



Recent IDEA Publications on Elections and Technology

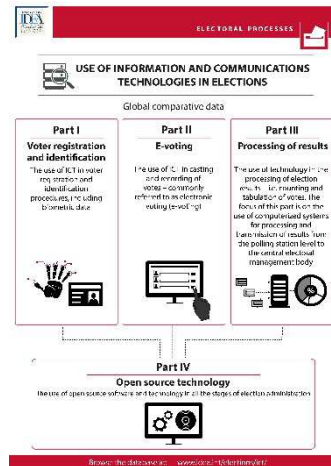


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International IDEA
Moldova, 11 September, 2015





The Use of Open Source Technology in Elections



Database on ICTs in Elections





The Use of Open Source Technology in Elections

Source Code:

instructions executed by an ICT system in a human readable format

Open Source Technology:

based on source codes that can be freely viewed, used, shared, modified





Open Source and Elections

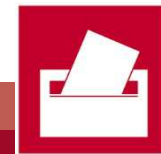


Many potential benefits

- ❖ Transparency, accountability
- ❖ Local ownership and capacity
- ❖ Maintainability and sustainability

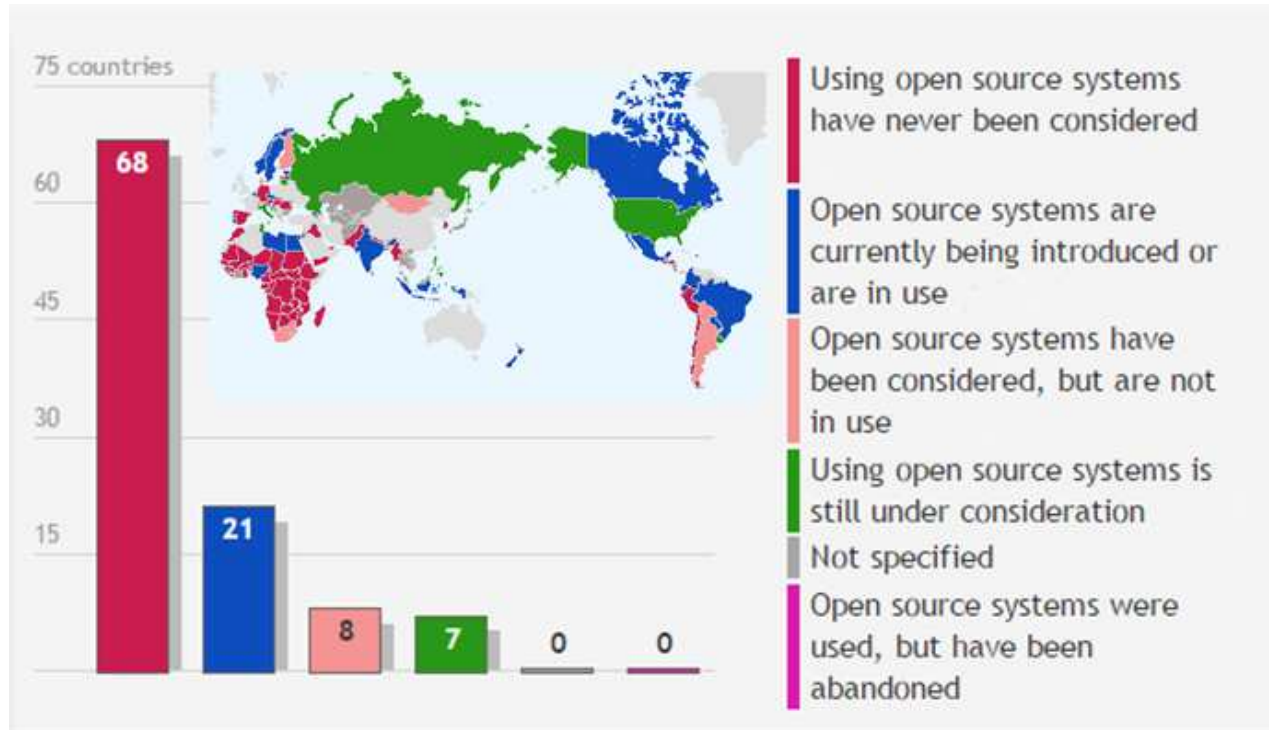
Recurring demand, especially where need for transparency is high

