

# THE CONTRIBUTION OF A UNIFORM LEGISLATIVE FRAMEWORK FOR ELECTRONIC TRANSACTIONS TO PROMOTING ECONOMIC DEVELOPMENT IN THE PACIFIC

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*A wide array of different technologies, ranging from web-based applications to emails, instant messaging and mobile devices, are used daily to conduct business transactions. A modern legal environment is needed to address the issues raised by the electronic nature of these technologies and to avoid obstacles to their use arising from laws and regulations drafted prior to their development.*

*The establishment of a broad uniform legislative framework for electronic transactions is necessary to foster cross-border transactions in the commercial field and beyond. Pacific countries are encouraged to continue the current trend of adopting UNCITRAL legislative models for electronic transactions. Moreover, they should consider the adoption of the United Nations Convention on the Use of Electronic Communications in International Contracts, 2005, in line with the decisions of major regional trading countries.*

*Un large éventail de technologies différentes, allant des applications basées sur le web aux courriels, aux messageries instantanées et aux appareils portables, sont utilisés quotidiennement pour effectuer des transactions commerciales. Un environnement juridique moderne est nécessaire pour répondre aux questions soulevées par la nature électronique de ces technologies et pour éviter les obstacles à leur utilisation découlant des lois et règlements rédigées avant de leur développement.*

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*La mise en place d'un vaste cadre législatif uniforme pour les transactions électroniques est nécessaire pour favoriser les transactions transfrontalières commerciales et non. Les pays du Pacifique sont encouragés à poursuivre la tendance déjà existante d'adoption des modèles législatifs pour les transactions électroniques de la CNUDCI. En outre, ils pourraient envisager l'adoption de la Convention des Nations Unies sur l'utilisation des communications électroniques dans les contrats internationaux, 2005, conformément aux décisions des principaux pays du commerce régional.*

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## **I INTRODUCTION**

One prominent feature of globalization is the widespread and pervasive use of electronic communications. A wide array of different technologies, ranging from web-based applications to emails, instant messaging and mobile devices, are used daily to conduct business transactions. This is true also for developing countries, where certain tools, such as mobile communications, have become so popular that they are the most common way of conducting business for small and medium-sized enterprises. A modern legal environment is needed to address the issues raised by the electronic nature of these technologies and to avoid obstacles to their use arising from laws and regulations drafted prior to their development.

Electronic transactions are relevant in a number of different fields involving large as well as small transactions. For instance, the use of electronic means in public procurement is considered an important step in improving transparency and efficiency. Moreover, mobile payments and mobile banking are increasingly relied upon to support financial inclusion. In both cases, the adoption of a law on electronic transactions is necessary to enable the use of those electronic services.

The United Nations Commission on International Trade Law (UNCITRAL) is the core legal body of the United Nations system in the field of international trade law. It is mandated by the United Nations General Assembly to further the progressive harmonization and unification of the law of international trade.<sup>1</sup> UNCITRAL has dealt with the law of "electronic commerce" since the 1980s and has prepared uniform legislative texts that have been adopted in several jurisdictions.<sup>2</sup>

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1 United Nations General Assembly, Resolution 2205 (XXI) of 17 December 1966, "Establishment of the United Nations Commission on International Trade Law".

2 Information on the UNCITRAL texts on electronic commerce is available on the UNCITRAL website at: <[www.uncitral.org/uncitral/en/uncitral\\_texts/electronic\\_commerce.html](http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce.html)>.

## ***II UNCITRAL TEXTS ON ELECTRONIC TRANSACTIONS AND THEIR UNDERPINNING PRINCIPLES***

Modern legislation on electronic transactions should take into account certain fundamental principles widely regarded as the core elements of modern electronic commerce law: the principle of non-discrimination, the principle of functional equivalence and the principle of technological neutrality. The principle of non-discrimination requires that electronic transactions shall not be discriminated against solely because of their nature; the principle of functional equivalence establishes that, when certain conditions are met, the legal value of electronic transactions shall be equivalent to that of other forms of communication such as those in writing; the principle of technological neutrality mandates that the law shall not demand the use of any specific technology, but shall accommodate all existing and future technologies by using generic terms.

Such principles may be complemented by the contractual choices of the parties to a specific transaction. Those contractual terms may be more relevant for systems that provide access to a limited number of pre-selected customers ("closed systems", such as electronic data interchange – EDI) due to the possibility of obtaining the preliminary consent to be bound by users before they actually access the system. However, the valid acceptance of contractual terms may not always be possible in the case of electronic transactions occurring on open platforms, such as the Internet, which are accessible to a virtually endless number of parties.

