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radon

: An integrated System of Services for Science - Online Elections for the Council of Scientific Excellence in Poland

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The National Information Processing Institute, Warsaw, Poland

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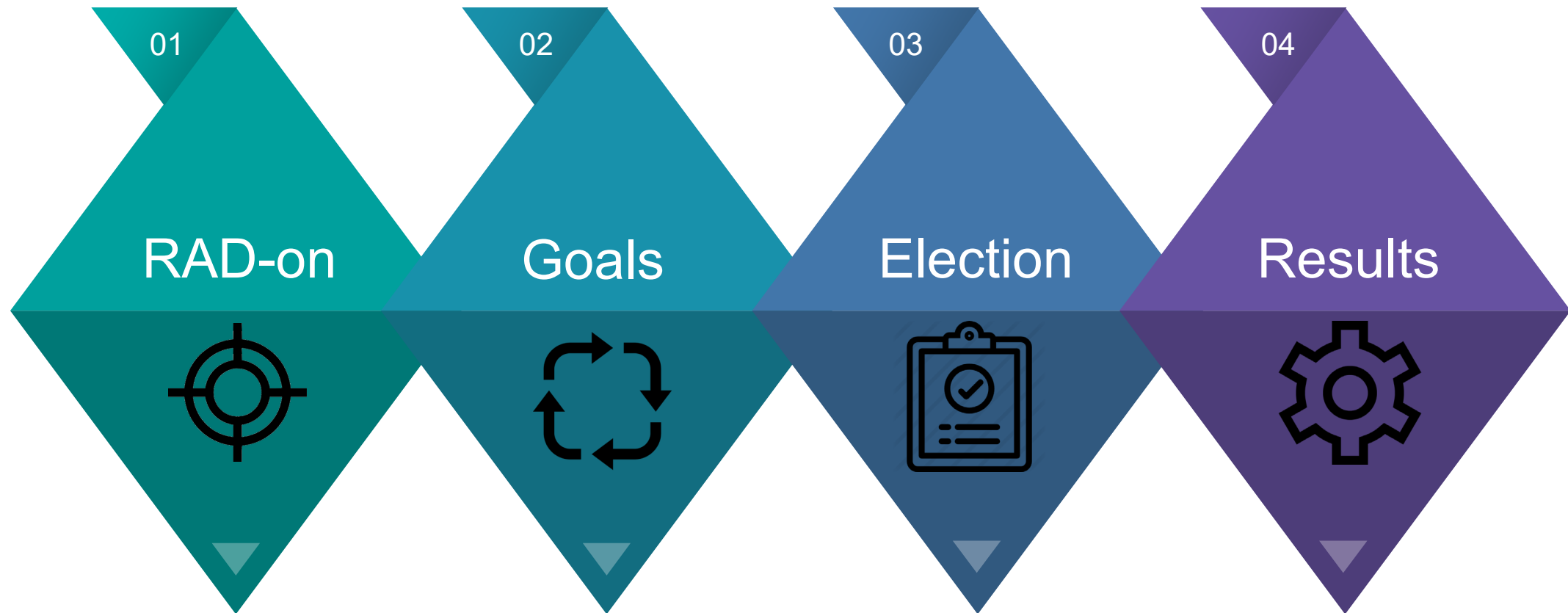
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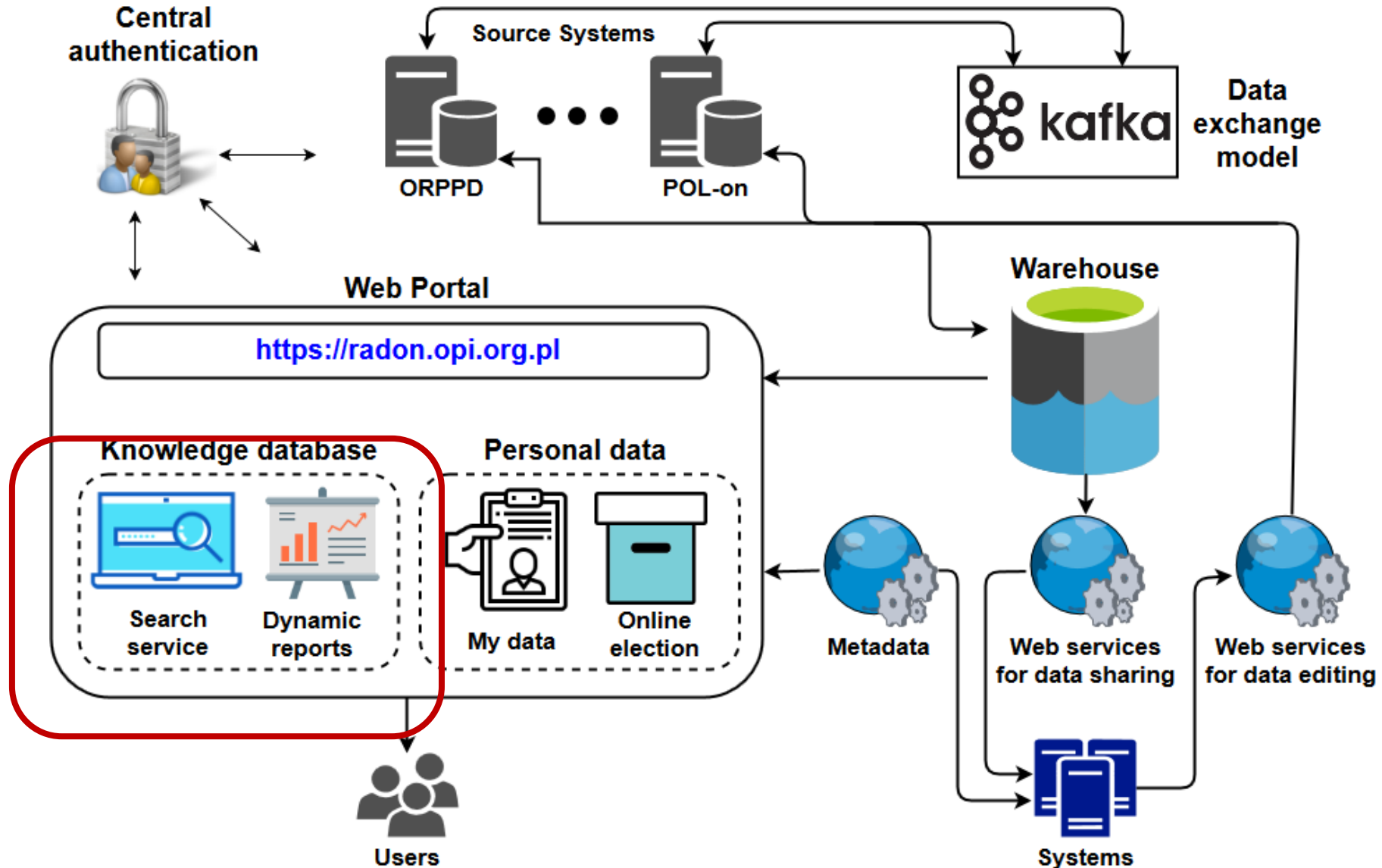
Our information systems offer services that suit to consumers needs