But: few available systems and implementations

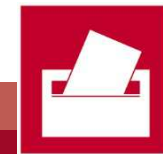




Global Survey of EMBs



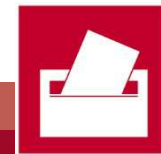
Results from 107 countries





Reasons for limited use: Supply

- ❖ fragmented market, no global election OST community
- ❖ vendors prefer current, “closed source” business models, have few incentives to change
- ❖ worry about intellectual property

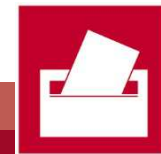




Reasons for limited use: Demand



- ❖ more from civil society than from EMBs
- ❖ limited awareness, common misconceptions ('insecure', 'immature', unprofessional')
- ❖ lack of successful examples
- ❖ OST considered a technical detail





Conclusions



- 1. Elections should be transparent. Thus, voting technology should be transparent, which in turn requires the source code of voting technologies to be accessible and transparent.**
- 2. The decision on whether to adopt OST for elections should not be left to vendors or technical experts, but rest with the EMB, which is responsible for the transparency of the electoral process.**
3. Intellectual property associated with voting technology can be protected without endangering the transparency of elections. The protection of intellectual property is not in violation of open source licences.
4. There is a need to define an open source licence for voting technology that is readily understandable, deployable and usable in the electoral context.
5. More widespread use of OST in elections would require vendors to adopt flexible business models that incorporate OST.
- 6. Awareness must be raised among EMBs.** EMBs, decision-makers, political parties, civil society and the media should be encouraged to build capacity on the benefits of the use of OST in elections, which in turn will create increased demand for accessible and transparent source codes in election technologies.
- 7. OST considerations must play a more prominent role in feasibility studies, which weigh alternative options for voting technologies, and must subsequently be properly reflected in the procurement process. This will give the use and development of OSTs in elections a critically required impetus.**
8. Open source voting technology would greatly benefit from the establishment of a global electoral OST community. Such a community would make releasing existing and newly developed voting technology under an open source licence more feasible.

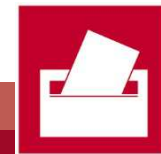
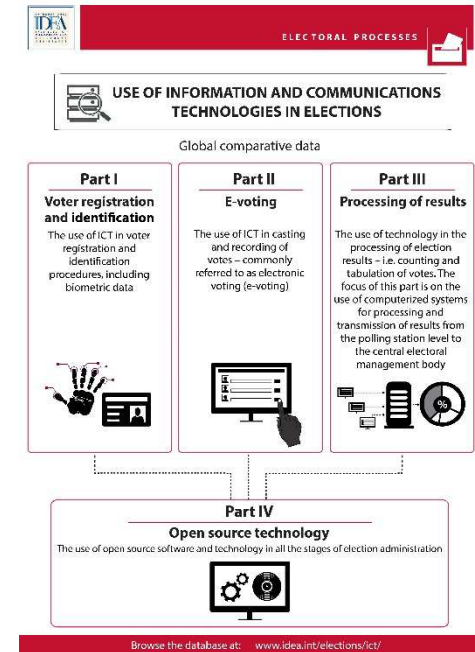




Database on ICTs in Elections

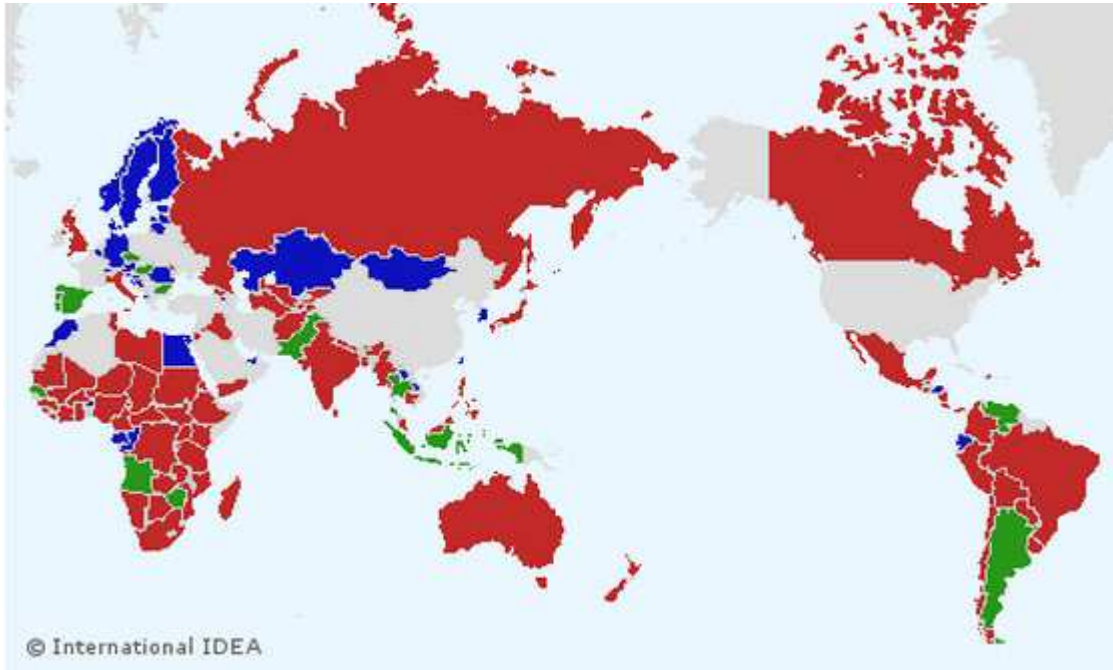
19 questions, 150 countries on:

