



RIIGI INFOSÜSTEEMI AMET

# RIA & Elections

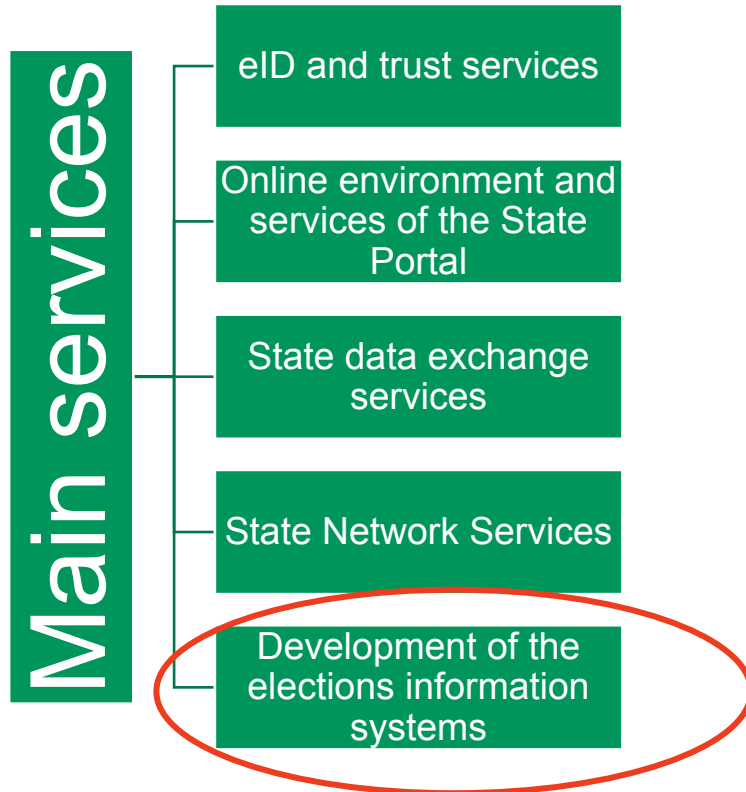
Alo Einla

Director of Elections Infosystems Development

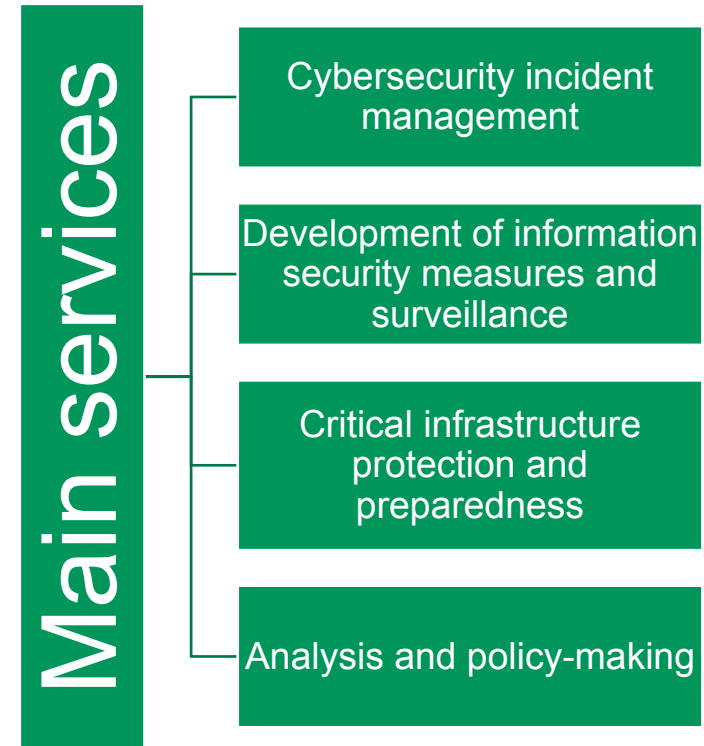
08.06.2024



## Providing basic infrastructure and services of the e-state

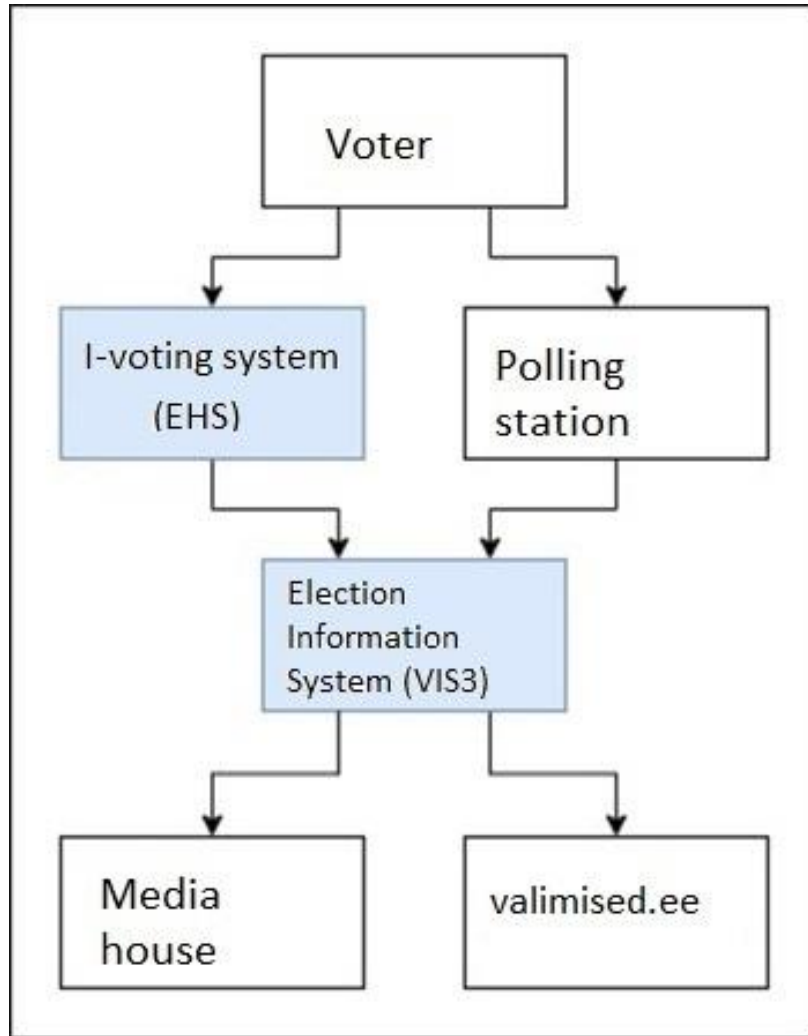


## Ensuring cybersecurity





# Voting Infosystems



I-voting system (EHS),  
Election Information System  
(VIS) and  
website displaying election  
results [www.valimised.ee](http://www.valimised.ee)  
**are three different systems**



## Cooperation is the Basis

1. Statute of RIA
2. Contract (RIA, Ministry, Electoral Office)
3. Election Law - *new*
4. We support 4 types of State Elections  
Parliament; EP; Local Gov; Referendum + extraordinary



## Responsibilities of RIA (1)

1. VIS Election Information System
  - Self service,
  - Map web-application
  - Results interface (API) to media houses
  - Open data (big data, verify results)
  - Electronic voters list (Population Register API)
  - ...



# Responsibilities of RIA (1)

1. VIS → **D**evelopment, **M**aintenance, **H**ost

- PPP and MIT License
- Security by Design
- Agile
- Micro services;
- Modular architecture
- GO/Angular, 1 milj lines
- Open source code policy (EHS / VIS)



# Responsibilities of RIA (1)

1. VIS →

**D**evelopment,

**M**aintenance, **H**ost



- 24/7 up & running
- Feedback
- Cont. dev.

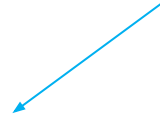


# Responsibilities of RIA (1)

1. VIS →

**D**evelopment,

**M**aintenance, **H**ost



High Availability (HA) database;  
Clusters;  
Cloud;  
Hosting results web





## Responsibilities of RIA (2)

2. Collecting e-votes
3. Risk assessment (procedures, ISKE/EITS)
4. Cyber defence
5. Cyber hygiene
  - Trainings (parties, candidates, polling station workers)
  - Cyber test (organisers, all state officials)
  - Security assessment for Parties, (IT systems)
  - Info campaigns for public
6. Testing (user, load, PEN, stress, integration, “play through”, *red-teaming*, *bug-bounty*, *code review*)
7. User support (e-voting/polling station)



## Responsibility of RIA (3)

8. DDoS protection (*distributed denial-of-service*)
9. Operations phase -> High alert level
10. Data auditors / observers can check the correct functioning of the system.



