no Foreign awards – uncertain	In principle, as a matter of Greek law, electronic documents issued by natural or legal entities using an authorized electronic signature or an approved electronic stamp are accepted by public authorities and courts throughout the country. In the context of arbitration, however, caution should be exercised taking into account the unfamiliarity of the state Courts with tech issues, the lack of any specific case-law and the absence of explicit provisions in the field of international arbitration. In the context of domestic arbitrations, arbitral awards are required to be signed by hand. This requirement does not explicitly exist in the Greek Law on International Arbitration which provides that an original signed hard copy of the arbitral award should be communicated to each of the parties, without specifying whether such signature should be handwritten or can be electronic. In practice, however, the enforcement of arbitral awards in Greece is subject to certain requirements that may involve the need for the parties and arbitrators to get a hard copy of the award bearing the handwritten signature(s) of the arbitrator(s). In the context of international arbitrations, securely digitally signed awards (by using encrypted electronic keys authenticated by a third-party certificate) would, most likely, be acceptable but relevant potential arguments to the contrary at the stage of enforcement cannot be excluded; having an award signed by inserting the image of a signature could more easily raise non-enforceability issues. The safest approach would be to have the award signed through handwritten signatures. It is noteworthy that the new definition of document of the draft (new) Law on International Arbitration (to be passed) provides that "*an electronic recording which allows subsequent confirmation of the identity of its author and access to the content of the agreement*". It remains to be seen if the said law and the evolving case law will provide further clarity in the future on the issue of the use of electronic signatures, of either type, for arbitral awards.
Guinea, by Thiam & Associés	Uncertain	The UAA contains no specific provision as to whether a court would consider an award that has been electronically signed or more securely digitally signed as an original for the purposes of recognition and enforcement.
Hong Kong, by Fangda Partners	Uncertain	Hong Kong law recognises electronic signatures so long as the method used to attach the electronic signature is reliable and appropriate for the purpose for which the information contained in the document is communicated. A digital signature

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Jurisdiction	Deemed original?	Commentary
		supported by a "recognised certificate" is expressly recognised under the Electronic Transactions Ordinance. However, for purposes of determining whether an award is an "original", it remains unclear under Hong Kong law whether a digitally signed award meets the formal requirements. Accordingly, parties and arbitrators should exercise extreme caution when pushing technological boundaries.
India, by Trilegal	Yes	The Information Technology Act, 2000 states that in any law (such as the Arbitration and Conciliation Act, 1996) that provides for authentication of a document by a signature, the signature requirement would be satisfied if the document is authenticated by means of an electronic signature in a manner prescribed by the Government. Looking to the relevant provisions of the Information Technology Act, 2000, an award passed under the Act would be considered authenticated only if it contains an electronic signature as specified in the Information Technology Act, 2000. Inserting the image of a signature is not considered an electronic signature and such an award would not be valid for recognition and enforcement of the award.
Indonesia, by KarimSyah Law Firm	Uncertain	This issue has not arisen yet.
Iran, by Gheidi & Associates	Uncertain	There is no regulation on electronic awards. However, in accordance with the general rules on e-commerce under the E-Commerce Act, an electronically signed or securely digitally signed award arguably may be considered valid. However, the lack of regulation and practice means there is no assurance that electronically signed awards will be recognized and enforced in Iran.
Iraq, by Eversheds Sutherland	No	Under Iraqi law, an electronically signed document will only be recognised and accepted if it is in relation to electronic transactions made, or entered into, by persons or entities, or for transactions under which parties agree to execute electronically. Law No. 78 of 2012 on Electronic Signature and Transactions stipulates that electronic signatures submitted for court procedures and judicial announcements shall not be accepted as originals.
Italy, by Legance	Electronically signed awards – no Digitally signed awards – yes	Legislative Decree No. 82 of 2005 (as modified by Legislative Decree No. 179 of 2016, which implemented EU Regulation No. 910/2014) officially recognises the validity of electronic signatures in Italy. These are now considered fully equivalent to handwritten signatures. The Decree and the EU Regulation No. 910/2014 specify the requirements that an electronic signature must meet to be deemed valid. A signature that has been inserted using encrypted electronic keys authenticated by a third-party certificate bears full legal recognition. However, inserting the image of a signature (e.g.,