- Use of biometrics
- Voter registration
- Voter identification
- Results processing
- Electronic voting





Source of Voter Registration Data

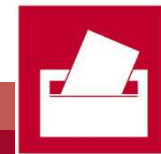


61% EMB collected

27% Civil/population register based

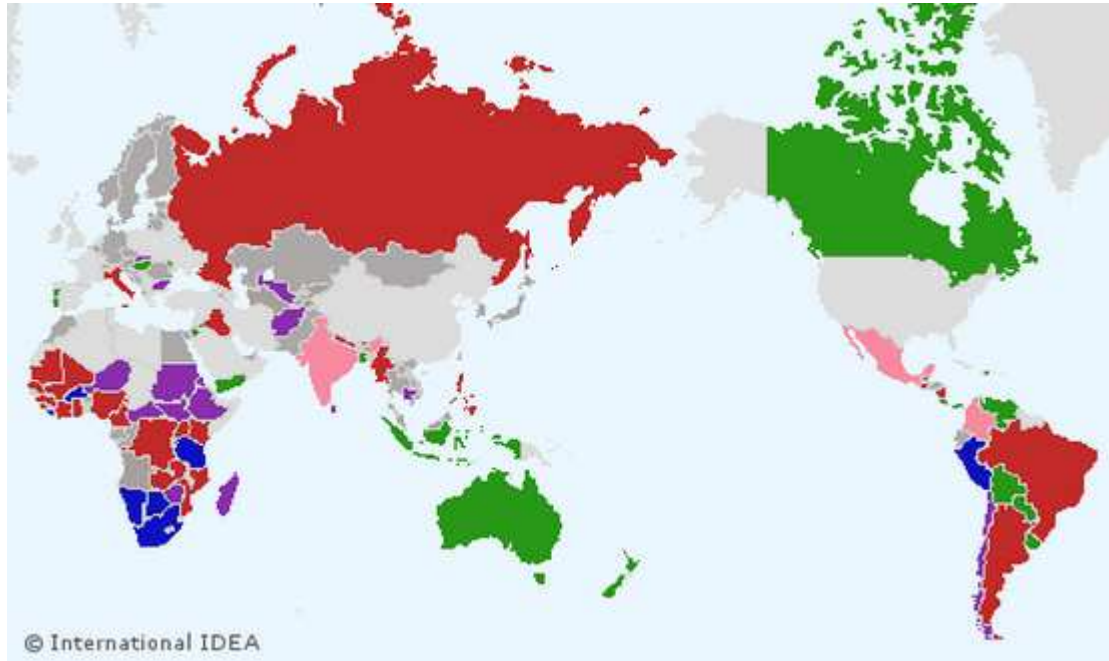
11% Combination

Source: <http://www.idea.int/elections/ict/field.cfm?field=484®ion=-1>





Technology used by EMBs for voter registration



