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## **Possible revisions to the UNCITRAL Model Law on Procurement of Goods, Construction and Services— drafting materials addressing the use of electronic communications in public procurement**

**Note by the Secretariat**

### **Addendum**

*[Chapters I through III.B are published in document A/CN.9/WG.I/WP.38]*

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### **III. Proposed draft text for the revised Model Procurement Law to accommodate the use of electronic communications during the procurement process**

#### **C. Form of communication—proposed revisions to article 9 of the Model Law<sup>1</sup>**

##### **1. General remarks**

1. The form of communication is a sub-category of the general means of communication proposed to be addressed in a new article 4 bis of the Model Law, as discussed in paragraphs 24-29 of document A/CN.9/WG.I/WP.38. The Working Group has agreed to provide for a general principle as to the form of communication in article 9 of the Model Law (A/CN.9/575, paras. 32 and 33), which would apply to all types of communications dealt with in the Model Law. The principle would enable the procuring entity to choose any form of communication with suppliers and others, without being required to justify its choice, provided that the chosen form meets the “accessibility standards” set out in draft article 4 bis above. The choice is also subject to the current provisions of article 9 that communications must contain a record of their content.

2. The Working Group may wish to consider whether, in the light of the interaction between the current article 9 and the proposed article 4 bis and accessibility standards, all three provisions should appear sequentially in the Model Law. For example, the Working Group may consider that the notion of access to communications as reflected in the draft accessibility standards is an issue that is closely linked to the current article 5 (“Public accessibility of legal texts”) and therefore that the articles governing the use of communications should immediately precede or follow it.

##### **2. Proposed additional text for the Model Law: revisions to article 9 of the Model Law, to address the form of communication**

3. The Working Group may wish to consider the following proposed revisions to article 9, the aim of which is to enable the procuring entity to choose the communication method. The text of paragraph (1) in the 1994 Model Law is restated below (in normal font), so as to introduce the proposed additional text, which is underlined.

##### Article 9. Form of communications

(1) Subject to other provisions of this Law and any requirement of form specified by the procuring entity when first soliciting the participation of suppliers or contractors in the procurement proceedings, documents, notifications, decisions and other communications referred to in this Law to be submitted by the procuring entity or administrative authority to a supplier or contractor or by a supplier or contractor to the procuring entity shall be in a form that provides a record of the content of the communication.

(1) bis. The procuring entity may stipulate in the solicitation documents the form that all communications with suppliers or contractors shall take.

provided that the means of communication chosen by the procuring entity shall comply with the accessibility standards contained in [article 4 bis or 5 bis].

(1) ter. The procuring entity may stipulate in the solicitation documents that tenders submitted under article 30 must be submitted in electronic form [provided that the means of submission chosen by the procuring entity shall comply with the accessibility standards contained in article [article 4 bis or 5 bis].

(1) quater. Without prejudice to the right of a procuring entity to stipulate the form of communications in the solicitation documents, the procuring entity shall not discriminate against or among suppliers or contractors on the basis of the form in which they transmit or receive documents, notifications, decisions or other communications.

(1) quinquies. The procurement regulations may establish measures to ensure the authenticity, integrity, accessibility and confidentiality of communications, and to ensure the interoperability of the systems used to transmit and receive them.

### **3. Proposed additional text for the Guide to Enactment regarding article 9 of the Model Law, to address the form of communication**

4. The Working Group may wish to consider whether the following paragraphs could form the basis of the guidance on this issue, using the text in the 1994 version of the Guide to Enactment as a basis. The text of paragraph (1) in the 1994 Guide is restated below (in normal font), so as to introduce the proposed additional text (with text to be removed struck through, and proposed additional new text underlined):

#### Article 9. Form of communications

1. Article 9 is intended to provide certainty as to the required form of communications between the procuring entity and suppliers and contractors provided for under the Model Law. The essential requirement, subject to other provisions of the Model Law, is that a communication must be in a form that provides a record of its content. ~~This approach is designed not to tie communication to the use of paper, taking into account that communications are increasingly carried out through means such as electronic data interchange ("EDI"). In view in particular of the as yet uneven availability and use of non-traditional means of communication such as EDI, paragraph (3) has been included as a safeguard against discrimination against or among suppliers and contractors on the basis of the form of communication that they use.~~

2. Obviously, article 9 does not purport to answer all the technical and legal questions that may be raised by the use of EDI or other non-traditional methods of communication in the context of procurement proceedings, and different areas of the law would apply to ancillary questions such as the electronic issuance of a tender security and other matters that are beyond the sphere of "communications" under the Model Law.