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		by scanning a model signature and pasting it at the end of a document) may not be recognized as a valid signature according to Italian or European law (Legislative Decree no. 82/2005, Article 24; EU Regulation No. 910/2014, Articles 2, 25, 26 and Annex 1). According to Article 25(3) of the EU Regulation No. 910/2014, a Member State is obliged to recognize the validity of an electronic signature that has been issued in another Member State, in accordance with the technical requirements set forth in the Regulation. Hence, while to the best of our knowledge there is no case law on the matter, an arbitral award that has been electronically signed in compliance with the provisions of Legislative Decree No. 82/2005 or EU Regulation No. 910/2014 should be considered an original for the purposes of recognition and enforcement in Italy.
Kenya, by ALN Kenya - Anjarwalla & Khanna	Probably yes	There is no requirement for an award to bear an arbitrator's actual signature as opposed to an electronic signature for purposes of recognition and enforcement under the Kenya Arbitration Act. There are no specific regulations that have been passed concerning the presentation of arbitral awards filed electronically. In addition, following the commencement of the COVID-19 pandemic, parties are required to file and serve their documents electronically and on a dedicated e-filing platform provided by the Judiciary. As such, parties have been using electronic signatures to sign their respective pleadings, with judges and arbitrators also using such signatures for their respective rulings, judgements, and awards. However, we have not come across any case law where recognition and enforcement has been denied on the basis that the award was signed using an electronic signature.
Korea, by Yulchon LLC	Uncertain	To date, there has been no court decision on this issue, and Korea does not have an established position on this issue.
Lebanon, by Obeid Law Firm	Probably yes	Lebanese legislation does not differentiate between an electronic signature and a digital one. Both terms are used interchangeably. Law No. 81 of 2018 on electronic transactions and personal data protection states under Article 4 that "*the electronic writings and signatures have the same legal effects than those done on paper or any other type of support, providing that their specific author can be traced and that they are stored in a secured manner*". Accordingly, in principle, there should not be an issue with the recognition and enforcement of electronically signed awards. However, this remains an open issue that needs to be tested before local courts. To our knowledge, Lebanese courts have not yet been faced with such issue at the recognition and enforcement stage.

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Jurisdiction	Deemed original?	Commentary
Libya, by MKE Lawyers	No	No.
Mauritius, by Peeroo Chambers	Probably yes	These issues are undecided. It is however expected that courts will be flexible given the provisions relating to arbitral awards and the legislative approach adopted in relation to arbitration agreements.
Mexico, by Von Wobeser	Uncertain	There are no specific regulations in that regard. However, the use of secure electronic signatures (e.g., the taxpayers' unique electronic signature, e.firma) is widely accepted in any procedures before Mexican Courts. Notwithstanding, the use of a standard electronic signature will not be accepted.
Morocco, by Gide Loyrette Nouel	Uncertain	No authority on this point.
New Zealand, by Chapman Tripp	Probably yes	This has not been tested in New Zealand. It is likely that an electronically signed award would be recognised as valid, provided that the award meets the mandatory form requirements. Part 4 of the Contract and Commercial Law Act 2017 provides that legal requirements for signatures are met by way of electronic signature provided that the signature adequately identifies the signatory and his/her approval of the information to which the signature relates, and is as reliable as is appropriate given the purpose for which, and the circumstances in which, the signature is required. Certain transactions, such as the transfer of land, require that an e-signature be "fresh", in the sense that it may not be an image of a signature inserted into a document, but must actually be digitally signed by the signatory. Although we have not been able to identify circumstances in which the validity of an electronic signature on an arbitral award has been considered by a New Zealand court, we consider it is likely that a New Zealand court would recognise and enforce such an award. Best practice would be for the arbitrator or tribunal members to digitally sign the award, rather than place a pre-signed digital image onto the award.
Nigeria, by Broderick Bozimo & Company	Probably yes	Although the Nigerian courts have not had cause to determine this question, section 93(2) of the Evidence Act 2011 validates the notion of signing an arbitration award electronically. The court's primary concern would be to verify that the electronic signature is genuine. Under section 93(3) of the Evidence Act, a party may prove an electronic signature's authenticity in any manner, including through a "*security procedure* [to verify] *that an electronic record* [belongs to the arbitrator in question]". To that end, a Nigerian court is more likely to accept a secure digitally signed award as an original for purposes of recognition and enforcement. If the arbitrator inserts an image of their signature in the award,

