Results of the votes by correspondence that ended in July and August 2020

Note to Executive Board representatives

Technical questions:

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Executive Board — 130th Session
Rome, 8-11 September 2020

For: Information
Results of the votes by correspondence that ended in July and August 2020

1. As per the communications issued by the Secretary of IFAD, the Executive Board was invited to approve two proposals through vote by correspondence, namely:
   
   (a) Proposed amendments to the Rules of Procedure of the Executive Board as contained in document EB 2020/130/V.B.C.1; and
   
   (b) Proposal for the Customization and Validation of an Automated Voting System at IFAD as contained in document EB 2020/130/V.B.C.2.

2. Both proposals were approved by the Executive Board in July and August 2020, respectively. The relevant communications on the outcome of the votes signed by the President of IFAD are contained in annex I and II of the present document.
Distinguished Executive Board Representatives,

In accordance with rule 23 of the Rules of Procedure of the Executive Board, which prescribes that the President shall notify all members and alternates of the results of votes by correspondence, I am pleased to inform you of the positive outcome of the recent vote by correspondence – as referred to in the communication attached to consider the proposed amendments to the Rules of Procedure of the Executive Board.

Under rule 23 of the Rules of Procedure of the Executive Board, a vote is considered valid if replies are received from members having at least two thirds (3,697,952) of the total number of votes in the Executive Board (5,546,927). Under rule 19.1, all decisions of the Board are to be taken by a majority of three fifths of the votes cast, provided that such majority consists of more than one half of the total votes in the Executive Board. Rule 19.3 specifies that "votes cast" shall mean affirmative and negative votes.

Replies constituting 5,056,911 votes (approximately 91.1 per cent of the total of 5,546,927 votes) were received from Executive Board members or their alternates by the deadline. Thus the requirement of rule 23 was met.

All the votes cast (5,056,911 votes) were in favour of the proposal, meeting the majority required by rule 19. The Executive Board thus approved the proposed amendments to the Rules of Procedure of the Executive Board as contained in document EB 2020/130/V.B.C.1.

Accept, Distinguished Representatives, the assurance of my highest consideration.

Gilbert F. Houngbo

Executive Board Representatives of the
International Fund for Agricultural Development and respective recipients
of copies for information
Approval through vote by correspondence of proposed amendments to the Rules of Procedure of the Executive Board

Distinguished Executive Board Representatives,

In light of the continued impact of the COVID-19 pandemic on the convening of governing body meetings at IFAD headquarters, Management recognizes the need to propose amendments to the Rules of Procedure of the Executive Board to allow Executive Board sessions to be held by virtual means. Management also recognizes this as an opportunity to update the Rules of Procedure to ensure business continuity and allow for greater flexibility in the future.

The Executive Board is therefore invited to consider and approve the proposed amendments, as contained in the attachment to this communication, through a vote by correspondence, in accordance with rule 23 of the Rules of Procedure of the Executive Board.

Executive Board representatives are invited to cast the votes of the members they represent in favour of, against, or to abstain with respect to this proposal. A written reply, specifying the vote cast (“yes”, “no” or “abstain”) should be submitted by midnight (Rome time), Friday, 24 July 2020.

Representatives are kindly reminded that:

(a) Members and alternate members may cast a “yes”, “no” or “abstain” vote by submitting a written reply by fax (+39 06 5459 3212) and/or e-mail (gb@ifad.org);

(b) The absence of a written reply by the stipulated deadline will not indicate abstention but rather the absence of a member in the voting procedure; and

(c) In the event of no reply from a member, the vote of the alternate member shall prevail.

The Executive Board will be informed of the result of this vote by correspondence in a timely manner.

Accept, Distinguished Executive Board Representatives, the assurance of my highest consideration.

Luis Jiménez-McInnis
Secretary of IFAD

Executive Board Representatives of the International Fund for Agricultural Development and respective recipients of copies for information
Proposed amendments to the
Rules of Procedure of the Executive Board

The Executive Board is invited to consider and approve the following amendments to the Rules of Procedure of the Executive Board. Additions are underlined while deletions are shown in strikethrough.

Rule 3 – Place of Sessions – amendments pertain to the possibility of holding Board sessions by virtual means.

“All sessions of the Board shall be held at the seat of the Fund, except for sessions held in conjunction with a session of the Governing Council held elsewhere, or sessions held by virtual means. Executive Board sessions may be held by virtual means when the President determines that holding a physical in-presence session is not feasible or appropriate for all representatives. In such instances, one or more representatives of Executive Board members and alternate members may participate in the meeting by teleconference, videoconference or other electronic means. Special procedures applicable to Executive Board sessions held by virtual means are set forth in annex I to the present Rules of Procedure.”

ANNEX I – Special Procedures

“The following special procedures shall apply to Executive Board sessions held by virtual means:

1. Attendance at Meetings

1.1. Members and alternates may participate in sessions of the Executive Board by teleconference or any other electronic means that enable them to listen to the proceedings and address the meeting from a remote location.

1.2. Members and alternates shall be represented by a single representative with the right to speak. Additional representatives of members and alternates may attend the meeting as silent observers. The President shall designate a restricted number of key staff to ensure the efficient and effective running of the meeting. During the meeting, should connectivity issues arise, members and alternates may be requested to restrict participation to a single representative only.

1.3. Representatives shall be responsible for the quality of their connection to the virtual meeting. Should a representative lose connectivity, deliberations shall continue and decisions made as appropriate, unless the quorum is lost due to the loss of connection.

1.4. Representatives may wish to share their position on agenda items with Management or fellow Executive Board representatives in advance of the session to ensure that said positions are duly recorded in the minutes of the virtual meeting.