3. In order to permit the procuring entity and suppliers and contractors to avoid unnecessary delays, paragraph (2) permits certain specified types of communications to be made on a preliminary basis through means, in particular telephone, that do not leave a record of the content of the

communication, provided that the preliminary communication is immediately followed by a confirming communication in a form that leaves a record of the content of the confirming communication.

3 bis. The revised article 9 of the Model Law provides that the procuring entity may choose the method by which it will communicate with suppliers or contractors in the procurement process. The objective of this provision is to afford the procuring entity the option of insisting on a particular means of communication, such as electronic means, without having to justify its choice. However, that option is subject to two elements of control: first, that the means of communication chosen must serve the objectives of the Model Law (that is, those objectives set out in the preamble to the Model Law) and, secondly, that the means of communication do not operate as a barrier to access to procurement (the “accessibility standards” described in paragraphs \*\* above, which will apply to any means of communication chosen). In this regard, the revised paragraphs (1) bis, (1) ter and (3) have been included so as to strengthen the safeguards contained in the article against discriminatory or otherwise exclusionary practices by the procuring entities (A/CN.9/575, para. 33). The obligation on the procuring entity to be satisfied that the accessibility standards are met will be open to review under article 54, and the requirements of the record of the procurement proceedings to be maintained pursuant to article 11 will enable the procuring entity’s decision and how it was arrived at to be reviewed.

3 ter. Paragraphs (1) bis and (3) are also designed to ensure that suppliers and contractors do not have the right to insist on any particular means of communication with a procuring entity, that no such right can be construed (A/CN.9/575, para. 33).

3 quater. The proposed text as regards paragraph 1 ter has been inserted in order to provide for the electronic submission of tenders, currently prohibited under article 30 of the Model Law (see, further, A/CN.9/568, para. 32 and A/CN.9/WG.I/WP.34/Add.1, paras. 22-37).<sup>a</sup>

3 quinquens. The proposed new paragraph (1) quinquens has been inserted so as to draw the attention of enacting States that:

(a) There should be appropriate procedures and systems to establish the authenticity of communications;

(b) The means used to send and receive electronic communications should be sufficient to ensure that the integrity of data is preserved;

(c) The confidentiality of information submitted by or relating to other suppliers is maintained;

(d) The tools or systems used to send and receive electronic communications are fully compatible (or interoperable);

(e) The means used to send and receive electronic communications should enable the time of receipt of documents to be established, if the time of

<sup>a</sup> Consequential proposed revisions and commentary to article 30 are set out in the text following paragraphs 23 and 24.

receipt is significant in applying the rules of the procurement process (for example, the submission of requests to participate and tenders/proposals); and

(f) The means used to send and receive electronic communications should be secure, that is, they ensure that tenders and other significant documents cannot be accessed by the procuring entity or other persons prior to any deadline, to prevent procuring entities' passing information on other tenders to favoured suppliers and to prevent competitors from gaining access to that information themselves (security) (A/CN.9/568, para. 41).

3 sexiens. Items (a), (b) and (c) fall to be addressed in general electronic commerce law, and as noted in paragraph [cross refer to general guidance section] above, enacting States [will] [may]<sup>b</sup> wish to consider the extent to which their existing laws provide adequate controls over the communications that may be generated in the procurement process, whether further regulation is needed, and whether to make reference to the need for such controls in their procurement regulations. One example in domestic legislation requires the heads of procuring entities before using electronic commerce to "ensure that the [entity's] systems are capable of ensuring authentication and confidentiality commensurate with the risk and magnitude of the harm from loss, misuse, or unauthorized access to or modification of the information".<sup>2</sup>

3 septiens. Items (d), (e) and (f) require procurement-specific solutions, arising most notably in connection with the submission of tenders electronically, and are addressed in paragraphs [cross reference] below.

#### **4. Commentary**

5. The Working Group may be aware that electronic means of communication may involve the use of particular tools or software. If a procuring entity wishes to use specialised software, for example, the Working Group may wish to provide that the procuring entity should provide it openly and without charge, and that the procuring entity should ensure that any electronic systems it uses are fully compatible (or interoperable) with those in common or general use. (The term interoperability is used to denote systems that can communicate between themselves without technical or functional hindrance, and general electronic commerce law or practice may establish appropriate measures or systems in a particular enacting State.) The Working Group may also wish to consider whether a description of what is meant by "common or general use" would be warranted, perhaps with reference to the accessibility standards discussed earlier in this Note.