UNCITRAL texts on electronic transactions are based on these fundamental principles and also fully accommodate the needs of contractual parties in order to let them design the legal framework most suitable for their business needs.<sup>3</sup> In particular, UNCITRAL has prepared three legislative texts applicable to both domestic and cross-border electronic transactions: the UNCITRAL Model Law on Electronic Commerce, the UNCITRAL Model Law on Electronic Signatures and the United Nations Convention on the Use of Electronic Communications in International Contracts.

The UNCITRAL Model Law on Electronic Commerce,<sup>4</sup> adopted in 1996,<sup>5</sup> is intended to facilitate the use of modern means of communications and storage of

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3 Thus, for instance, certain high-value transactions, such as electronic banking, will require a higher level of security, including with respect to the authentication of the parties, than other exchanges of communications. The technical conditions to ensure higher security may be determined by choice of the parties or by specific regulation of that trade, often taking place through self-regulation or co-regulation.

4 UNCITRAL Model Law on Electronic Commerce with Guide to Enactment, 1996, with additional article 5 bis as adopted in 1998, New York, 1999 (United Nations Publication Sales No E.99.V.4).

information. It was the first legislative text embodying the above-mentioned principles of non-discrimination, functional equivalence and technological neutrality. Thus, it establishes the conditions for equivalence between electronic data messages and paper-based concepts such as "writing", "signature" and "original". It also establishes rules for the formation and validity of contracts concluded with electronic means, for the attribution of data messages, for the acknowledgement of receipt and for determining the time and place of dispatch and receipt of data messages.

The UNCITRAL Model Law on Electronic Commerce has been particularly successful, having already been adopted in more than 40 jurisdictions.

Adopted in 2001, the UNCITRAL Model Law on Electronic Signatures<sup>6</sup> aims at giving additional legal certainty to the use of electronic signatures. It establishes criteria of technical reliability for the equivalence between electronic and hand-written signatures by following a technology-neutral approach which avoids favouring the use of any specific technical product. Thus, the Model Law may recognize both simple and advanced electronic signatures (for instance, those based on cryptography technology such as public key infrastructure – PKI) and attribute an adequate corresponding evidentiary value. The Model Law further establishes basic rules of conduct that may serve as guidelines for assessing responsibilities and liabilities of the signatory, of the relying party and of trusted third parties intervening in the signature process such as certification service providers. Finally, the Model Law contains provisions favouring the cross-border recognition of foreign simple and advanced electronic signatures.

The most recent text prepared by UNCITRAL in the field of electronic commerce is the United Nations Convention on the Use of Electronic Communications in International Contracts (the Electronic Communications Convention).<sup>7</sup> Concluded in 2005, the Electronic Communications Convention aims at enhancing legal certainty and commercial predictability where electronic communications are used in relation to international contracts. It satisfies at least four goals: removing obstacles to the use of electronic transactions arising from provisions contained in treaties adopted before the rise of electronic commerce; modernizing certain provisions contained in previous UNCITRAL texts; ensuring

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5 It was complemented with an additional article 5 bis in 1998.

6 UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, 2001, New York, 2002 (United Nations Publication Sales No E.02.V.8).

7 United Nations Convention on the Use of Electronic Communications in International Contracts and Explanatory Note, United Nations Publication Sales No. E.07.V.2 (treaty not yet in force).

that model legislation is uniformly enacted and interpreted; and providing a blueprint for legislation on electronic commerce to countries lacking any, as it contains the basic rules for the use of electronic transactions both domestically and internationally.<sup>8</sup> While the Electronic Communications Convention does amend in certain points older UNCITRAL texts and complements them by adding new provisions, such as one on input errors made by natural persons, it remains fully in line with the above-mentioned fundamental principles of electronic transactions legislation.

The adoption of these three UNCITRAL texts provides a jurisdiction with a comprehensive legal framework for the use of electronic transactions in commercial operations. From the standpoint of the legislative technique, the substantive provisions of the two Model Laws and of the Convention may be merged in one single text. However, formal treaty adoption is necessary to fully reap the benefits offered by the Electronic Communications Convention also at the international level.