2. Quorum

2.1. The quorum for any meeting of the Executive Board shall be constituted by the virtual presence of representatives of members or alternates exercising two-thirds of the total number of votes in the Executive Board.

2.2. In the event that the quorum is lost due to connectivity issues being experienced by a number of representatives, the meeting shall be suspended until such time as a quorum has been re-established.”
Rule 4 – Notification of Sessions – amended to allow for the option of issuing notifications electronically.

“3. Notifications under this rule may be issued by any suitable means, including cable or telex electronic means.”

Rule 5 – Agenda – amended to allow for the option of reviewing documents electronically – as has been the case with documents posted on the Member States Interactive Platform and open for comments from representatives.

“1. The President shall prepare a proposed agenda for each session of the Board, which shall include all items requiring consideration by the Board during the session or review by electronic means.”

Rule 6 – Distribution of Documents, footnote – updated to remove reference to the decision of the Executive Board in 1982, which was superseded by the decision of the Board in 2015. The details of decision shall be incorporated into the Rules of Procedure as annex II thereto. Subsequent annexes shall be renumbered accordingly.

“The documents relating to a proposal to be considered by the Board shall, as far as possible, be distributed to the members and alternates at least thirty days in advance of the meeting at which such proposal is to be considered. ¹

¹ At the Fifteenth Session of the Executive Board on 2 April 1982, the President assured the Executive Board that the following will be observed:

(a) Documents are to be dispatched from six weeks to four weeks in advance of a given session of the Executive Board. However, not more than two President’s Reports on projects are to be included in the last dispatch four weeks prior to the beginning of a session.

(b) The four-week dispatch limit with respect to documents presented for and requiring action by the Executive Board at a session shall not be exceeded. However, if necessary, information relating to matters that do not require decisions by the Board, or additional information regarding projects, may be provided subsequently.

¹ At its 115th session, the Executive Board approved document EB 2015/115/R.25 to replace the methodology established at its fifteenth session on 2 April 1982 to be observed for the dispatch of governing body documentation in the four official languages of the Fund. The related dispatch timelines are set forth in annex II to the present Rules of Procedure.

Annex II – Distribution of Executive Board Documents

The following dispatch periods shall normally apply for the following Executive Board documents:

(i) Provisional agendas shall be dispatched together with the notification of the session, six weeks in advance of said session.

(ii) Project, programme and grant proposals shall be dispatched four weeks prior to a session of the Executive Board, and/or in line with procedures for approval under the lapse-of-time modality. Additional information regarding such proposals – for example amendments arising as a result of negotiations – may be provided subsequently.

(iii) Corporate policies and strategies and corporate-level evaluations shall be dispatched four weeks prior to the session at which they are to be considered; comments thereon by either Management or the Independent Office of Evaluation of IFAD (IOE) shall be dispatched three weeks prior to the session. Programmes of work and budgets shall be dispatched three weeks prior to the session at which they are to be considered.

(iv) Results reports presented for the review of the Executive Board (e.g. Annual Report on Results and Impact of IFAD Operations [ARRI] and Report on IFAD’s Development Effectiveness [RIDE]) shall be dispatched four weeks prior to a Board session. Comments thereon by either Management or IOE shall be dispatched three weeks prior to the session at which they are to be considered.
Financial documentation requiring action by the Executive Board shall be dispatched three weeks in advance of the session at which it is to be considered.

Documents relative to country strategies and country programme evaluations shall be dispatched at least two weeks prior to the session at which they are to be considered, on the understanding that prior review has been facilitated by means of an informal seminar.

Other documents requiring action by the Board, listed in table 1 of document EB 2015/115/R.25, shall be dispatched in accordance with the timeline set therein.

Documents presented for information to the Board may be provided at a later date.

Addenda to documents reviewed and discussed by the subsidiary bodies of the Executive Board shall normally be dispatched at least four days in advance of the session of the Executive Board at which they are to be considered.

* Additional information relative to project/programme proposals (e.g. addenda and financial agreements) will be dispatched in line with negotiation schedules and, as such, may be tabled in-session or in line with procedures for approval under the lapse-of-time modality.

** Every effort will be made to ensure dispatch one week in advance of a session.”

Rule 20 – Method of Taking Decisions – amended to allow for the possibility of voting by electronic means

"2. Voting shall normally be by electronic means or by roll-call, which, For the latter, voting shall be taken in the English alphabetical order of the names of the members, starting with the member whose name is drawn by lot by the President. The name of each member shall be called in all roll-calls, and its representative shall reply “yes”, “no” or “abstention”. Unless otherwise decided by the Board, the vote of each member participating in a roll-call shall be recorded.

3. In the exceptional cases when the Board decides that voting shall be by secret ballot, each member shall receive one or more ballot papers each indicating a specific number of votes, which shall be so distributed that: (i) papers specifying any particular number of votes shall be received by at least three members, and (ii) the total number of votes specified on the papers received by any member shall equal the number of votes he is entitled to cast. Each member may indicate his vote on all the papers he receives and deposit them in the ballot boxes, from which they shall be taken and counted by tellers appointed by the President from among the members of the Board. Voting shall be carried out by the casting of paper ballots or, if available, through an electronic voting system in such a way as to safeguard the secrecy and integrity of the secret ballot. Each member shall have access to and the ability to cast, the specific number of votes he/she is entitled to cast.

5 In the case of paper ballots, each member shall receive one or more ballot papers each indicating a specific number of votes, which shall be so distributed that: (i) papers specifying any particular number of votes shall be received by at least three members, and (ii) the total number of votes specified on the papers received by any member shall equal the number of votes he is entitled to cast; each member may indicate his vote on all the papers he receives and deposit them in the ballot boxes, from which they shall be taken and counted by tellers appointed by the President from among the members of the Board."