### **D. Notion of "electronic" and related terms<sup>3</sup>**

#### **1. General remarks**

6. There is no definition of the notion "electronic optical or comparable means of communicating [, including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy" set out in the alternative draft provisions for functional equivalence under consideration by the Working Group.

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<sup>b</sup> See paragraph 23 of document A/CN.9/WG.I/WP.38.

7. At its seventh session, the Working Group considered whether a definition of the term “electronic” or of “electronic means” should be included in article 2 of the Model Law, perhaps based on the definitions found in the European Union procurement directives of 31 March 2004 (Directive 2004/17/EC and Directive 2004/18/EC) (A/CN.9/575 (para. 20). The definitions in these Directives provides as follows: “Electronic means” means using electronic equipment for the processing (including digital compression) and storage of data which is transmitted, conveyed and received by wire, by radio, by optical means or by other electromagnetic means.”<sup>4</sup>

## **2. Proposed additional text for the Model Law: addition to article 2 of the Model Law, to provide definitions of the notion “electronic” and related terms**

8. In the light of the references to the term “electronic means” and other related terms in the proposed articles 4 bis and 9 bis, the Working Group agreed that further deliberations regarding proposed definitions of these items should be held at a future session (A/CN.9/575 (para. 22), taking the following alternative proposals into account:

### **(a) Variant A**

“‘Electronic means’ of communicating, publishing, exchanging or storing information or documents means the generation, exchange, sending, receipt or storage of information or documents by electronic, optical or comparable means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy.

‘Electronic means’ of assembly of persons for any purpose under this Law means any method of assembly whereby those assembled can follow and participate in the proceedings by electronic means of communication.”

### **(b) Variant B**

“‘Electronic means’ of communicating, publishing, exchanging or storing information or documents, and of holding meetings, means the generation, exchange, sending, receipt or storage of information or documents by electronic, optical or comparable means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy.”

## **3. Commentary**

9. The Working Group may wish to bear in mind that electronic commerce legislation in certain systems defines the term “electronic”, or “electronic means”, or provide equivalent definitions, with varying levels of specificity. Common elements include references to electrical, digital, magnetic, wireless, optical, electromagnetic, biometric and photonic technology, and references to the form in which information can be transmitted or stored (e.g. using telecommunications technology).<sup>5</sup>

10. However, the Model Law on Electronic Commerce does not define the adjective “electronic” itself, again approaching the question of electronic

communications from a functional standpoint. It provides, in the definitions section, that:

*“(a) ‘Data message’ means information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex or telecopy;*

*“(b) ‘Electronic data interchange (EDI)’ means the electronic transfer from computer to computer of information using an agreed standard to structure the information;”*

11. These definitions are similar to those of the proposed new article 4 bis and revised article 9, set out in the text following paragraphs 25 of document A/CN.9/WG.I/WP.38 and 3 above.

12. It was also suggested that it would be possible not to include a definition of the term “electronic means” or related items, on the basis that one would be superfluous in the light of the proposed article 4 bis (see the text following para. 25 of document A/CN.9/WG.I/WP.38). Further, the Working Group may consider that not including a definition would be consistent with the general principle of addressing only procurement-specific electronic commerce issues in the Model Law. If the Working Group concludes that no definition is necessary, it may consider that a description of what is meant by “electronic means” of communication in the introductory text for the Guide to Enactment proposed in the text following paragraph 23 of document A/CN.9/WG.I/WP.38, so as to address the concern that the Guide to Enactment should encourage consistency in the use of terminology by enacting States, so as to avoid conflict with other legislative acts (A/CN.9/575, para. 20).

## **E. Legal value of procurement contracts concluded electronically<sup>6</sup>**

### **1. General remarks**

13. Articles 36 (2)(a) and (b) of the Model Law provide that the solicitation documents may require the supplier or contractor whose tender has been accepted to “sign a written procurement contract” conforming to the tender. Consistent with its general stance on the inclusion of electronic commerce issues in the Model Law, the Working Group has decided that the ability to conclude a contract electronically, including to sign an electronic contract, is a matter that falls to be addressed in general laws governing electronic commerce and therefore that the Model Law should not make provision for the electronic conclusion of contracts (A/CN.9/575, para 50).<sup>7</sup> However, the Working Group expressed the view that the Guide to Enactment might usefully address the issues raised by electronic contracting (see, further, A/CN.9/WG.I/WP.34/Add.1, para. 44). Suggestions for that text are set out below.