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Jurisdiction	Deemed original?	Commentary
		the Court would likely require an ancillary document (e.g., a verifying affidavit from the arbitrator) that authenticates the signature as genuine.
Norway, by Wikborg Rein	Domestic awards – probably yes Foreign awards – uncertain	The Norwegian Arbitration Act prescribes that an arbitral award shall be rendered in writing and be signed by the arbitrators (or a majority of them if a minority refuses to sign). There is not yet a clear precedent that a court would consider an award that has been electronically signed or digitally signed, nor is there legislation explicitly accepting it. However, we expect a court to accept an award signed through such means. For recognition and enforcement of foreign arbitral awards, it depends on the law of the seat of the relevant arbitration, provided that an original or a certified copy of the award may be produced. The Norwegian Arbitration Act is in this regard based on Article 35(2) of the Model Law.
Peru [2022]	Yes	Courts in Peru accept awards electronically signed by inserting an image of a signature as originals for the purposes of recognition and enforcement. It is worth pointing out that this is the most common practice within arbitral proceedings in Peru. As such, Courts will also consider as originals for the aforementioned purposes awards that have been digitally signed.
The Philippines, by SyCip Salazar Hernandez & Gatmaitan	Yes	The court may consider an award electronically or digitally signed as an original. A document is considered original if it is a printout or other output readable by sight or other means, which reflects the data accurately. Rule 2, Section 1(j) of Administrative Matter No. 01-07-01-SC, or the Rules on Electronic Evidence, considers a digital signature as an electronic signature. Thus, a court may consider an electronically or digitally signed award as an original for purposes of recognition and enforcement. It should be noted though that the Philippine Supreme Court has not yet ruled on this issue.
Poland, by Clifford Chance	Electronically signed awards – no Digitally signed awards – probably yes	Article 1197 § 1 of the Code of Civil Procedure provides that an award must be "in writing". Some academics interpret this as a requirement for an award to be a written document signed by the arbitrators. The status of awards that have been signed electronically but not secured by an additional encryption key (*e.g.,* signatures made by inserting an image of a handwritten signature into a document) remains uncertain, and is untested in Polish case law. Notably, the interpretation of some provisions of the Polish Code of Civil Procedure (*e.g.,* Article 1162 concerning the form of arbitration agreement) confirms that the requirement of a written form does not necessarily require a handwritten document or a document rendered in a hard copy. However, it remains uncertain whether a non-

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		encrypted e-signature would be considered "an original" for the purposes of recognition and enforcement. Awards that have been signed with an advanced electronic signature fulfilling the criteria laid down in Article 26 of eIDAS Regulation (910/2014) are likely to be recognised by the Polish state courts. The Polish Civil Code allows declarations of will to be made in electronic form and certified by an encrypted signature (Article 78 Polish Civil Code). Although the Code of Civil Procedure lacks a specific regulation regarding arbitral awards issued in electronic form, a state court might be guided by Article 324(4) of the Code of Civil Procedure, which provides that in the case of virtual court proceedings, a state court may issue judgements signed with an encrypted electronic signature [*podpis kwalifikowany*]. Arbitral scholarship indicates that even if the provisions of the Code of Civil Procedure regarding state courts do not directly apply to arbitration, the fact that the use of encrypted electronic signature is envisaged for the state courts means that the use of such signature should also be permitted in arbitration proceedings. Therefore, such an award is likely to be considered "an original" for the purposes of recognition and enforcement.
Portugal, by Morais Leitão, Galvão Teles, Soares da Silva & Associados (MLGTS)	Probably yes	Although Portuguese Arbitration Law does not expressly regulate the form of signature, nor specifically electronic signatures, it certainly does not pose any obstacles on that matter. As such, unless there are questions as to the authenticity and authorship of such signatures, it seems that no novel issues of recognition and enforcement should, in principle, arise.
Romania, by Iordache Partners	Yes	On the question of court decision or arbitral awards, the specific rules regarding the requirement of signature do not distinguish between 'under-hand' or ink-on-paper and electronic signature and, therefore, under the general treatment of electronic signatures in Romanian law there would be no legal basis for denying recognition of an award (or court judgment) by reason of its bearing qualified electronic signature as opposed to ink-on-paper signature. However, to our knowledge, this is yet to be tested in the courts.
Russia, by Freshfields Bruckhaus Deringer	Uncertain	Russia recognizes documents signed with qualified electronic signatures (as defined in Federal Law "On Electronic Signature" dated 6 April 2011 No. 63-FZ) as fully equal to documents bearing physical signatures, except where the Russian legislation requires a particular document to be signed physically. The Law "On International Commercial Arbitration" dated 7 July 1993 and Federal Law "On Arbitration" dated 31 December 2015 both provide that the award must be "*issued in written form*" and "*signed*" by the members of the tribunal, after which signed originals are delivered to the parties. Neither statute defines expressly if the awards may be 'e-signed'.