Source: <http://www.idea.int/elections/ict/field.cfm?field=486®ion=-1>

24% Digital kits, offline

17% Digital kits, online

14% No technology

*8% Scanners
(OMR/OCR)*

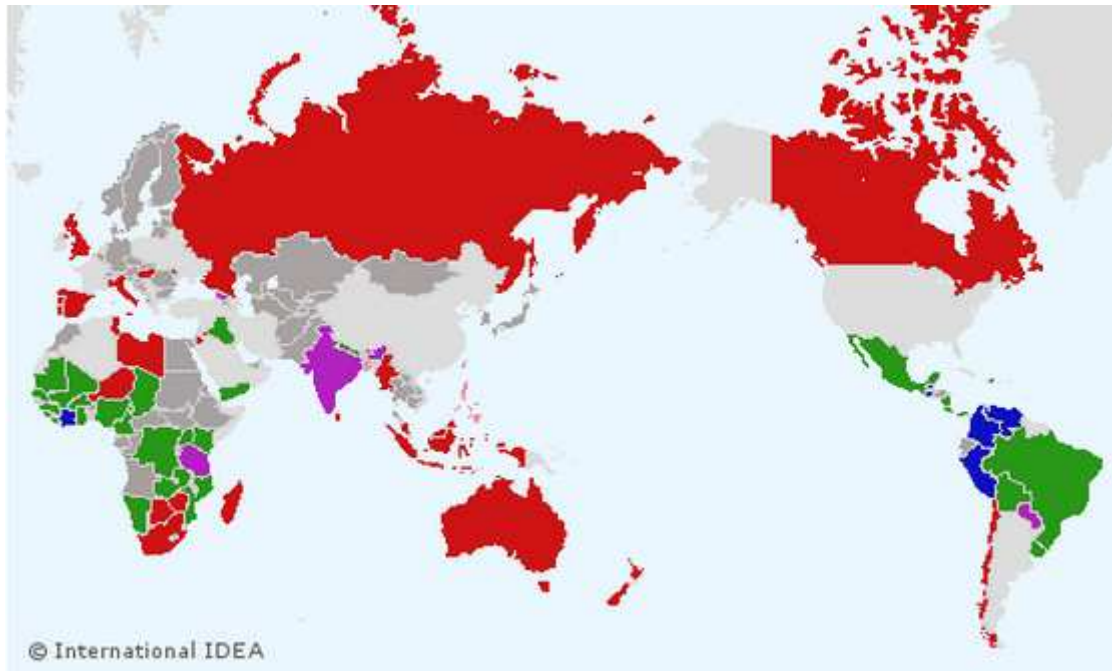
5% Other systems

32% not applicable





Biometric data in voter registration



Source: <http://www.idea.int/elections/ict/field.cfm?field=487®ion=-1>

26% Finger print & photo