Rule 23 – Voting by Correspondence – amended to allow for the possibility of voting by correspondence electronically.

Whenever an action must be taken by the Board that should not be postponed until its next session but does not warrant the calling of a session of the Board, the President shall transmit to each member and alternate, by any rapid means of communication, a motion embodying the proposed action with a request for each member to vote thereon. Votes shall be cast within such reasonable period as the President shall prescribe, at the expiration of which he shall record the results and notify all members and alternates.
Members and alternate members may cast a “yes”, “no” or “abstain” vote by submitting a written reply by facsimile transmission, telex or letter, e-mail or alternative electronic means. The absence of a written reply by the deadline prescribed by the President shall not indicate an abstention but rather the absence of the member from the voting procedure and, in the event of no reply from a member, the vote of the alternate member shall prevail. The vote shall be valid if replies are received from members having at least two-thirds of the total number of votes in the Executive Board.
Distinguished Executive Board Representatives,

In accordance with rule 23 of the Rules of Procedure of the Executive Board, which prescribes that the President shall notify all members and alternates of the results of votes by correspondence, I am pleased to inform you of the positive outcome of the recent vote by correspondence – as referred to in the communication attached regarding the proposal for the customization and validation of an automated voting system at IFAD.

Under rule 23 of the Rules of Procedure of the Executive Board, a vote is considered valid if replies are received from members having at least two thirds (3,697,952) of the total number of votes in the Executive Board (5,546,927). Under rule 19.1, all decisions of the Board are to be taken by a majority of three fifths of the votes cast, provided that such majority consists of more than one half of the total votes in the Executive Board. Rule 19.3 specifies that "votes cast" shall mean affirmative and negative votes.

Replies constituting 5,291,097 votes (approximately 95.4 per cent of the total of 5,546,927 votes) were received from Executive Board members or their alternates by the deadline. Thus the requirement of rule 23 was met.

All the votes cast (5,291,097 votes) were in favour of the proposal, meeting the majority required by rule 19. The Executive Board thus approved that the Secretariat initiate development and implementation of an automated voting system for the scenarios of on-site and online voting with the selected company – Minsait – to allow for customization and validation with the ultimate goal of testing both solutions with Executive Board representatives in accordance with the timeline indicated in document EB 2020/130/V.B.C.2, for possible use in appointing the President in 2021.

Accept, Distinguished Representatives, the assurance of my highest consideration.

[Signature]

Gilbert F. Houngbo

Executive Board Representatives of the
International Fund for Agricultural Development and respective recipients
of copies for information
Approval through vote by correspondence of the proposal for the customization and validation of an automated voting system at IFAD

Distinguished Executive Board Representatives,

The Executive Board is invited to consider document EB 2020/130/V.B.C.2, and in line with resolution 215/XLIII of the Governing Council, is requested to approve that the Secretariat initiates development and implementation of the automated voting system provided by the selected company – Minsait – and proceeds with customization and validation of both the onsite and online voting solutions.

Executive Board representatives are invited to cast the votes of the members they represent in favour of, against, or to abstain with respect to this proposal. A written reply, specifying the vote cast ("yes", "no" or "abstain") should be submitted by midnight (Rome time), Thursday, 6 August 2020.

In accordance with rule 23 of the Rules of Procedure of the Executive Board, representatives are kindly reminded that:

(a) Members and alternate members may cast a “yes”, “no” or “abstain” vote by submitting a written reply by fax (+39 06 5459 3212) and/or e-mail (gb@ifad.org);

(b) The absence of a written reply by the stipulated deadline will not indicate abstention but rather the absence of a member in the voting procedure; and

(c) In the event of no reply from a member, the vote of the alternate member shall prevail.

The Executive Board will be informed of the result of this vote by correspondence in a timely manner.

Accept, Distinguished Executive Board Representatives, the assurance of my highest consideration.

Luis Jiménez-McInnis
Secretary of IFAD

Executive Board Representatives of the International Fund for Agricultural Development and respective recipients of copies for information
Proposal for the Customization and Validation of an Automated Voting System at IFAD
Recommendation for approval
The Executive Board is invited to consider the present document and to approve the recommendation contained in paragraph 27.

Proposal for the Customization and Validation of an Automated Voting System at IFAD

I. Introduction
1. The Governing Council Bureau, in its Report on the Review of the Established Practice for the Process Leading to the Appointment of the President of IFAD (GC 41/L.9), recommended that the Secretariat explore the introduction of an automated voting system for potential use in the appointment of the President in 2021, and that the voting for the appointment of the President continue to be held by secret ballot. Following the endorsement of these recommendations by the Governing Council, the Secretariat worked with the Executive Board to agree on the specifications for such a system. Besides ensuring secrecy, the main requirements for an automated solution include confidentiality, verifiability and integrity of the vote. It should also implement a secure system that minimizes the probability of cyberattacks.
2. Following a thorough and transparent procurement process, submissions from five companies were evaluated on their commercial and technical merits, and the best entry was selected. The Executive Board was informed of the outcome at an informal seminar on 24 June 2020, when the selected company was presented together with its proposed system. A timeline was indicated for further action and, most importantly, for obtaining feedback from Member State representatives.
3. The negotiated procurement procedure was carried out on the assumption that a physical meeting of the Governing Council would be possible. However, following the outbreak of COVID-19 and the introduction of restrictions on assemblies and movements, Management, upon consultation with Member States, also decided to consider the option of online/remote voting. The online option mitigates, or even eliminates, the risk of not being able to elect and appoint the President of IFAD in 2021, thus ensuring the Fund’s business continuity.
4. The company selected through the negotiated procurement procedure was Minsait. A subsidiary of Indra Holding Tecnologías de la Información, the company is one of the top consulting and technology groups in the world, with 42 years of experience in developing electoral solutions at the international level. It can not only organize on-site elections with physical voting machines but also run online votes. These two options are described below, along with an explanation of how the requirements identified by the Board are addressed.