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		Arguably, they imply physical signing of the awards. However, it remains untested in practice whether e-signed awards may be deemed enforceable.
Rwanda, by Freshfields K-Solutions & Partners	Yes	Art 146 of Law No. 24/2016 provides that where it is required to have a signature of a person on an electronic record, an electronic signature has admissibility and evidential value in any legal proceedings if: (i) the method used indicates the originator of the record and that the originator approves the information contained in the record; (ii) that method is reliable for the purpose for which the electronic record was generated or communicated, in the light of agreement. Unless the arbitration agreement provides otherwise, the court would likely accept an award that has been electronically signed for the purposes of recognition and enforcement.
Senegal, by Geni & Kebe	Yes	Courts consider electronically signed or digitally signed awards as originals for purposes of recognition and enforcement. According to the provisions of the UAA, the existence of the arbitral award shall be established by copies of these documents meeting the conditions required to prove their authenticity including electronically signed or digitally signed award. Electronic signature is recognised under Senegalese law. In addition, electronic writing is recognised equal to a hard copy under Senegalese law.
Serbia [2022]	Uncertain	In principle, only a securely electronically signed document may qualify as an original: it should be signed by a "*qualified electronic signature*", *i.e.*, an advanced electronic signature created by a qualified electronic signature creation device and based on a qualified certificate for electronic signature. However, the specific issue of electronically signed arbitral awards has not been tested in practice.
Singapore, by Shearman & Sterling	Uncertain	Singapore recognises electronic signatures if (a) a method is used to identify the person and indicate the person's intention; and (b) the method used is reliable and/or functional in accord with the requirements of section 8 of the *Electronic Transactions Act 2010*. As to secured digital signatures, while it could in principle, and in the correct circumstances and with proper encryption, satisfy the requirements of the Electronic Transactions Act 2010, this is yet untested in the context of arbitral awards in the Singapore courts. Arbitrators should appreciate the risk and uncertainty therein before considering whether to use such digital signatures. As to unsecured image-based signatures, it is highly unlikely that the requirement for the method to be reliable will be satisfied.
South Africa [2022]	Probably yes	The domestic Arbitration Act states that the award shall be