### **2. Proposed additional text for the Guide to Enactment regarding article 36 of the Model Law, addressing the acceptance of tender and entry into force of procurement contract**

14. The Working Group may wish to consider whether the following proposed text may usefully be added following paragraph 1 of the Guide to Enactment addressing



article 36 of the Model Law. As noted above, the text appears under headings and sub-headings, but these could be removed for consistency of style when the Guide is produced.

#### Formalities regarding the procurement contract

(1) bis. Articles 27 (y) and 38 (u) of the Model Law refer to a “written” procurement contract, and article 36 (2)(a) and (b) provide that the solicitation documents may require the supplier or contractor whose tender has been accepted to “sign a written procurement contract” [, which may be signed in the traditional manner, or electronically]. [Enacting States will wish to ensure that their existing legislation recognizes procurement contracts that are executed electronically.]

#### (a) Electronic contracting

(1) ter. The solution provided by the UNCITRAL electronic commerce texts, found in article 11 of the Model Law on Electronic Commerce, does not seek to interfere in the general rules of contract formation. Rather, its stated aim is to “promote international trade by providing increased legal certainty as to the conclusion of contracts by electronic means. It deals not only with the issue of contract formation but also with the form in which an offer and an acceptance may be expressed. In certain countries, [the provision] ... might be regarded as merely stating the obvious, namely that an offer and an acceptance, as any other expression of will, can be communicated by any means, including data messages. However, the provision is needed in view of the remaining uncertainties in a considerable number of countries as to whether contracts can validly be concluded by electronic means. Such uncertainties may stem from the fact that, in certain cases, the data messages expressing offer and acceptance are generated by computers without immediate human intervention, thus raising doubts as to the expression of intent by the parties. Another reason for such uncertainties is inherent in the mode of communication and results from the absence of a paper document.” Article 11 itself provides that “[w]here a data message [electronic communication] is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message [electronic communication] was used for that purpose.”

#### (b) Electronic signatures

(1) quater. In practical terms, enacting States may wish to prescribe the manner in which the parties will sign or otherwise authenticate a procurement contract concluded electronically, in accordance with their laws on electronic commerce. Some States may have requirements for digital or other authenticated forms of electronic signatures in electronic commerce, which may be applied to procurement provided that they do not operate so as to restrict access to the procurement.

(1) quinquies. The solution provided by the UNCITRAL electronic commerce texts is found in article 7 of the Model Law. The Guide to Enactment text discussing the latter article notes that its aim is to promote reliance on electronic signatures for producing legal effect where such electronic signatures are functionally equivalent to handwritten signatures. The

provisions themselves address the issue of electronic signature of documents using the principle of functional equivalence, by providing that: “[w]here the law requires a signature of a person, that requirement is met in relation to a data message if: [the signature] is as reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.”

### **3. Commentary**

15. The Working Group will note that proposed paragraph 1 bis contains alternative text addressing the issue of electronic signatures, addressing the question of the degree of prescription to be given in the Guide (see, further, paragraph 23 of document A/CN.9/WG.I/WP.38).

## **F. Requirement to maintain a record of the procurement proceedings**

### **1. General remarks**

16. Article 11 of the Model Procurement Law requires the procuring entity to maintain a record of the procurement proceedings containing certain minimum information, and provides for that information to be made accessible. However, recognizing that article 11 addresses the storage but not the dissemination of information, and that it does not prescribe the form in which it should be maintained, the Working Group has requested the Secretariat to include the concepts of both storage and dissemination in the “accessibility standards” set out in the text following paragraph 30 of document A/CN.9/WG.I/WP.38. The draft article 4 bis and alternative article 5 bis, and the draft text for the Guide to Enactment addressing accessibility standards, reflect these issues. Further, the Working Group has decided that article 11 should not address the form of the record, but that the Guide to Enactment should consider the issues raised (see, further, A/CN.9/575, paras. 43-46).

### **2. Proposed additional text for the Model Law: revisions to article 11 of the Model Law, to enable the maintenance of the record of the procurement proceedings in any form**

17. The Working Group has also requested the Secretariat to re-draft proposed new paragraph 6 of article 11, so as to ensure that its provisions apply to all methods of storage of documents (A/CN.9/575, para. 47). The proposed revisions to the provision are set out below.

Article 11. Record of procurement proceedings

...

(6) Procurement regulations may establish procedures for maintaining and accessing the record of the procurement proceedings, including measures to ensure the integrity, authenticity, accessibility and, where appropriate, confidentiality of information, the traceability of steps in the procurement process, and the interoperability of record retention systems.