II. Objectives
5. The first objective of this document is to provide Board members with sufficient information for them to make an informed decision on the automated voting scenarios described in this document, taking into due consideration the impact of COVID-19 on the process of appointing the President of IFAD in February 2021.
6. The second objective is to request the Board’s approval for the customization of the solutions for both scenarios (on-site and online) of the automated voting system, identified in paragraph 4 above, and to validate those scenarios with an external security company. Customization and validation are the two obligatory steps

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1 Since 2014, Minsait is a certified elections provider for the United Nations Development Programme. More information on the company can be found in the appendix or on their website: www.minsait.com.
needed to test the options with the Board and, ultimately, with the Governing Council.

7. A detailed timeline is provided in section IX.

III. Budget

8. The Governing Council approved capital budget funding for the exploration of an automated voting system in February 2019. Of the funds earmarked for this system (US$210,000), 24 per cent has already been committed, while the remaining 76 per cent (approximately US$160,000) – not yet committed – covers the estimated costs of customizing and validating the on-site option. It is estimated that it should also cover costs related to customizing the online option. It should be noted that consideration of the online option represents a significant expansion of the original scope and costs of the project. However, Management hopes to contain costs and upon additional analysis will keep the Executive Board updated on costs as needed.

IV. Automated voting system – scenarios

9. As mentioned above, due to the importance of ensuring operational continuity at IFAD, and given that COVID-19 makes it uncertain that a physical Governing Council session can be held in February 2021, Management believes that the system should be developed for use either on-site or online.

10. According to the proposed timeline in section IX, the options would be tested with members on the sidelines of the Board session in September 2020 or at an informal seminar in September or October. In December, the Board would make the final decision on whether to implement one or neither of the options described in the present document for the appointment of the President of IFAD in 2021.

A. Scenario 1 – Election held on the premises with physical voting machines

11. This scenario allows for Member State representatives to cast their votes on voting machines set up in voting booths in much the same way as voting with paper ballots. Rather than stamping the name of the preferred candidate on each one of the ballot papers provided, voters would select their preferred candidate on-screen and confirm the vote cast. The solution proposed by Minsait will be validated by a third-party company in terms of security.

B. Scenario 2 – Election held online (internet voting)

12. The scenario allows Member State representatives to cast their votes from anywhere in the world. Access to the voting portal would be granted to voting representatives upon identification and authentication. They would be able to use their laptops or personal computers to cast a vote for their preferred candidate. At the end of the process, voters would be given a verification code as added assurance of the correctness of the results. A comparison of the main differences between using paper ballots and automated voting either on-site or online can be found in section V below. The solution proposed by Minsait will be validated by a third-party company in terms of security.

V. Differences between voting procedures

13. Below is a brief and high-level comparison of the voting process between paper ballots and automated scenario 1 (on-site) or scenario 2 (online), which is subject to change and will be further detailed during development, considering the IFAD requirements and technical capabilities of the system proposed by Minsait.
<table>
<thead>
<tr>
<th>Main steps</th>
<th>Paper ballot</th>
<th>Automated voting system scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>On-site voting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online voting</td>
</tr>
<tr>
<td>1</td>
<td>Calling of names</td>
<td>Calling of names</td>
</tr>
<tr>
<td></td>
<td>Representatives are called in alphabetical order.</td>
<td>Representatives are called in alphabetical order. In case COVID-19 restrictions still apply, time slots could be organized for the representatives to enter the voting room in small groups, coordinated for social distancing.</td>
</tr>
<tr>
<td>2</td>
<td>Moving to the table</td>
<td>Moving to the table</td>
</tr>
<tr>
<td></td>
<td>Tables will be divided according to the first letter of the formal name of Member States. Each representative moves to the appropriate table according to alphabetical order by country name.</td>
<td>Tables/rooms will be divided according to the first letter of the formal name of Member States. Each representative moves to the appropriate table/room according to alphabetical order by country name.</td>
</tr>
<tr>
<td>3</td>
<td>Collecting the ballots</td>
<td>Collecting the token</td>
</tr>
<tr>
<td></td>
<td>Representatives collect their envelopes with the ballots and check that the Membership and contribution votes correspond to the total votes to which the Member State is entitled. Given the various ballot papers provided, calculators are at the disposal of representatives so that they can count the votes.</td>
<td>Representatives are each given a token in the form of a QR code.</td>
</tr>
<tr>
<td>4</td>
<td>Signing for the ballots</td>
<td>Signing for the token</td>
</tr>
<tr>
<td></td>
<td>Once the correct number of votes has been checked, representatives sign for receipt of their ballots and move to the booths.</td>
<td>Representatives sign for receipt of their QR tokens and move to the booths.</td>
</tr>
<tr>
<td>5</td>
<td>Voting using the stamps in the booths</td>
<td>Voting using the token</td>
</tr>
<tr>
<td></td>
<td>Once in the booth, each representative uses one of the stamps provided to stamp the name of the selected candidate on the ballot paper(s).</td>
<td>The representative inserts their token into the machine. The number of votes is displayed on the screen. The representative verifies that the number is correct. If so, they can proceed to cast a vote. If not, the representative should return to the desk where they collected the token and ask for verification.</td>
</tr>
<tr>
<td>6</td>
<td>Casting the ballot</td>
<td>Casting the vote</td>
</tr>
<tr>
<td></td>
<td>The representative puts the ballot in the ballot box and goes back to their seat in the plenary.</td>
<td>The representative casts and confirms their vote. A voter-verifiable “paper trail” is printed with the various denominations. The representative puts the paper trail in the ballot box.</td>
</tr>
<tr>
<td>7</td>
<td>Communication of results</td>
<td>Communication of results</td>
</tr>
</tbody>
</table>