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		made in writing and signed by the arbitrator or a majority of the arbitrators in a tribunal.27 If any signature is absent the reason for this must be stated in the award. The IAA is silent regarding electronic signatures, however, in 2002 South Africa enacted the Electronic Communications and Transactions Act 25 of 2002 ("**ECTA**") which caters for this. ECTA has followed the global trend of legalising electronic signatures and transactions through legislation. ECTA defines an electronic signature as "*data attached to, incorporated in, or logically associated with other data and which is intended by the user to serve as a signature*". ECTA further provides a definition for an "*advanced electronic signature*" which is "*an electronic signature which results from a process which has been accredited by the Authority as provided for in section 37*." Section 37 essentially provides for an established Accreditation Authority to approve of authentication products. Section 13 of ECTA (under the chapter of electronic transactions) indicates that where the signature of a person is required by law and such law does not specify the type of signature, that requirement in relation to data message is met only if an advanced signature is used. From these relevant sections in ECTA it appears that where an arbitration agreement is silent on the signature requirements, only a more securely digitally signed method of signature would be accepted. In other words, it is likely that the court would only accept an advanced electronic signature and not simply an image of a signature for the purposes of recognising and enforcing and award. It is always best to agree upfront (as is done in the vast majority of South Africanseated arbitrations) as between the parties to the arbitration in what form the arbitral award may be rendered. Such an agreement eliminates this unnecessarily com plex question from a practical perspective.
Spain, by Garrigues	Probably yes	As per the Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC and, namely, its Article 25.1, "*an electronic signature shall not be denied legal effect and admissibility as evidence in legal proceedings solely on the grounds that it is in an electronic form or that it does not meet the requirements for qualified electronic signatures*". As such, we understand that both the electronic signature –"*electronically signed (by inserting the image of a signature)*"– and the qualified one –"*more securely digitally signed (by using encrypted electronic keys authenticated by a third-party certificate)*"– should be deemed admissible. Spanish courts are yet to consider such admissibility.
Sri Lanka, by FJ&G	Uncertain	The Electronic Transactions Act, No. 19 of 2006 of Sri Lanka

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de Saram		gives legal recognition to electronic signatures. For this purpose, a signature includes affixing a person's hand-written signature or any mark on any document. However, whether these would suffice in the context of arbitration awards remains to be seen. The signing of awards using secure digital signing protocols too remains untested and therefore cannot be recommended.
Sweden, by Mannheimer Swartling	Probably not	Awards rendered in Sweden must be made in writing and signed by the arbitrators. As the law currently stands, it does not enable arbitrators to sign awards electronically notwithstanding Article 25 of the EU Regulation 910/2014 on electronic identification and trust services for electronic transactions in the internal market. The validity of electronically signed awards has not, to our knowledge, been tried in Sweden, but it cannot be ruled out that such award would be valid, provided that the parties agree on that form.
Switzerland, by Lévy Kaufmann-Kohler	Probably yes	The Swiss courts do not appear to have had an opportunity to consider this question. However, there are several elements that would support the admissibility of foreign awards signed by electronic signature for the purposes of the form requirements under Article IV(1)(a) of the New York Convention.
Taiwan, by Formosa Transnational	Uncertain	Articles 4 II and III of the Electronic Signatures Act apply to the Arbitration Law, and therefore an arbitral award may be rendered in an electronic form with secure digital signatures. However, in practice, an arbitral award is usually submitted in writing for the purposes of recognition and enforcement. The authenticity of an award in digital form might be challenged as it is not something courts are familiar with. Therefore, the rendering of an arbitral award in writing is recommended for the avoidance of further disputes in enforcement proceedings.
United Arab Emirates (UAE), by Al Tamimi & Co.	Yes	Article 41(6) of the UAE Arbitration Law establishes the general principle of the validity of an award signed through electronic means. The UAE Arbitration Law does not distinguish between the types of electronic signatures. Based on our experience, UAE Courts admit electronically-signed arbitration agreements and/or awards as originals. Accordingly, UAE Courts should consider an arbitral award electronically signed, either through inserting the image of a signature or digitally signed, as an original for the purposes of recognition and enforcement, absent any agreement to the contrary by the parties.
United States of America (USA) by Arent Fox for California, Boies Schiller Flexner for Florida, New York and Washington	Varies by state, uncertain Texas – probably yes	The jurisprudence on this is currently evolving in U.S. Courts. While U.S. courts will consider an electronic signature in an arbitration agreement, there has not been discussion on the validity of electronic signatures or secure digital signatures as they apply to arbitration awards. Note that Texas has adopted the Uniform Electronic Transactions Act which provides in relevant part "*(a) A record or*

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D.C., and Vinson & Elkins for Texas		*signature may not be denied legal effect or enforceability solely because it is in electronic form; … (c) If a law requires a record to be in writing, an electronic record satisfies the law; (d) If a law requires a signature, an electronic signature satisfies the law.*"

Acknowledgements for their help in preparing the reference sheet part of this report:
Mihaela Apostol, Facundo Marcone, Ezequiel Pien

Acknowledgements for her help in preparing the commentary part of this report:
Alveen Shirinyans