Throughout this presentation ...



RAD-on: Reports, Analyses, Data



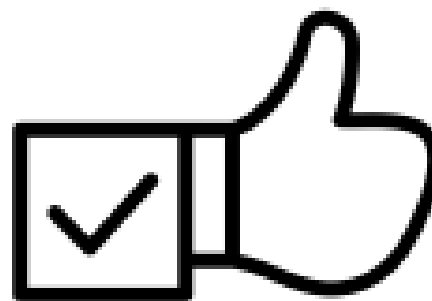
Goals of the service for online election



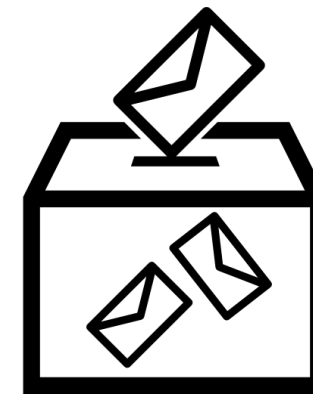
Establish
candidates
and voters



Ensure
safety and
unambiguity

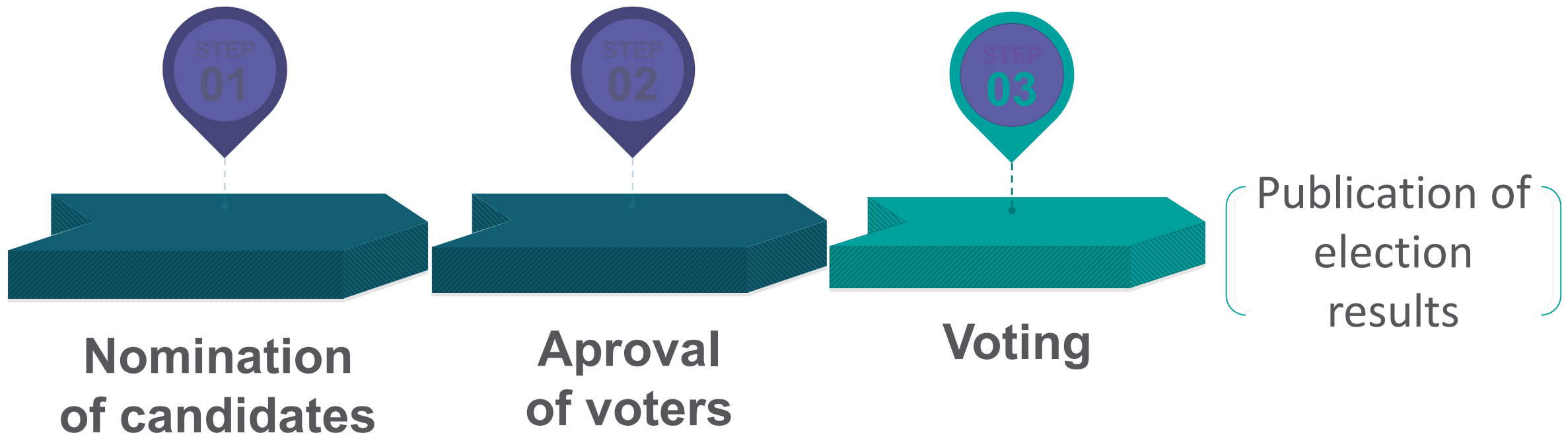


Ensure
availability
and usability

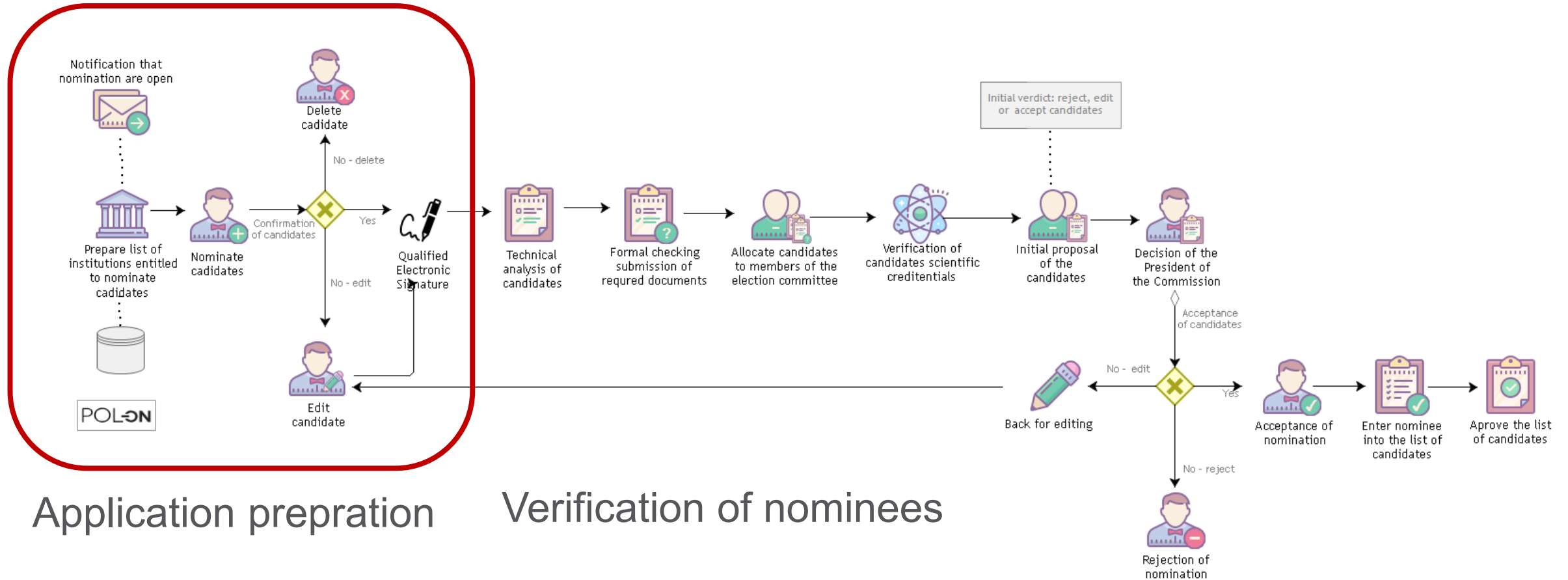


Perform
elections and
publish results

