HOW INCREASING INTERNET VOTING IMPACTS THE ESTONIAN ELECTION MANAGEMENT

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2017 LOCAL ELECTIONS
METHODOLOGY AND FINDINGS

9 Steps

- Electoral Process Modelling
- Interviews and OnSite Observations
- Mapping actors
- Listing Activities
- Identification of Resource Pools
- Attribution of costs to activities
- Practical capacities of resources
- Cost per minute per activity
- Cost per ballot per voting channel
- Cost comparison
Forthcoming


New Methodology Calculating Cost-Efficiency of Voting Channels: Is Internet Voting cheaper in Estonian Municipal Elections?

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2019 PARLIAMENTARY ELECTIONS

Voting Period
01-02-2019 / 03.03.2019

2019 Riigikogu Election

N of ordinary polling stations: 426
N of polling stations in county centres: 25
N of polling stations in diplomatic missions: 40
What has changed?

- **2 more voting channels:** Postal voting and voting in Diplomatic Missions

- **Overall turnout**
  37.6% in EP 2019;
  63.6% in Parliament 2019;
  64.2% in Local 2017

- **Voters’ distribution among voting channels:**
  For the 1st time, Internet voting is the most popular voting channel
  (44% and 47% of the votes cast)
## 2019 Parliamentary Elections

### Votes distribution

<table>
<thead>
<tr>
<th>Voting Channel</th>
<th>2017 Local</th>
<th>2019 EEP</th>
<th>2019 EUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-voting</td>
<td>31.4%</td>
<td>43.8%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Election day voting</td>
<td>47.2%</td>
<td>37.4%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Advance voting</td>
<td>20.3%</td>
<td>17.6%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Home voting</td>
<td>1.1%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Voting from Abroad</td>
<td>n/a</td>
<td>0.3%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
What's the impact of growing usage of Internet voting?

3 Categories of impact
Security;
Administration;
Infrastructure
2019 PARLIAMENTARY ELECTIONS

What’s the impact of growing usage of Internet voting?

Security
Potential rise of security costs

The more the system is used, the bigger the temptation and impact of an intromission

Estonia has a traceable trajectory in evolving and adapting the I-voting system

Availability of data? Security and availability
What’s the impact of growing usage of Internet voting?

Administration
Delivery of paper-based voting channels and financing of elections;
Decreasing demand for paper-based voting channels;
Lower cost-efficiency;

Should Cost-Efficiency determine the allocation of voting channels?
If so, which is the cost efficiency that should activate a system iteration?
2019 PARLIAMENTARY ELECTIONS

What’s the impact of growing usage of Internet voting?

Administration
Delivery of paper-based voting channels and financing of elections;
Decreasing demand for paper-based voting channels;
Lower cost-efficiency;
Decrease in supply of polling stations.

<table>
<thead>
<tr>
<th>Year</th>
<th>N of VDC</th>
</tr>
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<tbody>
<tr>
<td>2007</td>
<td>657</td>
</tr>
<tr>
<td>2011</td>
<td>625</td>
</tr>
<tr>
<td>2015</td>
<td>547</td>
</tr>
<tr>
<td>2019</td>
<td>451</td>
</tr>
</tbody>
</table>
2019 PARLIAMENTARY ELECTIONS

What’s the impact of growing usage of Internet voting?

**Infrastructure**

Impact on supporting electoral infrastructure

Lower feasibility of analogue processes surrounding Internet voting

Use of Electronic Poll Books.

Currently they are used in i-Voting, while in paper voting, paper poll books are used and then integrated.

Update of the Voting Information System, impact in all voting channels (e.g. Tabulation). Good time-frame for it (2y gap between EUP Elections and next Local Elections)
Summary and conclusions

- This is a work in Progress.
We pinpoint 3 main areas of concern but do not exclude other.
- The Estonian Electoral System is under constant review for a more optimal allocation of the (limited) resources.
Accordingly, a whole review of the system is currently under progress.
- Our aim is still to analyse costs
But the new scenario opened in the elections held in 2019 (I-Voting overtaking), raised some parallel questions for the organization of elections.
THANKS FOR YOUR ATTENTION

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