### 3. Proposed additional text for the Guide to Enactment regarding article 11 of the Model Law, to enable the maintenance of the record of the procurement proceedings in any form

18. The Working Group may wish to consider whether the following paragraphs could form the basis of the guidance on this issue, using the 1994 version of the Guide text as a basis. The text of paragraph (1) in the 1994 Guide to Enactment is restated below (in normal font), so as to introduce the proposed additional text (with text to be removed struck through, and proposed additional new text underlined):

#### Article 11. Record of procurement proceedings

1. One of the most important ways to promote transparency and accountability is to include provisions requiring that the procuring entity maintain a record of the procurement proceedings. A record summarizes key information concerning the procurement proceedings. It facilitates the exercise of the right of aggrieved suppliers and contractors to seek review. That in turn will help to ensure that the procurement law is, to the extent possible, self-policing and self-enforcing. Furthermore, adequate record requirements in the procurement law will facilitate the work of Government bodies exercising an audit or control function and promote the accountability of procuring entities to the public at large as regards the disbursement of public funds...

[additional text proposed to be inserted in current paragraph (1), to be paragraph (1) bis, thus separating the original paragraph (1) into two new paragraphs<sup>c</sup>

(1) bis. Article 11, however, focuses on the accessibility and availability of information forming the record, and does not contain requirements as to the form of the record, nor the conditions to be in place for a record to be maintained electronically (A/CN.9/575, para. 45). The accessibility standards set out in [article 4 bis or 5 bis], however, require the procuring entity, when maintaining the record, to select a means of storage of information that will enable the information concerned to remain accessible even as technologies advance, and to be non-discriminatory. Further, enacting States may wish to pass regulations that ensure that record retention systems are fully compatible (interoperable), and that they allow each communication in the procurement process to be verified, such that the sender, recipient and time and duration of each communication can be established (and automatic data processing or calculations can be reconstituted) (traceability). Further, the regulations may address whether access to the record and contract documents should be recorded and any data protection issues that would arise, to ensure the integrity and security of data, and confidentiality of communications and information, as more fully set out in [cross reference to commentary to article 9 above].]

<sup>c</sup> The remainder of paragraph (1) and of the commentary on the article addresses the issue of disclosure of information. The Working Group may consider that a new paragraph (1) bis could be inserted, before the disclosure discussion, to address the continued accessibility and interoperability of record retention systems, any required period of retention of records, confidentiality and integrity and security of electronic records (A/CN.9/WG.I/WP.34/Add.1, para. 57).

## **G. Electronic submission of tenders, proposals and quotations<sup>8</sup>**

### **1. General remarks**

19. Under article 30 (5)(a) of the Model Law, tenders are to be submitted “in writing, signed and in a sealed envelope”, or under article 30 (5)(b) “in any other form specified in the solicitation documents”, subject to certain conditions. Article 30 (5)(b) also gives a supplier an overriding right to submit a tender in writing, signed and in a sealed envelope. According to the 1994 Guide to Enactment, this latter is an “important safeguard against discrimination in view of the uneven availability of non-traditional means of communication such as [Electronic Data Interchange (EDI)]”. (Those provisions are incorporated by cross-reference to chapter III of the Model Law in articles 46 (1) (two-stage tendering) and 47 (3) (restricted tendering), and similar provisions are implied in article 48 (6) (request for proposals).) However, and in the light of more widespread availability of the relevant technology, the Working Group has decided to amend these provisions in order to enable tenders and other offers to be submitted electronically (A/CN.9/586, para. 32).

20. Applying the principle of functional equivalence to the electronic submission of tenders, electronic tenders require the same legal value as tenders submitted in writing, signed and in a sealed envelope. Article 30 (5)(b) provides that the form of any tender should provide “a record of the content of the tender and at least a similar degree of authenticity, security and confidentiality” as one submitted in writing, signed and in a sealed envelope. The Guide to Enactment refers to additional “rules and techniques” that might be needed, for instance “to guard the confidentiality of tenders and prevent ‘opening’ of the tenders prior to the deadline for submission of tenders”.<sup>9</sup>

21. In the electronic context, such rules and regulations may need to address the following matters. First, security: tenders must be protected from unauthorized access or interference (for example, via firewalls). Secondly, integrity: the system should prevent any reading or alteration of the contents of tenders submitted before the time stipulated for opening (for example, by using encryption technologies, locking all tenders, ensuring that tenders cannot be decrypted before the scheduled opening time, ensuring that only authorized persons can set or change the opening time, perhaps requiring two authorized persons). Thirdly, the authenticity of tenders must be established). Fourthly, the confidentiality of information must be protected, including intellectual property rights. Fifthly, interoperability—procuring entities should ensure that the systems used are fully compatible with those of potential suppliers or contractors. Finally, systems should be checked periodically to assist in protection of the system against outside interference (including viruses, worms and hackers).