Finally, it should be noted that electronic communications were first developed for transactions between professionals (business to business, or B2B). Therefore, it is not surprising that a United Nations Commission tasked with the harmonization of trade law would set the legal standards in the field. However, it is not easy at present to distinguish between purely commercial transactions, on the one hand, and transactions between governmental agencies (G2G), between business and governmental agencies (B2G), and between business or government and consumers/citizens (B2C and G2C), on the other hand. Thus, in a number of jurisdictions UNCITRAL texts are enacted so as to apply to all types of electronic transactions. Additional special provisions may apply: for instance, the actual deployment of electronic services in the various branches of the public service may be subject to capacity and require special additional rules for authentication (e.g., mandating the use of advanced signatures). Moreover, rules pertaining to consumer protection would, of course, apply also to electronic commerce.<sup>9</sup>

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8 For further discussion of these points, see Luca G Castellani "Policy Considerations on the Electronic Communications Convention" 3 *Sungkyunkwan Journal of Science & Technology Law* 1 (Fall 2009) at 187-195.

9 The introduction of special rules for the protection of e-consumers should be carefully considered as it may violate the principle of non-discrimination by imposing on e-merchants more burdens than those carried by "brick and mortar" traders.

### **III THE CURRENT STATUS OF ELECTRONIC TRANSACTIONS LEGISLATION IN THE PACIFIC**

Electronic transactions have become essential in all fields of human activity. While they are already very relevant at the national level, they may be even more important for cross-border exchanges. This could be particularly true for countries facing peculiar geographic challenges such as those of the Pacific. Therefore, it is imperative that legislation should not create obstacles to those transactions. The best manner for ensuring legal predictability in transnational relations is the adoption of uniform texts. This approach may explain why existing legislation in the Pacific is significantly inspired by UNCITRAL texts.

In fact, not all the States in the region have already adopted dedicated electronic transactions legislation.<sup>10</sup> The main example of such legislation from a smaller jurisdiction has been for some time provided by the Electronic Transactions Act, 2000 of Vanuatu,<sup>11</sup> in turn inspired by the Electronic Transactions Act, of Bermuda,<sup>12</sup> which follows closely the UNCITRAL Model Law on Electronic Commerce.<sup>13</sup>

More recently, Fiji has enacted the Electronic Transactions Promulgation 2008,<sup>14</sup> inspired by Australian and New Zealand legislation, and therefore also following the principles, if not always the letter, of the UNCITRAL Model Law on Electronic Commerce. Samoa has also enacted the Electronic Transactions Act 2008,<sup>15</sup> enacting the same UNCITRAL Model Law on Electronic Commerce as well as the UNCITRAL Model Law on Electronic Signatures. It may therefore be concluded that the existing electronic transactions laws in the Pacific are following rather closely UNCITRAL models.

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10 Nicola Scott "Cyber legislation: a Model Law for the South Pacific" in Tony Angelo and Yves-Louis Sage (eds) *Information and Communication Technologies in the South Pacific – Selected Issues*, *Revue Juridique Polynésienne Hors Série/Special Issue Volume IX* (2009) 93-103, at 98.

Lena Nash, *Electronic Transactions*, available at <[www.pln.com.au/index.php?option=com\\_content&task=view&id=101](http://www.pln.com.au/index.php?option=com_content&task=view&id=101)> (last visited 27 February 2011).

11 *Electronic Transactions Act No. 24/2000* [Cap. 263]. See also Phillip Tagini "E-commerce in Vanuatu: Can contract law accommodate for new technology?" (2000) 4 *Journal of South Pacific Law* available at <[www.paclii.org/journals/JSPL/vol04/10.shtml](http://www.paclii.org/journals/JSPL/vol04/10.shtml)> (last visited on 27 February 2011).

12 *Electronic Transactions Act, 1999*.

13 The *Electronic Transactions Act 1999* of Bermuda is under revision. The public consultation phase was concluded on 31 December 2010.

14 *Electronic Transactions Promulgation 2008* (Promulgation No 25 of 2008).

15 *Act No 15 of 2008*.

Furthermore, UNCITRAL texts are prevalent also in a broader geographic area. With respect to major regional trading powers, UNCITRAL model laws were enacted, as already mentioned, in Australia and New Zealand, as well as in the People's Republic of China. They were also enacted, albeit with variations, in the vast majority of ASEAN States,<sup>16</sup> and they inspired the legislation of the USA, of Canada and of various Latin American States.

