Take e-voting away from Europe

…and our experience in challenging e-voting in Italy!

#34c3 CCC Congress 2017

- E-voting in Italy in Lombardy Region as Consulting Referendum

- Smartmatic won 23m contract with proprietary hw & sw for 24.000 e-voting machines

- President of Region justified expenses saying that those machines will be available to schools as tablets*

- No public oversight, no public availability for auditing of testing (before / after election)

- A single audit of few days by an IT security without publishing full report, but a marketing stunt on security

- An open repository with provisioning scripts of the election has been found online (no voting software)

2.5   Compilazione del codice e calcolo del codice sicurezza della trusted build

In data 27 settembre 2017, presso la sede della Regione Lombardia alla presenza dei consulenti Smartmatic e dei referenti regionali, si è provveduto a verificare che i file da compilare siano gli stessi di cui si è effettuata l'analisi di sicurezza, inclusi quelli file inviati in data 25 settembre. Verificata questa corrispondenza, Smartmatic ha provveduto a compilare il codice sorgente e a installarlo sulla Voting Machine generando il codice di sicurezza di seguito riportato:

```
28 EC 98 D5 AC 9A 21 B2 95 FE E5 55 BB 0A BE A0 BC DE 84 26 CD 63 E5 48 A0
49 9D 5F 0C 87 3B E6
```

In fase di avvio della voting machine sarà necessario calcolare il codice di sicurezza utilizzando l'apposita funzionalità presente nell'applicativo. Se il codice mostrato a video dalla voting machine corrisponde con il codice

- We made FOIA asking for security and functional details, they gave everything except "security details" **because it could compromise the risk of the election**

- We released an e-book on e-voting explaining fundamental flaws and democratic risks

- Participated to most media and political conversation

- Many operational issues in the elections

  - Voting machines in "test mode"

  - Voting machines with usb-initialization-key already inserted

  - Numbers of voters and numbers of votes mismatch by ~4000 votes (impossible to verify what happened)

  - Analog system to collect votes 24.000 usb sticks to be delivered during the night to a single place where 30 persons had to download the vote delaying vote ballots

- President of Lombardy Region publicly advised minister of Interior that this is going to be the next national election platform and will send a report on their "success"

  - We did a FOIA to Ministry of Interior and Lombardy Region, there was no report.

  - Searching online for that report the "big failure" :-)

Lesson Learned

- People doesn't know the difference between E-voting and Online Voting

- Everyone in favour of e-voting refer to Estonia as the paradise

- Those problems are national/specific, no pan-european guidelines or toolkits to take action when e-voting get proposed

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