22. For the purposes of the record of the procurement proceedings required under article 11 of the Model Law, the traceability of the communications concerned should also be verified (see, further, the text following paragraph 18 above). In practical terms, this may involve creating a record of all access to the system before tenders are opened and detecting any unauthorized access.

23. The Working Group may wish to consider whether the Guide to Enactment should propose draft regulations or narrative text to address these matters, such as that set out in the preceding paragraphs.

## **2. Proposed additional text for the Model Law: revisions to article 30 of the Model Law, to enable the submission of tenders in electronic form**

24. The text of paragraph (5) in the 1994 Model law is restated below (in normal font), so as to introduce the proposed additional text (with text to be removed struck through, and proposed additional new text underlined):

### Article 30. Submission of tenders

(5) (a) ~~Subject to subparagraph (b),~~ A tender shall be submitted in writing, signed and in a sealed envelope ~~(b) Without prejudice to the right of a supplier or contractor to submit a tender in the form referred to in subparagraph (a), a tender may alternatively be submitted in or in any other~~ form specified in the solicitation documents, provided that the means of submission chosen by the procuring entity shall comply with the accessibility standards contained in [article 4 bis or 5 bis].

(b) The procuring entity shall, on request, provide to the supplier or contractor a receipt showing the date and time when its tender was received.

## **3. Commentary**

25. The proposed revisions would enable the procuring entity to insist on the submission of tenders in electronic format, by removing the previous option for a supplier to submit its tender in a sealed envelope. The Working Group may note that there is no provision for an electronic equivalent of a sealed envelope in the proposed revisions (questions of confidentiality, security and integrity of data are examined further in paragraphs 26 to 27 below). The procuring entity is required, under the proposed article, to apply the accessibility standards discussed earlier in this Note to the selection of the submission method, consistent with the choice to be made in any form of communication in the procurement.

## **4. Proposed additional text for the Guide to Enactment regarding article 30 of the Model Law, to enable the submission of tenders in electronic form**

26. In the light of the above, paragraph 3 of the current text of the Guide to Enactment addressing article 30 of the Model Law could therefore be amended to provide as follows, with a new paragraph 3 bis (with text to be removed struck through, and proposed additional new text underlined):

### Article 30. Submission of tenders

(3) ~~The requirement in Paragraph (5) (a) that tenders provides that tenders are to be submitted in writing is subject to the exception in subparagraph (b) permitting the use of a form of communication other than writing, such as electronic data interchange (EDI), including submission by electronic means as [defined in article 2] [described in the commentary to article 9],~~ provided that the form used is one that provides a record of the content of the communication. Additional safeguards are included to protect the integrity of the procurement proceedings, as well as the particular interests

of the procuring entity and of suppliers and contractors: ~~that the use of a form other than writing must be permitted by the solicitation documents; that suppliers and contractors must always be given the right to submit tenders in writing, an important safeguard against discrimination in view of the uneven availability of non-traditional means of communication such as EDI; and that the alternative form must be one that provides at least a similar degree of authenticity, security and confidentiality. It may be further noted that the implementation of paragraph (5) to accommodate the submission of tenders in non-traditional forms~~ that the form must be set out in the solicitation documents; and that the form must be one that provides at least a similar degree of authenticity, security and confidentiality as submission in traditional paper-based format. Enacting States or procuring entities may consider that the submission of tenders in non-traditional forms would necessitate elaboration of special rules and techniques to guard the confidentiality of tenders and to prevent “opening” of the tenders prior to the deadline for submission of tenders, and to deal with other issues that might arise when a tender is submitted other than in writing (e.g., the form that the tender security would take).

(3) bis. Enacting States or procuring entities may therefore wish to enact regulations that address the origin and authenticity of communications, documents and tenders (and proposals or quotations) received from suppliers or contractors; the integrity of communications, documents and tenders received from suppliers or contractors, the date and time of receipt of communications, documents and tenders; that prevent communications, documents and tenders from being accessed by the procuring entity or other persons prior to any deadline, that provide that any unauthorized access or attempt to access communications, documents and tenders prior to the deadline referred to in paragraph (1) above is detectable; that ensure the ongoing confidentiality of communications, documents and tenders received from or relating to other suppliers or contractors; and that ensure that communications are traceable and systems interoperable.

