
Electronic Signatures: When are they effective?¹

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The Answer in a Nutshell

The Australian legislative framework introduced to simplify electronic commerce operates in a variety of contexts.

1. The *Electronic Transactions Act 1999* (Cth) ('ETA') is restricted to Commonwealth laws and likely to be limited to its statutes. The corresponding State and Territory Acts apply to the statutes, common law and rules of equity of their respective jurisdictions.
2. The various pieces of legislation provide a general rule: that a transaction is not invalid because it took place wholly or partly by means of an electronic communication.
3. The general rule does not apply in respect of a transaction to the extent that a more specific provision of the legislative framework, such as in respect of signatures, is applicable.
4. The specific legislative provision for signatures applies when a law requires the signature of a person. To satisfy that provision, electronic signatures must adopt a reliable method for identifying the signatory and their intention in relation to the information communicated to which the recipient of the signature has consented.
5. Digitised and digital signatures can act as electronic signatures; however, digital signatures offer greater security.
6. Lawyers need to advise their clients that in circumstances of a law requiring the signature of a person, an effective electronic signature will need to comply with all the requirements of the legislative provision for acceptance of electronic signatures.

Development of Electronic Commerce Legislation

Electronic commerce has become routine in commercial transactions. It is so commonplace that rarely is there a need to analyse transactions for requirements such as 'writing' and 'signing'. For over 10 years Australian legislation at a Commonwealth as well as at a State and Territory level has made provision for electronic communications to meet these requirements.

The 'ETA' was enacted to implement the United Nations Commission on International Trade Law (UNCITRAL) *Model Law on Electronic Commerce 1996* which provided a set of internationally accepted rules to remove legal obstacles and provide a more secure environment for electronic commerce.² It established a basic rule that a transaction was not invalid because it took place wholly or partly by means of an electronic communication.³ To

¹ First published *Internet Law Bulletin* LexisNexis October 2012 Vol 15 No 7 118.

² Explanatory Memorandum to the *Electronic Transactions Amendment Bill 2011* (Cth), at 2.

³ *Electronic Transactions Act 1999* (Cth) s 8(1).

achieve national conformity, all Australian States and Territories enacted complementary legislation.⁴

The Commonwealth legislation has been amended⁵ recently to accord with the *United Nations Convention on the Use of Electronic Communications in International Contracts 2005*⁶ and these further changes are being implemented at the State and Territory level.

At this juncture of the law of electronic signatures, it is timely to review its operation.

Electronic Signatures under Commonwealth Law

The ETA has the dual aims of (1) generally confirming the effectiveness of a transaction that has been undertaken electronically and (2) specifying the requirements for an electronic communication to act as a signature when a law requires the signature of a person.

General Rule

The ETA applies in respect of ‘electronic communications’.

The general rule is that ‘for the purposes of a law of the Commonwealth’ a ‘transaction’ is not invalid because it took place **wholly or partly** by means of one or more ‘electronic communications’.⁷

An electronic communication is a communication of information in the form of data, text or images or in the form of speech by means of guided and/or unguided electromagnetic energy.⁸ A transaction the subject of the ETA ‘encapsulates a wide range of exchanges of information including dealings connected to the formation and performance of a contract’⁹ and includes a transaction of a non-commercial nature.¹⁰

The general rule is applicable ‘[f]or the purposes of a law of the Commonwealth’¹¹ and was ‘intended to be read in its broadest sense as applying to all laws of the Commonwealth, whether they are made by or under a statute or derive from the common law and the rules of equity’.¹² However, it has been doubted that the laws of the Commonwealth for the purposes of the ETA extend to its common law and rules of equity.¹³

A distinction needs to be made between the general rule and the operation of more specific provisions of the ETA that deal with the validity of a transaction, such as the provision directed to signatures.¹⁴ The general rule does not apply to a transaction to the extent that a more specific provision deals with the validity of the transaction.¹⁵

⁴ *Electronic Transactions Act 2001 (Qld)*, *Electronic Transactions Act 2001 (ACT)*, *Electronic Transactions Act 2000 (NSW)*, *Electronic Transactions Act 2000 (NT)*, *Electronic Transactions Act 2000 (SA)*, *Electronic Transactions Act 2000 (Tas)*, *Electronic Transactions Act 2000 (Vic)*, *Electronic Transactions Act 2003 (WA)*.

⁵ *Electronic Transactions Amendment Act 2011 (Cth)*.

⁶ Explanatory Memorandum to the *Electronic Transactions Amendment Bill 2011 (Cth)*, at 2.

⁷ *Electronic Transactions Act 1999 (Cth)* s 8(1).

⁸ *Electronic Transactions Act 1999 (Cth)* s 5(1).

⁹ Explanatory Memorandum to the *Electronic Transactions Amendment Bill 2011 (Cth)*, at 7.

¹⁰ *Electronic Transactions Act 1999 (Cth)* s 5(1).

¹¹ *Electronic Transactions Act 1999 (Cth)* s 8(1).

¹² Explanatory Memorandum to the *Electronic Transactions Amendment Bill 1999 (Cth)*, at 20.

¹³ Christensen, Duncan and Low, ‘Moving Queensland Property Transactions to the Digital Age-Can writing and signature requirements be fulfilled electronically?’ [2002] Centre for Commercial and Property Law, Queensland University of technology at para 2.6.1.

¹⁴ *Electronic Transactions Act 1999 (Cth)* s 10.