Besides, the Electronic Communications Convention received strong support in East Asia and the Pacific. Singapore has already ratified the text. The accession of Australia is imminent, as national model legislation based on the substantive provisions of the Convention and updating existing Electronic Transactions Acts is being enacted at the State and Commonwealth levels.<sup>17</sup> The USA is also reporting significant progress towards accession to the Convention.<sup>18</sup> Finally, the People's Republic of China, the Philippines and the Republic of Korea have already signed the Convention. It is possible, if not probable, that the Electronic Communications Convention will become the standard legislative text for electronic transactions in the larger Pacific region, both at the international level, due to its force of treaty, and at the national level, due to the enactment of its substantive provisions as parts of a model law.<sup>19</sup>

#### ***IV BENEFITS FOR PACIFIC STATES ARISING FROM THE ADOPTION OF UNIFORM LEGISLATION ON ELECTRONIC TRANSACTIONS***

Several arguments advise in favour of the adoption of uniform texts in the field of electronic transactions: among them, the desire to promote legal predictability in the use of electronic means, which are particularly relevant for international trade due to their speed and ubiquity, and the possibility to benefit from texts prepared in light of the experience of several jurisdictions. A number of additional considerations may be formulated with respect to Pacific States.

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16 Chris Connelly "Using the Electronic Communications Convention to Harmonize National and International Electronic Commerce Laws: an ASEAN Case Study" in Amelia Boss and Wolfgang Kilian (eds) *The United Nations Convention on the Use of Electronic Communications in International Contracts: an in-depth guide and sourcebook* (Kluwer Law International, Alphen an der Rijn, 2008) at 315-331.

17 Consultation papers are available at <[www.ag.gov.au/ecommercereview](http://www.ag.gov.au/ecommercereview)>.

18 Preparatory documents are available on the Uniform Law Commission website at <[www.nccusl.org/Committee.aspx?title=UN E-Commerce Convention](http://www.nccusl.org/Committee.aspx?title=UN%20E-Commerce%20Convention)>.

19 Both Australia and Singapore have decided to keep the same legislation for national and international transactions and therefore to amend existing domestic legislation by adopting the substantive provisions of the Convention.

The widespread use of information and communications technology may ease the physical isolation of island States, especially small islands.<sup>20</sup> Accordingly, the United Nations have identified enhancing the information and communication technologies (ICT) framework as a key area for the development of small island States.<sup>21</sup> An enabling legal environment is a condition necessary, though not sufficient alone, for the enhancement of that ICT framework.<sup>22</sup> In the same line, the Framework for Action on ICT for Development in the Pacific (FAIDP) promotes and supports the adoption of legislation that encourages electronic commerce.<sup>23</sup> The FAIDP aims at the adoption of e-commerce legislation in 10 Pacific islands countries and territories by 2015, in the broader context of the implementation of national ICT strategies.<sup>24</sup>

Electronic transactions may open up a number of cross-border economic opportunities, ranging from better advertising and delivering local products and services (eg, in the case of tourism) to creating new business thanks to offshore outsourcing.

However, significant efficiency gains may be achieved already at the national level by enabling the use of electronic means in existing procedures and processes, including in the context of e-government.<sup>25</sup> This is the case, for instance, of electronic public procurement and of electronic single windows for customs operations. These two applications share the ability to increase transparency in sectors critical for the economy of a country, and to streamline related steps. Their implementation may reduce opportunities for voluntary or accidental non-compliance with rules and regulations. Since procurement and customs operations represent significant components, respectively, of public expenditures and revenues, the introduction of electronic means to monitor the flow of resources could impact positively on budgetary discipline by increasing oversight.

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20 United Nations, Report of the International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. Port Louis, Mauritius, 10-14 January 2005. UN Doc. A/CONF.207/11, p 73.

21 *Ibid.*, para 84, letter l).

22 See also World Summit on the Information Society Plan of Action, UN Doc WSIS-03/GENEVA/DOC/5-E, Action Line C5, sub point 12 e).

23 Framework for Action on ICT for Development in the Pacific (FAIDP), draft 2 June 2010, p. 12, strategy 2.1.3, available at <[www.spc.int/edd/images/stories/ictpapers/ICT%20Framework.pdf](http://www.spc.int/edd/images/stories/ictpapers/ICT%20Framework.pdf)> (last visited on 28 February 2011).