27. The Working Group may, as noted above, wish to provide further detail or draft regulations addressing these issues, for example along the following lines, in proposed paragraph (3) ter:

(3) ter. Systems for the electronic receipt of tenders must ensure at a minimum that:

(a) [The authenticity of] electronic signatures relating to tenders [can be established][comply with relevant electronic signature legislation, e.g. that based on Model Law on Electronic Signatures];

(b) The system is interoperable with those in [general]<sup>d</sup> use in [the enacting State];

(c) The exact time and date of the receipt of tenders can be established;

<sup>d</sup> As regards the notion of “general use”, see paragraph 5 above.

(d) No person can have access to a tender prior to the time and date specified in the solicitation documents, or any extension thereto as the deadline for submission of tenders, and at which tenders are to be opened;

(e) If that access prohibition is infringed, the infringement is clearly detectable;

(f) Only [two] authorized persons may set or change the time and date specified in the solicitation documents or any extension thereto as the deadline for submission of tenders, and at which tenders are to be opened;

(g) Authorized persons may have access to the tender only after the deadline;

(h) Data received and opened in accordance with these requirements must remain accessible only to such authorized persons.<sup>10</sup>

## **H. Electronic opening of tenders**

### **1. General remarks**

28. Article 33 (1) of the UNCITRAL Model Procurement Law provides that tenders “shall be opened at the time specified in the solicitation documents as the deadline for the submission of tenders [...], at the place and in accordance with the procedures specified in the solicitation documents.” Article 33 (2) provides further that “all suppliers or contractors that have submitted tenders, or their representatives, shall be permitted by the procuring entity to be present at the opening of tenders.”

29. The Working Group has noted that while article 33 (1) may be sufficiently broad to accommodate any system for opening tenders, article 33 (2) suggests the physical presence of suppliers and contractors at a given place and time (A/CN.9/575, para. 36). The Working Group decided that the Model Law should include an enabling provision to permit the opening of electronic tenders. Such opening may be achieved through an electronic information system, which would automatically release and open the tenders at the date and time provided in the solicitation documents, and automatically transmit the information that would usually be publicly announced at the opening of tenders. Alternatively, authorized persons may open tenders on-line and publish the relevant information.

30. The electronic opening of tenders may require security-related controls additional to those for other electronic procurement. For example, even automatic release and opening of tenders will require human authorization at some point, and individuals will have to be designated for that purpose. If tenders are to be opened by individuals, they may need to be issued with decryption keys. The controls may also include only simultaneous action by at least two authorized persons (e.g. unlocking of data), logging each access to the system and step taken, and the prevention of virus-checking steps from compromising the integrity of data. Finally, the system must allow the sequential opening of both elements of a two stage tender submitted under article 46 of the Model Law, without the security of the second stage being compromised. The Working Group may wish to consider whether it is appropriate to address these detailed technical issues in the Guide to Enactment, or

merely to make reference to the general controls set out in paragraphs 21 and 22 above.

**2. Proposed additional text for the Model Law: revisions to article 33 of the Model Law, to address the opening of tenders submitted electronically**

31. The Working Group has decided that article 33 of the Model Law should be revised to contain the following draft text, as a new sub-paragraph 4 (A/CN.9/575, paras. 37-42):

Article 33. Opening of tenders

...

(4) Where the procurement proceedings were conducted electronically in accordance with [insert provisions dealing with electronic communications, reverse auctions and other fully automated procedures, if any], suppliers or contractors shall be deemed to have been permitted to be present at the opening of the tenders if they are allowed to follow the opening of the tenders through electronic means of communication used by the procuring entity.

(5) Where suppliers or contractors are permitted to follow the opening of the tenders through electronic means of communication used by the procuring entity in accordance with article 33 (4), they shall be deemed to have been permitted to be present at the opening of tenders in accordance with the requirements of article 33 (2).

**3. Proposed additional text for the Guide to Enactment regarding the opening of tenders submitted electronically**

32. In the light of the above, the Working Group may wish to include guidance to the opening of tenders electronically, setting out the solutions adopted to the matters discussed in paragraphs 29 and 30 above.