¹⁵ *Electronic Transactions Act 1999 (Cth)* s 8(2).

Signatures

Unlike the general rule which is directed to a transaction, the signature provision is directed to a law of the Commonwealth that requires the signature of a person. It states the circumstances in which an electronic communication will meet the requirement of a signature.

The circumstances are cumulative meaning that for an electronic communication to operate as a signature all of the requirements discussed below will need to be met.

- *Method of identification and intention of signatory*

The first is that the electronic communication provides a *method* that is used to identify the person and indicate the person's intention in respect of the information communicated.¹⁶ Prior to the amending act of 2011, it was necessary for the electronic communication to indicate the person's approval of the information communicated rather than intention. The amendment acknowledged that there were circumstances in which a signature was required to indicate other than approval as with the signature of a witness.¹⁷

The method of identification and approval need not be elaborate. A Northern Territory decision¹⁸ considered the Territory equivalent of the pre-existing provision of the ETA. The electronic communication was an email in which "Regards Angus" had been typed at its conclusion. It was held that the typed signature amounted to the identification and approval of the sender to the email.

- *Reliability of method*

The second of the required circumstances¹⁹ is that the *method* used was either:

- a) as reliable as appropriate for the purpose for which the electronic communication was generated or communicated, in the light of all the circumstances, including any relevant agreement; or
- b) proven in fact to have fulfilled the functions described in paragraph (a), by itself or together with further evidence.

This requirement is directed to the reliability of the method used to make the electronic communication and has involved some controversy.

In *GetUp Ltd v Electoral Commissioner*²⁰ an electoral enrolment application was rejected by the Commissioner on the basis that its electronic signature was not sufficient signing by the applicant. The applicant had used a digital pen guided by her cursor to create a facsimile signature that had been affixed to the application. The decision was in respect of the ETA prior to its 2011 amendment, in which the requirement of section 10(1)(b) was that "having regard to all the relevant circumstances at the time the method was used, the method was as reliable as was appropriate for the purposes for which the information was communicated."

The ETA's introduction of the requirement of reliability has been criticised for creating uncertainty in respect of the use of electronic signatures.²¹ In *GetUp Ltd* the Commissioner argued that having regard to the Commissioner's experience of the enrolment process, the

¹⁶ *Electronic Transactions Act 1999* (Cth) s 10(1)(a).

¹⁷ Explanatory Memorandum to the *Electronic Transactions Amendment Bill 2011* (Cth), at 9.

¹⁸ *Faulks v Cameron* (2004) 32 Fam LR 417

¹⁹ *Electronic Transactions Act 1999* (Cth) s 10(1)(b).

²⁰ (2010) 268 ALR 797.

²¹ A Davidson, *The Law of Electronic Commerce* (2009) 81.

court should give deference to the Commissioner's views as to the reliability of the method used.

The court rejected this submission, holding that the standard of reliability was to be ascertained and applied by the court.²² In the result, it found that the application had been signed and considered that that view followed as a result of the Commissioner accepting signed applications forwarded by facsimile transmission or emailed as a JPEG file.²³

The alternate limb of the second circumstance of reliability; that the *method* has proven to be reliable in identifying the signatory and the signatory's intention in relation to the electronic communication was inserted by the 2011 amendment to the ETA. It aims to avoid the possibility of a claim that a method was unreliable when no dispute had existed as to the identity or intent of the signatory.²⁴

- *Consent to use method*

The final required circumstance is, in the case of a signature required to be given to a Commonwealth entity, that the *method* comply with any particular information technology specifications of that entity and in the case of any other party that it has consented to the use of the *method*.²⁵

Electronic Signatures under State and Territory Law

Because the application of the ETA was restricted to Commonwealth laws, complementary State and Territory legislation was needed for their laws. The regime introduced at the State and Territory level mirrored the substantive provisions of the ETA with the practical effect that the general rule as to the effectiveness of a transaction conducted electronically and the specific requirements for an electronic communication acting as a signature (discussed above) also apply at the State and Territory level.

Similarly, the amendments to the ETA of 2011 have also been implemented at a State and Territory level. Queensland remains the only jurisdiction yet to amend its Electronic Transactions Act to accord with the ETA.

Digitised Signatures and Digital Signatures

Digitised signatures act as a means of electronically authenticating or identifying a person and their intention associated with an electronic communication. They are an example of an electronic signature. A digitised signature often takes the form of a scanned signature superimposed upon a document such as a letter or contract. For the purposes of the Electronic Signatures legislation at a Commonwealth and a State or Territory level, there is no legal difference between electronic and digitised signatures.

Not to be confused with the aforementioned methods, a digital signature refers to the use of a cryptic mathematical function and private key verification scheme in order to determine the identity of a person. The use of a simple mathematical algorithm to authenticate the identity of a sender of electronic communication ensures greater security in electronic transactions. The parties agree upon an equation that may appear at first to be a random set of numbers, but is in fact a means of identification and approval.

²² (2010) 268 ALR at 801.

²³ Ibid at 802.

²⁴ Explanatory Memorandum to the *Electronic Transactions Amendment Bill 2011* (Cth), at 11.

²⁵ *Electronic Transactions Act 1999* (Cth) s 10(1)(c) and (d).

It is clear that the law has progressed from accepting a hand written signature only. Lawyers and their clients can safely use electronic signatures in the place of the analogue version provided the legislative requirements for electronic signatures are satisfied.

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