21% None

5% Fingerprint only

5% Photos only

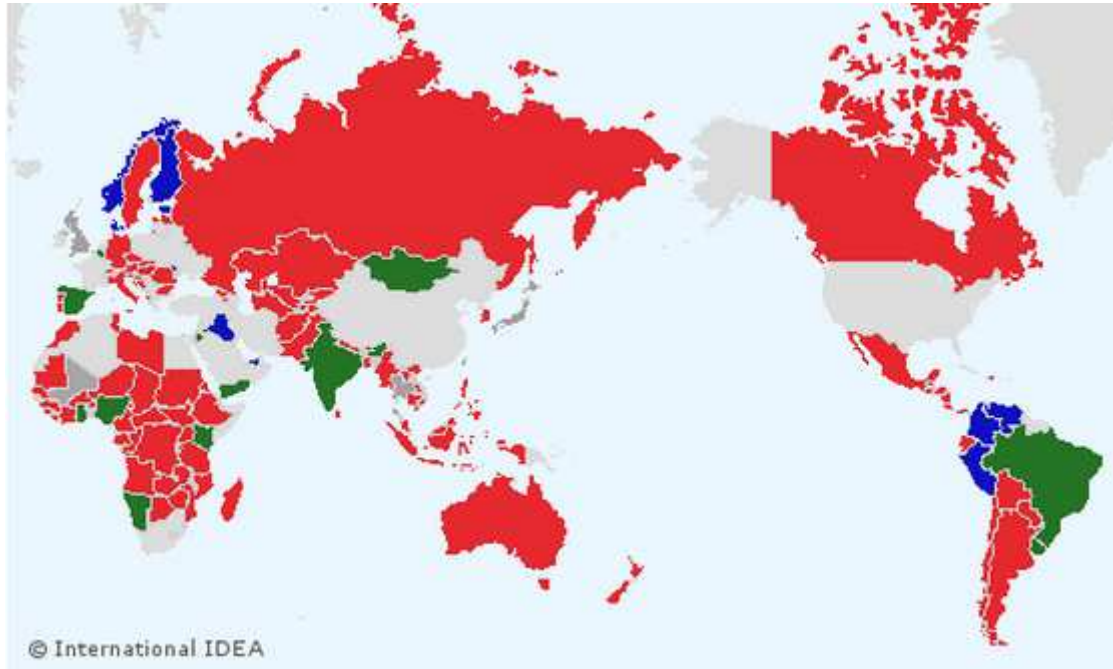
3% Other

40% not applicable





Technology for identifying voters in polling stations



74% Not used

11% Offline system

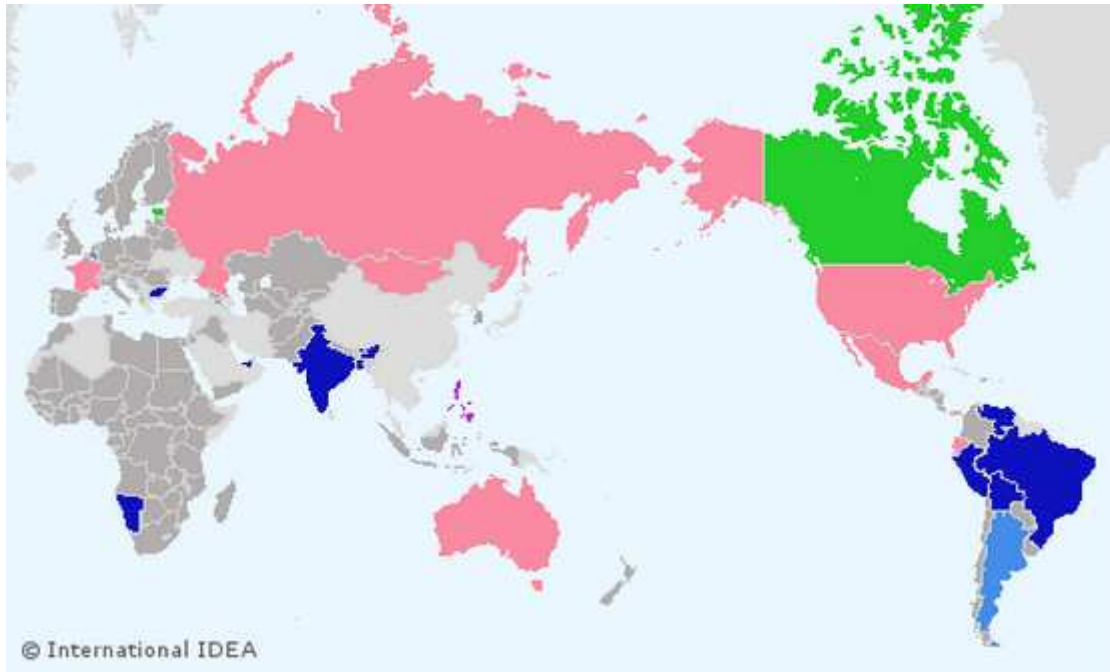
8% Online system

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Source: <http://www.idea.int/elections/ict/field.cfm?field=489®ion=-1>