*Notes:*

<sup>1</sup> See, further, A/CN.9/WG.I/WP.34/Add.1, paras. 18-43, and A/CN.9/WG.I/WP.34/Add.2. The form of communication applies to documents and communications generated in prequalification proceedings (article 7 of the Model Law), Form of communications (article 9), Rules concerning documentary evidence provided by suppliers or contractors (article 10), Contents of invitation to tender and invitation to prequalify (article 25), Provision of solicitation documents (article 26), Clarification and modification of solicitation documents (article 28), Submission of tenders (article 30), Notice of solicitation of proposals (article 37), and Clarification and modification of requests for proposals (article 40).

<sup>2</sup> The United States Federal Acquisition Regulations, sect. 4.502, available at <http://www.arnet.gov/far/loadmainre.html>.

<sup>3</sup> See, further, A/CN.9/WG.I/WP.34, paras. 17-22, and A/CN.9/WG.I/WP.34/Add.2, article 2. Definitions.

<sup>4</sup> See article 1, para. 13, of the EU Directive 2004/18/EC.

<sup>5</sup> Examples of provisions found include:

a. "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities (United States Electronic Signatures in Global and National Commerce Act of 2000; Sect. 106 (2));



- b. "Electronic" includes created, recorded, transmitted or stored in digital form or in other intangible form by electronic, magnetic or optical means or by any other means that has capabilities for creation, recording, transmission or storage similar to those means and "electronically" has a corresponding meaning. (Canada: draft "Uniform Electronic Commerce Act" Part 1, 1 (a));
- c. "Electronic mail means any text, voice, sound or image message sent over a public communications network which can be stored in the network or in the recipient's terminal equipment until it is collected by the recipient (EU Directive 2002/58/EC).
- d. "Electronic communication means: (a) a communication of information in the form of data, text or images by means of guided and/or unguided electromagnetic energy; or (b) a communication of information in the form of speech by means of guided and/or unguided electromagnetic energy, where the speech is processed at its destination by an automated voice recognition system." (Australia, The Electronic Transactions Act 1999, Sect 5, (1));
- e. "Electronic communication" means a communication transmitted (whether from one person to another, from one device to another or from a person to a device or vice versa (a) by means of a telecommunication system (within the meaning of the Telecommunications Act 1984); (b) by other means but while in an electronic form (UK Electronic Communications Act 2000, Sect. 15);
- f. "Electronic" includes electrical, digital, magnetic, optical, electromagnetic, biometric, photonic and any other form of related technology; "electronic communication" means information communicated or intended to be communicated to a person or public body, other than its originator, that is generated, communicated, processed, sent, received, recorded, stored or displayed by electronic means or in electronic form, but does not include information communicated in the form of speech unless the speech is processed at its destination by an automatic voice recognition system (Republic of Ireland Electronic Commerce Act 2000, Sect. 2);
- g. "Electronic record" means a record generated, communicated, received or stored by electronic, magnetic, optical or other means in an information system or for transmission from one information system to another (Singapore, Electronic Transactions Act (Chapter 88), Art. 2).

The Secretariat found that other jurisdictions, notably those in continental Europe and Latin America, typically did not define the term "electronic".

- <sup>6</sup> See, further, A/CN.9/WG.I/WP.34, paras. 44-58, and A/CN.9/WG.I/WP.34/Add.2. The legal recognition of electronic communications arises in connection with the acceptance of tender and entry into force of procurement contract (article 36), and also raises issues of procurement contracts and electronic signatures.
- <sup>7</sup> The UNCITRAL Model Law on Electronic Signatures (2001) addresses the issue, as its name suggests. For the text of the Model Law, see *Official Records of the General Assembly, Fifty-sixth Session, Supplement No. 17 (A/56/17)*, annex II. The Model Law and its accompanying Guide to Enactment have been published as United Nations publication, Sales No. E.02.V.8, and are available in electronic form at the UNCITRAL web site (<http://www.uncitral.org/english/texts/electcom/ml-elecsig-e.pdf>).
- <sup>8</sup> See, further, A/CN.9/WG.I/WP.34/Add.1, para. 33, and A/CN.9/WG.I/WP.34/Add.2.
- <sup>9</sup> Guide to Enactment of the UNCITRAL Model Law on Procurement of Goods, Construction and Services, remarks to article 30, para. 3. For the text of the Guide to Enactment, see document A/CN.9/403, reproduced in the UNCITRAL Yearbook, vol. XXV:1994 (United Nations publication, Sales No. E.95.V.20), part three, annex II.

<sup>10</sup> These regulations are based on those found in Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors (Official Journal of the European Union, No. L 134, 30 April 2004, p. 1).

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