Main processes of online election



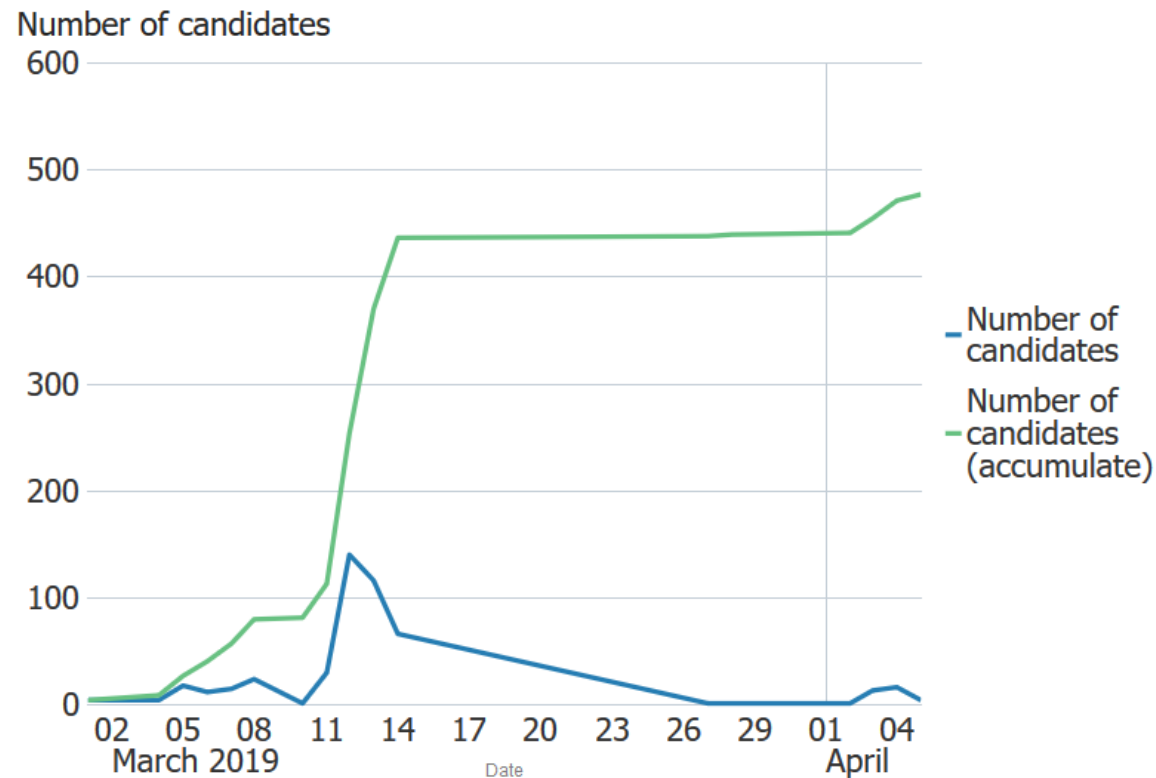
Election - Nomination of candidates



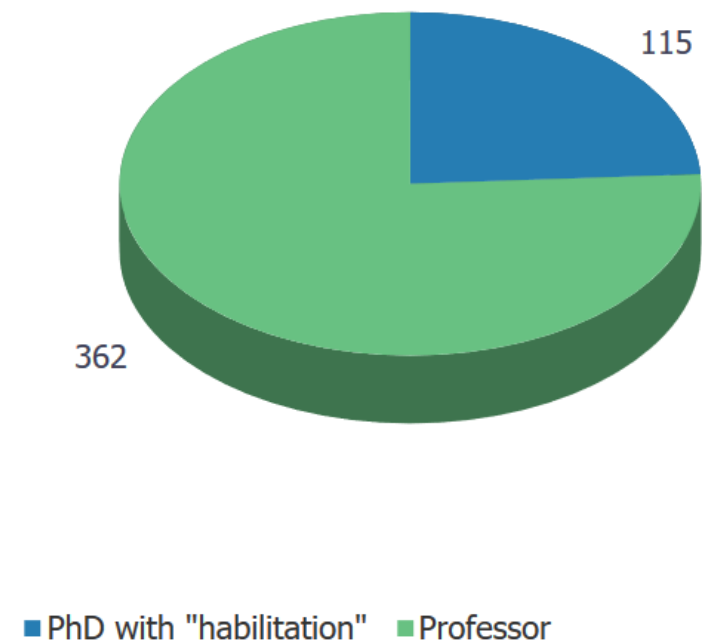
Results - selected statistics of candidates