In accordance with rule 41.2 of the Rules of Procedure of the Governing Council, "In the case of more than one nominee, if no nominee receives the required number of votes on the first ballot, a second ballot shall be taken in which the nominee who received the fewest votes shall not participate. This procedure shall be repeated until one nominee receives at least two-thirds of the total number of votes or the Council decides that such balloting be discontinued and decision be taken on another date."
VI. Requirements and how they are met by the automated options

14. Secrecy

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The system uses an algorithm to randomly split the weighted votes of IFAD into several denominations.²</td>
<td>In order to maintain the secrecy of the vote, the system randomly adds the votes cast into a so-called &quot;Elliptic curve homomorphic encryption&quot;. This uses a special mathematical function allowing one to determine the sum of all encrypted votes without having to decrypt a representative’s individual vote. The system can thus fulfill the requirement of weighted voting without endangering secrecy since individual votes remain encrypted and thus unreadable.</td>
</tr>
<tr>
<td>Essentially, the printed vote gets broken into several pieces of pseudo-random weight that makes it practically impossible to trace the vote to the country responsible.</td>
<td></td>
</tr>
</tbody>
</table>

15. Integrity

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The voting machine allows for printing a so-called voter-verifiable paper trail which is randomly split in denominations and deposited by the voter in a ballot box. Should a recount or audit be requested, the ballot box would be opened and the votes counted and checked against the system result.</td>
<td>When casting the vote on behalf of their Member State, each voter receives a numeric code unique for each voting right and thus vote cast. This allows a voter to check that the signature of the vote count contains their numeric code and that the vote has not been tampered with.</td>
</tr>
</tbody>
</table>

16. Verifiability

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A voter can see their vote on the paper audit trail and hence verify that the vote cast is recorded correctly. The voting machine can recount the votes, reading them back and showing the count on-screen as an additional verifiability feature.</td>
<td>The vote signatures provide additional assurance of the correctness of the result when reviewed by auditors or if a recount is required.</td>
</tr>
</tbody>
</table>

17. Security

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In addition to the generic computer security safeguards such as firewalls and antivirus or anti-brute-force attack systems, the risks of an external attack would be mitigated by using the voting machines as stand-alone devices with no wireless connections. Other election-specific security measures such as vote encryption, digital certificates, blockchain security and intrusion detection would be implemented.</td>
<td>The online system would reside in a cloud, hence security measures need to be enhanced compared to scenario 1 (on-site). Generic internet security measures include: firewall, antivirus, secure software development life cycle, real-time traffic monitoring, protection against brute-force attacks, intrusion detection, 2FA, signed static content and device tracking. Security measures for elections include: voting encryption, homomorphic encryption, certificates and digital signatures, blockchain security, single-use links, universal verifiability, multifactor authentication, voter verifiability, blind signature and multi-voting. For more details please refer to the appendix.</td>
</tr>
</tbody>
</table>

² Example in the appendix, page 13.
18. **Identification**

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A token, in the form of a QR code, is delivered to each representative. The representative signs for the receipt of the QR token and moves towards the booth. This is the same process as the one for voting with paper ballots. Voting machines only accept voting tokens which a) are valid and b) have not been used previously. Voting tokens provide the necessary credentials for Member State representatives to approach the voting machines and to provide the system with the information about the total number of votes to be cast by the Member State.</td>
<td>The delegation provides the credentials of the designated voter (official e-mail address, mobile phone number and possible other required information) through an official communication channel to the IFAD Secretariat. The voter is sent an e-mail with a link to access the online voting portal. After logging in, the voter receives a text message with a code (a one-time password) which constitutes a 2FA code. The code is sent to the mobile phone number that the Member State representative has registered with IFAD.</td>
</tr>
</tbody>
</table>

19. **Portability**

<table>
<thead>
<tr>
<th>Scenario 1 (on-site)</th>
<th>Scenario 2 (online)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The voting machine can be transported in a case. See the appendix for images of the machine and its case.</td>
<td>The online option allows for voting from any location, as long as a reliable internet and mobile phone (including SMS) connection is available.</td>
</tr>
</tbody>
</table>

**VII. Main risks and mitigation measures**

20. Following is a brief description of the main risks identified and the corresponding mitigation measures.

<table>
<thead>
<tr>
<th>Risk with paper ballot scenario</th>
<th>Mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main risk is that the President of IFAD is not appointed due to the impossibility of holding a physical Governing Council meeting in February 2021.</td>
<td>1. Using an online voting system would eliminate the risk of not being able to appoint the President of IFAD, allowing Member State representatives to cast a vote on behalf of their country remotely, providing they have access to a reliable internet and mobile phone (including SMS) connection. 2. On-site voting would avoid staff having to engage in preparatory back-office work, considerably reduce interaction between Member State representatives and respect social distancing. 3. For both options the rules and procedures will be amended to cover exceptional cases (inability to vote at a given time for technical reasons).</td>
</tr>
<tr>
<td>Ballot preparation and counting is a cumbersome process, as highlighted by the Governing Council Bureau (GC41/L.9): “The preparation of the anonymous ballot papers required by rule 35.3 of the Rules of Procedure of the Governing Council for each of the ballots is a complex process, entailing the involvement of approximately 20 staff members in the days preceding the Governing Council meeting at which the President will be appointed. On the day of the Governing Council meeting, the process also requires the presence of a large number of essential staff to: (a) distribute the respective ballot papers to each of the Governors; (b) record each Governor’s confirmation that they have received their full entitlement of ballot papers; (c) direct Governors to the voting booths where they are invited to stamp the ballot papers with a stamp bearing the name of the candidate they wish to vote for; (d) ensure that each Governor deposits his/her ballot papers in the ballot box; and (e) after the vote is closed, count the ballots. On average, a minimum of 20 staff members are needed for at least two hours to complete each ballot from the beginning of the proceedings to the announcement of its results.”</td>
<td>The Governing Council Bureau, in its report (GC41/L.9), identified a mitigation measure, namely the possibility of introducing an automated system to “expedite the ballot counting process and increase workforce efficiency”.</td>
</tr>
</tbody>
</table>
### Risks with scenarios 1 and 2