Electronic Voting



Source: <http://www.idea.int/elections/ict/field.cfm?field=492®ion=-1>

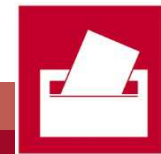
80% Do not use e-voting

13% use DRE

6% use internet voting

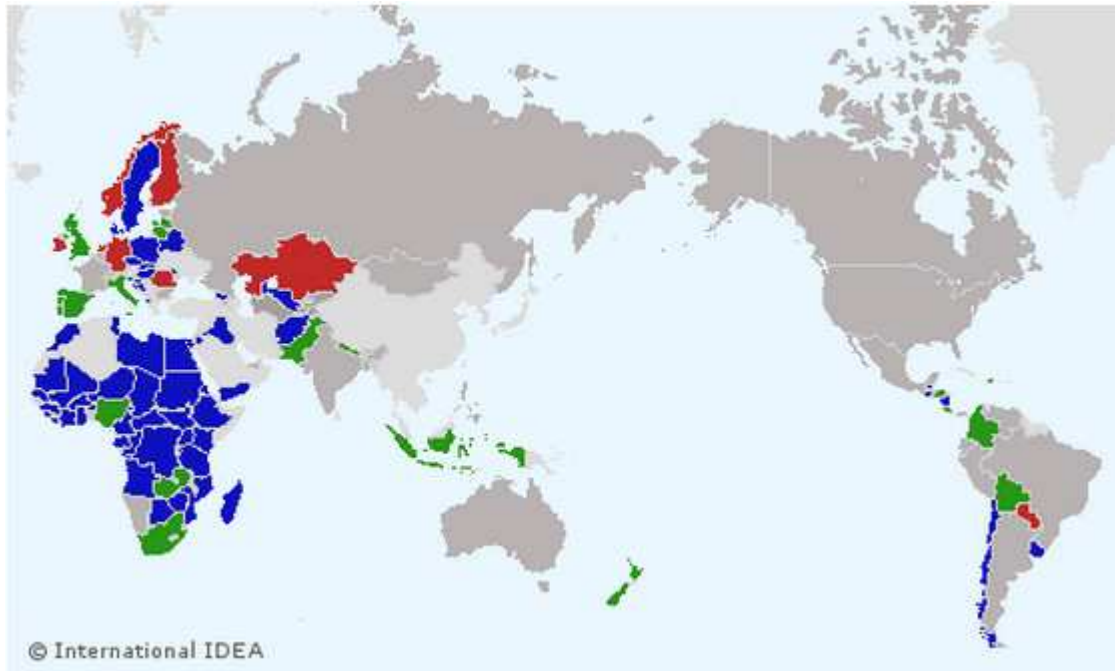
4% use ballot scanners

2% use electronic ballot printers





Electronic Voting, details of none-users



15% test or pilot e-voting





6% abandoned e-voting

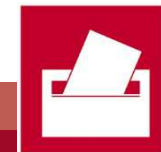
56% have no e-voting exposure

Source: <http://www.idea.int/elections/ict/field.cfm?field=495®ion=-1>



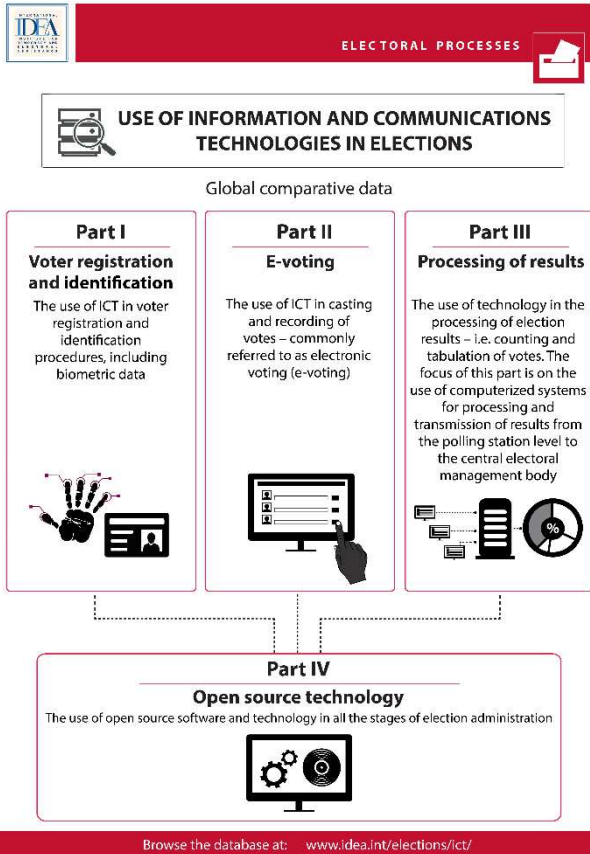
More Than Quantitative Data

Czech Republic	<p>No</p>	
Denmark	<p>Yes, online/connected to central voter register</p> <hr/> <p>The use of electronic poll books is not mandatory, and is to be decided by the local municipal council. The council can decide that electronic poll books can be used for one or more or all polling districts in the municipality.</p> <p>If electronic polling books are employed, appropriate fall-back procedures must be in place to ensure that the electronic poll books can be immediately replaced by electoral registers in paper and that the electoral register procedure can be carried out manually if the electronic system should break down or malfunction.</p>	 <div data-bbox="1344 638 1881 1061" style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>Source: <i>Law no. 294 of 2005-04-27 Parliamentary Elections Act section 19, subsection 3. http://elections.oim.dk/media/502465/electionsUK-2013.pdf</i></p> <hr/> <p>Last changed: 2014-11-27</p> <p> Suggest update or correction</p> </div>
Djibouti	<p>No</p> <hr/> <p>According to Articles 49-50 of the Electoral Code, Upon entering</p>	





All Data & Details Online



ICTs in Elections Database

<http://www.idea.int/elections/ict/>





THANK YOU!