24 *Ibid.*

25 On e-government in the Pacific, see Mohammed L Ahmadu "The Legal Aspects of Electronic Government in Pacific Island Countries: a Reflection" (2006) 10 *Journal of South Pacific Law* 1, available at <[www.pacii.org/journals/fJSPL/vol10/1.shtml](http://www.pacii.org/journals/fJSPL/vol10/1.shtml)> (last visited on 28 February 2011).



In addition, the possibility to design and operate such facilities at the regional level could allow for significant savings. It could also pave the way to an increase in regional commercial exchanges and address some potential obstacles arising from limited resources. For instance, one important issue pertains to the level of security requested for authentication of users in the context of e-government. A number of jurisdictions require the use of Public Key Infrastructure (PKI) systems, and often demand the use of PKI certificates issued nationally, possibly by a specific certification service provider or by the national root certificate authority itself. Setting up and managing such PKI systems comes at significant cost, and small markets with specific requests may not be particularly attractive for commercial providers. A coordinated regional approach may build a system of sufficient size to be viable. It could also promote cross-border recognition of electronic signatures, including by adopting more modern systems of identification, authentication and authorization such as federated identity management.

## ***V SUGGESTIONS FOR THE WAY FORWARD***

Pacific states are already adopting electronic transactions legislation closely following UNCITRAL models. This trend is welcome and should be further encouraged. Indeed, UNCITRAL texts represent the prevailing global standard and the sole available legislative model that enables domestic electronic transactions while also favouring their use in international trade.

Electronic transactions legislation is necessary not only for merchants. The increasing convergence of services offered by the various actors, and the corresponding importance of e-government, recommend a comprehensive approach that prevents any obstacle to the interaction of business, public authorities and consumers/citizens. Therefore, it is desirable to adopt a common legislative core based on uniform texts and applicable to all electronic transactions.

Pacific states are surrounded by a particularly sophisticated electronic environment. Countries like Australia, the Republic of Korea and Singapore are at the forefront of the use of electronic means and therefore are particularly keen on adopting the most modern legislation to enable their use. These countries have made a significant choice in favour of the adoption of the Electronic Communications Convention. It would therefore be particularly desirable that Pacific States would consider doing the same, in particular, where legislation on electronic transactions has yet to be adopted. Adoption of the Electronic Communications Convention entails no budgetary or administrative requirement: it is therefore simply a matter of taking advantage of a legislative initiative to adopt the most complete and modern legal framework.

Different strategies are available to achieve these goals.

On the one hand, initiatives arising from the ICT field are already under way. Including the preparation and adoption of electronic transactions legislation in their work programme would complement other goals and does not seem to pose excessive difficulties.

Thus, for instance, the International Telecommunication Union (ITU) Asia-Pacific regional initiatives already recognize certain specificities of Pacific islands and small island developing states (SIDS) in the Asia-Pacific region. In particular, ITU-D is managing a project on "Capacity Building and ICT Policy, Regulatory and Legislative Frameworks Support for Pacific Island States" and that could be an appropriate venue to further discuss the above suggestions.

Moreover, the Economic Development Division of the Secretariat of the Pacific Community is in charge of the Pacific ICT Outreach (PICTO) Programme. PICTO focuses on the implementation of the FAIDP, whose thematic area 2, as already mentioned, deals with ICT policy, legislation and regulatory frameworks.

Additional capacity building may be provided by dedicated training institutions such as the United Nations Conference on Trade and Development (UNCTAD), through, in particular, its Train for Trade training programme on legal aspects of e-commerce, and the United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development (UN APCICT) of the United Nations Economic and Social Commission of Asia and the Pacific (UN ESCAP).

On the other hand, it is important to remember that the adoption of electronic transactions legislation remains of immediate relevance from the commercial sector. This is the area where economic benefits may be reaped first.

However, Pacific states are not yet fully engaged in modern trade law. On the contrary, the regional rate of adoption of fundamental texts, such as the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 1958<sup>26</sup> or the United Nations Convention on Contracts for the International Sale of Goods, 1980,<sup>27</sup> is low. Therefore, complementing on-going legislative initiatives in the field of electronic transactions with a broader work programme of trade law reform based on uniform texts seems particularly important in order to create an environment fully supportive of international trade and thus conducive to sustainable economic development.

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26 United Nations, Treaty Series, vol 330, 38. This treaty is often referred to as the "New York Convention".

27 United Nations, Treaty Series, vol 1489, 3. Also known as the "CISG".