<table>
<thead>
<tr>
<th>Security</th>
<th>Mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site voting would be a stand-alone exercise not requiring a wireless connection. Additional details are provided in paragraph 17 above.</td>
<td>Online solution features several security measures, as outlined in paragraph 17. Additional work will be undertaken to detail the process and analyse the risks and vulnerabilities, bearing in mind that a guarantee of 100% cyber security is practically impossible. The security of both solutions will be checked and validated by an external company with specific security expertise.</td>
</tr>
<tr>
<td>Security</td>
<td>Mitigation measures</td>
</tr>
<tr>
<td>Online solution features several security measures, as outlined in paragraph 17. Additional work will be undertaken to detail the process and analyse the risks and vulnerabilities, bearing in mind that a guarantee of 100% cyber security is practically impossible.</td>
<td>The security of both solutions will be checked and validated by an external company with specific security expertise.</td>
</tr>
<tr>
<td>Usability by representatives</td>
<td>Training slots based on time zones, support on election day and additional measures may be implemented, as appropriate.</td>
</tr>
<tr>
<td>Usability by representatives</td>
<td>Training slots based on time zones, support on election day and additional measures may be implemented, as appropriate.</td>
</tr>
<tr>
<td>Bespoke technology</td>
<td>The test and security validation activities will aim to mitigate this risk.</td>
</tr>
<tr>
<td>a) Given the specific field of automated/electronic voting and the lack of in-house expertise, reliance and trust in the vendor and its system is necessary.</td>
<td>Representatives entitled to cast the votes of their countries will need to ensure sufficient connectivity. Connectivity tests will be carried out with representatives if needed.</td>
</tr>
<tr>
<td>b) Dependence on internet and/or SMS connectivity.</td>
<td>a) The test and security validation activities will aim to mitigate this risk.</td>
</tr>
<tr>
<td>b) Dependence on internet and/or SMS connectivity.</td>
<td>b) Representatives entitled to cast the votes of their countries will need to ensure sufficient connectivity. Connectivity tests will be carried out with representatives if needed.</td>
</tr>
<tr>
<td>Timeline</td>
<td>The project for the on-site solution commenced in 2019, meaning there has been adequate time to develop the necessary components. Consideration of an online option has only recently emerged in response to the ongoing COVID-19 pandemic. As such, the timeline to deliver the project is much tighter.</td>
</tr>
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<td>The project for the on-site solution commenced in 2019, meaning there has been adequate time to develop the necessary components. Consideration of an online option has only recently emerged in response to the ongoing COVID-19 pandemic. As such, the timeline to deliver the project is much tighter.</td>
</tr>
<tr>
<td>The project for the on-site solution commenced in 2019, meaning there has been adequate time to develop the necessary components. Consideration of an online option has only recently emerged in response to the ongoing COVID-19 pandemic. As such, the timeline to deliver the project is much tighter.</td>
<td>IFAD has communicated the time constraints to the vendors to ensure awareness of the need to deliver the solution and its validation on time.</td>
</tr>
<tr>
<td>IFAD has communicated the time constraints to the vendors to ensure awareness of the need to deliver the solution and its validation on time.</td>
<td>Furthermore, the vendor selected to implement the online option is the same vendor selected to implement the on-site option. In this way, the vendor is already aware of the high-level requirements, which apply to both the on-site and online options.</td>
</tr>
</tbody>
</table>

21. Outside of the scope of this project, but nonetheless worthy of mention, is the fact that a system offering the possibility of voting online would mitigate unforeseen risks – such as those posed by COVID-19. It would safeguard operational continuity while supporting efficiency by making it possible for Member State representatives to participate in the governance of the institution even when it is not feasible or appropriate for all representatives to meet physically. At the informal seminar held in June to present the automated voting system, one Member State representative raised the possibility of using such a system to streamline decision-making in other instances. This proposal was welcomed and supported by other representatives, and Management will certainly consider how best to capitalize on its potential benefits.

### VIII. Preparation for secret ballot – preliminary cost-benefit analysis

22. The preliminary cost-benefit analysis was elaborated to provide a comparison of costs among the different voting processes, namely paper ballots, automated on-site and automated online voting, in relation to tangible and intangible costs.

23. The main tangible cost considered in this preliminary analysis is related to the time saved by IFAD staff in preparing for the election with paper ballots, including setting up the various task forces, preparing the paper ballots and counting the ballots.
24. The analysis is made under the assumption that two “ballots” take place (as was the case in the 2017 election). The costs described below are based on average IFAD staff costs for both professional and general service categories. Any discrepancies in the totals below are due to rounding.