# Responsibility of RIA (4)

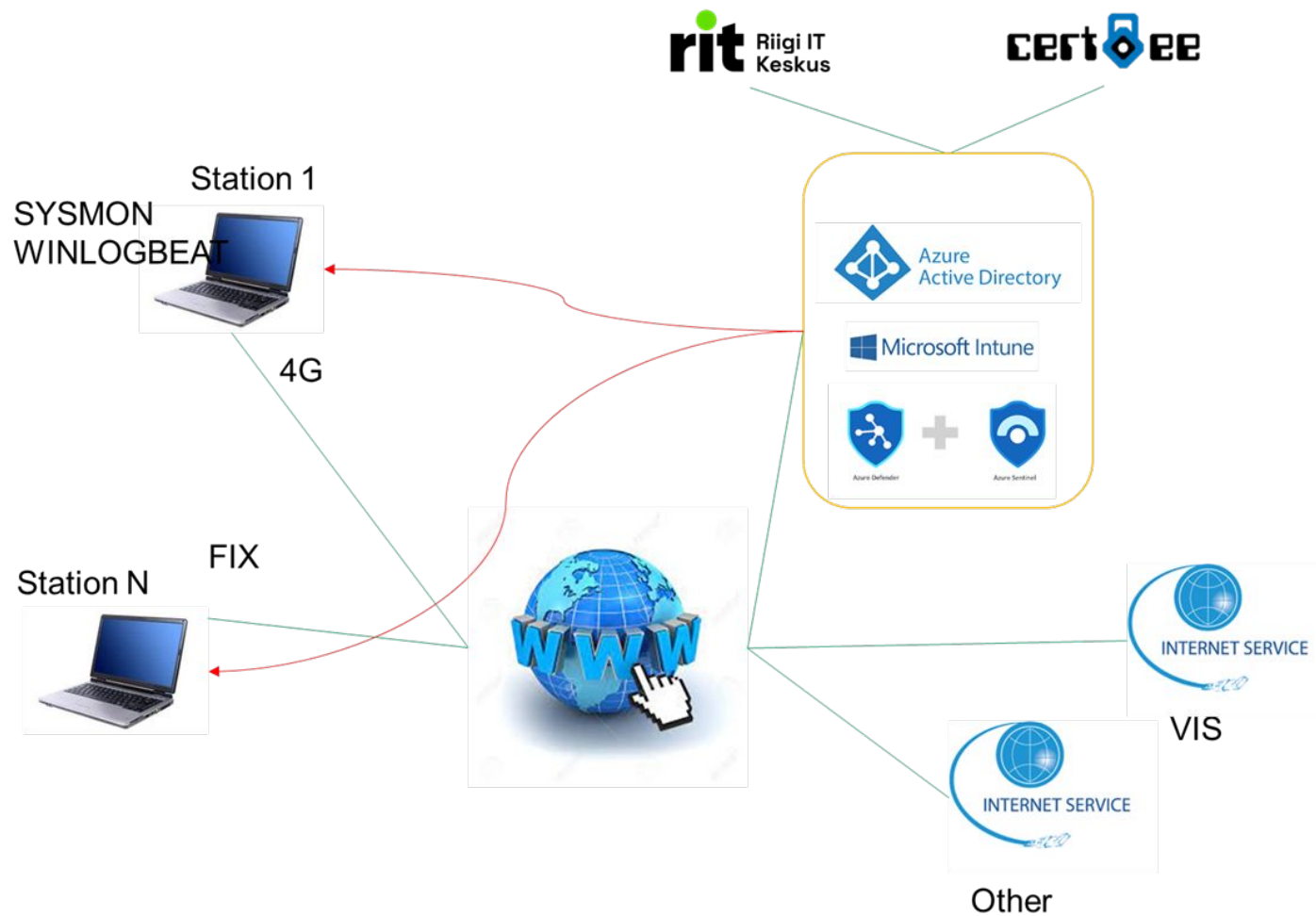
## 11. Polling station IT

Centrally:

- distributed of IT equipment (laptop, printer, bar-code reader)
- managed profiles
- managed support

secure connection

monitoring traffic and logs



# Thank You!

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