<table>
<thead>
<tr>
<th>Costs per hour are based on an average cost of General Service (GS) staff (US$43) and Professional (P) staff (US$92)</th>
<th>Hours</th>
<th>Overtime pay</th>
<th>GS staff</th>
<th>P staff</th>
<th>Total hours GS staff</th>
<th>Total hours P staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paper vote</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin ballot preparation group (prepares terms of reference for task forces &amp; selection)</td>
<td>40</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Ballot preparation group</td>
<td>12</td>
<td>0.5</td>
<td>10</td>
<td>10</td>
<td>180</td>
<td>120</td>
</tr>
<tr>
<td>Voting (incl. dry run)</td>
<td>10</td>
<td>0</td>
<td>17</td>
<td>13</td>
<td>170</td>
<td>130</td>
</tr>
<tr>
<td><strong>Subtotal (in US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16,770</td>
<td>26,680</td>
</tr>
<tr>
<td><strong>Total (in US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>43,450</td>
<td></td>
</tr>
<tr>
<td>Time spent by Governors</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (177 Governors)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1416</td>
<td></td>
</tr>
<tr>
<td><strong>Voting machine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Election preparation</td>
<td>2</td>
<td>0.5</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Voting (incl.1-hour training)</td>
<td>4.5</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td><strong>Subtotal (US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,806</td>
<td>1,012</td>
</tr>
<tr>
<td><strong>Total GS+P (US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,818</td>
<td></td>
</tr>
<tr>
<td>Time spent by each Governor (incl. 1-hour training)</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (177 Governors)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>796.5</td>
<td></td>
</tr>
<tr>
<td><strong>Time savings (only Governors)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>619.5</td>
<td></td>
</tr>
<tr>
<td><strong>Internet voting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Election preparation</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Voting (incl. 4-hour training)</td>
<td>4.5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Hotline during voting (incl. 2-hour training)</td>
<td>4.5</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>13.5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal (US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>580.5</td>
<td>2,760</td>
</tr>
<tr>
<td><strong>Total GS+P (US$$)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,818.5</td>
<td></td>
</tr>
<tr>
<td>Time spent by each Governor (incl. 1h training)</td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (177 Governors)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>796.5</td>
<td></td>
</tr>
<tr>
<td><strong>Time savings (only Governors)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>619.5</td>
<td></td>
</tr>
</tbody>
</table>
25. The above analysis does not include the help desk support foreseen in scenario 2, to be included should the scenario be confirmed. Also not included are the administrative costs related to security guards, printing of ballot papers, enrolling the voters in the online solution, cost of stamps and other various minor costs.

26. The analysis has, however, also identified a number of intangible costs/benefits for automated voting:

- Ensuring business continuity;
- Time saved by Governors, as indicated in the table above;
- Time saved by delegations and by Management;
- Streamlined process for the appointment of the President of IFAD;
- Supporting governance efficiency should Member States wish to use automated voting for other matters in the future;
- Reduction in risk of errors.

IX. Indicative timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2020</td>
<td>Based on the positive outcome of the vote by correspondence, award contracts:</td>
</tr>
<tr>
<td></td>
<td>- To Minsait for a) customization and b) testing at Sep. and Dec. Executive Board sessions</td>
</tr>
<tr>
<td></td>
<td>- To external security company for validation of solutions</td>
</tr>
<tr>
<td>August-September 2020</td>
<td>Customization of solutions by Minsait</td>
</tr>
<tr>
<td>September/October 2020</td>
<td>Validation of solutions by the external security company</td>
</tr>
<tr>
<td>September/October 2020</td>
<td>Presentation and testing of the system</td>
</tr>
<tr>
<td></td>
<td>I. On the sidelines of September Executive Board session; or</td>
</tr>
<tr>
<td></td>
<td>II. At an informal seminar in Sept/Oct; and</td>
</tr>
<tr>
<td></td>
<td>Discussion with the Governing Council Bureau</td>
</tr>
<tr>
<td>October/November 2020</td>
<td>Complete validation of online system, if needed</td>
</tr>
<tr>
<td></td>
<td>Arrange for distribution of credentials, prepare for training and support material for Member State representatives</td>
</tr>
<tr>
<td></td>
<td>Ongoing discussion with Governing Council Bureau</td>
</tr>
<tr>
<td>December 2020</td>
<td>Executive Board’s final decision on feasibility of implementing and using the selected solution for the appointment of the President in 2021</td>
</tr>
<tr>
<td>January 2021</td>
<td>Training on the selected system for Member State representatives</td>
</tr>
<tr>
<td>February 2021</td>
<td>Forty-fourth session of the Governing Council</td>
</tr>
</tbody>
</table>

X. Recommendation

27. In line with resolution 215/XLIII, the Executive Board is requested to approve that the Secretariat initiate development and implementation of an automated voting system for the scenarios of on-site and online voting with the aforementioned company to allow for customization and validation with the ultimate goal of testing both solutions with Executive Board representatives in accordance with the timeline indicated above, for possible use in appointing the President in 2021.
Onesait Democracy

IFAD Proposal
June 2020

m1nsa1t

An Indra company
Table of Contents

01. Introduction
02. Onesait Democracy Elections Kiosk (ODEK)
03. Onesait Democracy Elections Online (ODEO)
Indra Global Company

“We are a global technology company”

€ 3.0 Bn
Sales

52,000
employees

Projects in
+140
countries

Complete offering for all industries

R&D 6-8% of sales + 200 deals with research centers and universities

Leading clients in key geographies and industries

An Indra company
Our experience is based on more than 400 projects developed over the last 42 years...

**Maturity as a business unit**
- More than 40 years of experience have helped us to develop a deep and healthy knowledge of the market and the latest trends in this sector at any time.
- Due to this knowledge of trends, we have recently expanded new areas of identification, protection and participation in our unit.

**Experienced team**
- The average staff turnover of our unit is over 10 years, which helps us with unique stability, experience and knowledge.
- Working within our unit, our professionals are constantly enriching their knowledge thanks to our company training programmes.

Certified UN Elections Provider
Our experience

...which has allowed our department to develop Electoral Solutions projects at an international level

- Our department is exclusively dedicated to electoral projects, and has full access to global resources in the company: financial, human and technological.
- We have been working for more than 40 years in 40 countries, proving organisational and technical capacity to synchronise and successfully carry out a large number of projects, adapting to specific standards and legislation for each electoral process.
Our experience

Committed to quality: ISO 9001, ISO 27001 and CMMI Level 5
Stand alone electronic voting kiosk
The new generation of electronically assisted voting

ODEK

Carrying case

An India company
Security measures
The combination of these security measures addresses all threats

Election-specific security measures
- Vote encryption
- Digital certificates and signatures
- Secret Sharing
- Visual assisted count
- Voter verifiability
- Unique encryption per computer
- BlockChain transmission security
- Voting station authentication
- Single-use access token
- Paper Vote

Generic computer security measures
- Firewalls
- Anti-Virus
- CDN
- Anti Brute Force Attacks
- Signed static content
- Honey pots
- Auto-scaling microservices
- Redundant sites
- Secure software development lifecycle
- Real-time traffic monitoring
- Intrusion detection systems
- Code signing
- Device tracking
## ODEK Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>ODEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchscreen voting system</td>
<td>✓</td>
</tr>
<tr>
<td>Multi-Election and with distinct algorithms</td>
<td>✓</td>
</tr>
<tr>
<td>Secured execution</td>
<td>✓</td>
</tr>
<tr>
<td>Cryptographically protected vote printing</td>
<td>✓</td>
</tr>
<tr>
<td>QR reader for assisted counting and secure access control</td>
<td>✓</td>
</tr>
<tr>
<td>Touchless voting mode</td>
<td></td>
</tr>
<tr>
<td>Hot-swap batteries up to 12 hours duration</td>
<td></td>
</tr>
<tr>
<td>Integrable with various electronic pollbook technologies, including ODEI</td>
<td></td>
</tr>
<tr>
<td>Central consolidation via Blockchain</td>
<td></td>
</tr>
<tr>
<td>Voting mode for the blind</td>
<td></td>
</tr>
<tr>
<td>Various screen sizes (17&quot; or 15&quot;)</td>
<td></td>
</tr>
<tr>
<td>Traditional mode of execution type of electronic voting</td>
<td></td>
</tr>
<tr>
<td>Ballot-marker execution mode</td>
<td></td>
</tr>
<tr>
<td>Individual voter audit for voters (also for blind voters)</td>
<td></td>
</tr>
<tr>
<td>Advanced visual audit of the entire ballot box</td>
<td></td>
</tr>
</tbody>
</table>

- Available
- Optional
- Need additional centralized servers

## ODEK

- Secured execution
- Various operating modes
- Multi choice
- Multi algorithm
- QR Reader
- Printer
- Removable battery
- Blockchain results consolidation
- Transparent and auditable

## Minsait Election Solutions
Algorithm to split the weighted votes of IFAD on paper (example)

<table>
<thead>
<tr>
<th>Country</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Total #</th>
<th>Token 1</th>
<th>Token 2</th>
<th>Token 3</th>
<th>Token 4</th>
<th>Token 5</th>
<th>Token 6</th>
<th>Token 7</th>
<th>Token 8</th>
<th>Token 9</th>
<th>Token 10</th>
</tr>
</thead>
</table>

The printed vote gets broken into several pieces of pseud-random weight that makes it impossible to trace the vote to the country voting using the weight info.
IFAD requirements

The modern architecture allows for an easy deployment of customization and customer-specific functionalities like weighted voting, or COVID-19 protected touchless voting mode.

### Identification
- ID card with QR code

### Security
- All the measures on previous slides

### Secrecy
- Vote encryption
- Database individual votes not stored, only totals
- On paper votes broken into tokens of pseudo-random weight

### Sanitizing
- Data can be wiped securely from kiosks
- Data deletion procedures

### Data retention
- Data will be erased following instructions from IFAD. Not later, not sooner

### Verifiability
- Voters can see their votes on paper
- The kiosk can recount the paper votes reading them back and showing the count on screen

### State of the Art
Kiosk Voting

An India company
Onesait Democracy Elections Online (ODEO)
Making online voting robust

Threats to online voting

Face your threats and you are closer to defeating them

- Voter Coercion
- Elimination of votes
- Stolen voter credentials
- Voter Impersonation/Ballot Filling
- Unauthorised voters casting votes
- Hacking, DoS, phishing, identity theft, and other general Internet threats
- Voting manipulation
- Inaccurate audits
- Voter privacy
- Buying votes

minsait

An India company
Security measures

The combination of these security measures addresses all threats

Specific security measures for elections

- Voting encryption
- Certificates and digital signatures
- Share secrets
- Universal verifiability
- Voter verifiability
- Blind signatures
- Homomorphic encryption
- BlockChain Security
- Single use links
- Multifactor authentication
- Multi-voting

Generic Internet security measures

- Firewall
- Antivirus
- CDNs
- Protection against brute force attacks
- Signed static content
- Honeypots
- Automatic scaling microservices
- Redundant sites
- Secure software development life cycle
- Real-time traffic monitoring
- Intrusion detection systems
- Two-factor authentication
- Code signing
- Device tracking
Onesalt Democracy Elections Online

IFAD requirements

The layered architecture allows for an easy deployment of customization and customer-specific functionalities like voter and candidate registration flows, integration with ID cards, usage of specific cryptographic algorithms.

Identification
- User / Password + SMS or OTP
- User / Password + face recognition

Security
- All the measures on previous slide
- Blockchain audit

Secrecy
- Elliptic curve homomorphic encryption
- No need to decipher votes
- Weighted voting without need to break votes into pieces

Sanitizing
- Servers on the cloud
- Data deletion procedures

Data retention
- Data will be erased following instructions from IFAD. Not later, not sooner

Verifiability
- Vote signature available to voters. Can check the signatures of the votes with their vote signature
- Universal verifiability for auditors

State of the Art
Online Voting

An India company