477

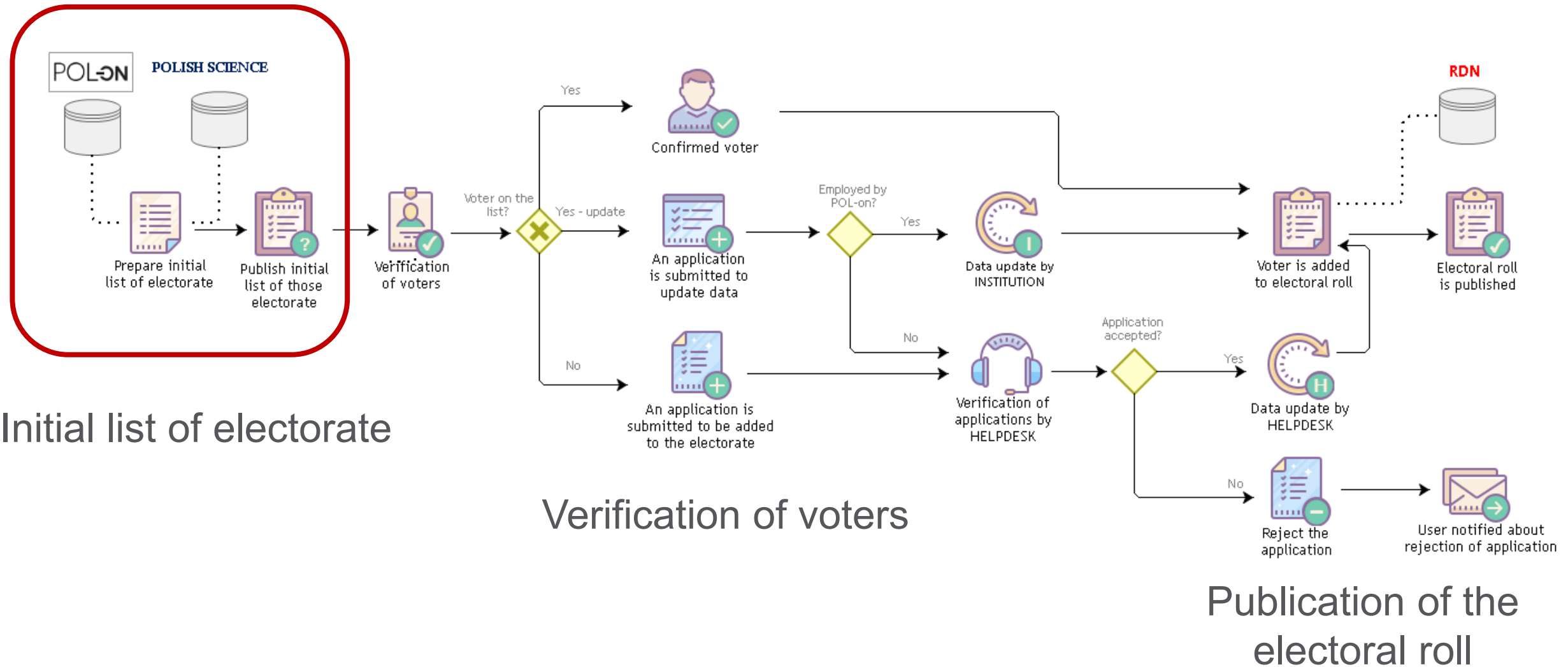
Total number of candidates



Number of candidates by degrees



Election - Approval of voters

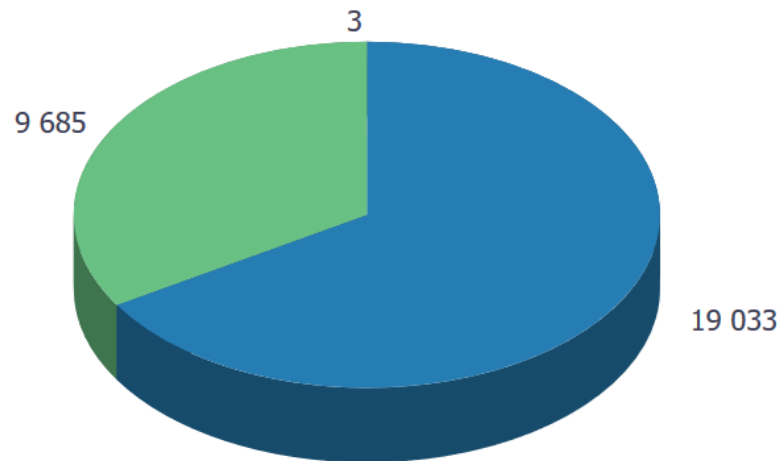


Results - selected statistics of voters

28 721

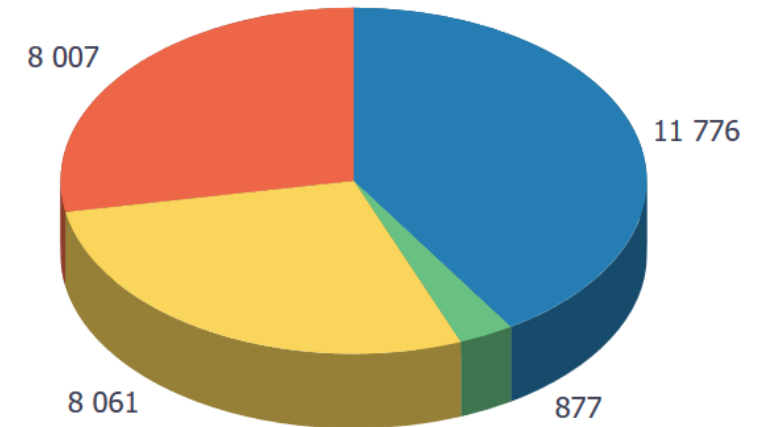
Number of people eligible to vote

Number of people eligible to vote by degrees



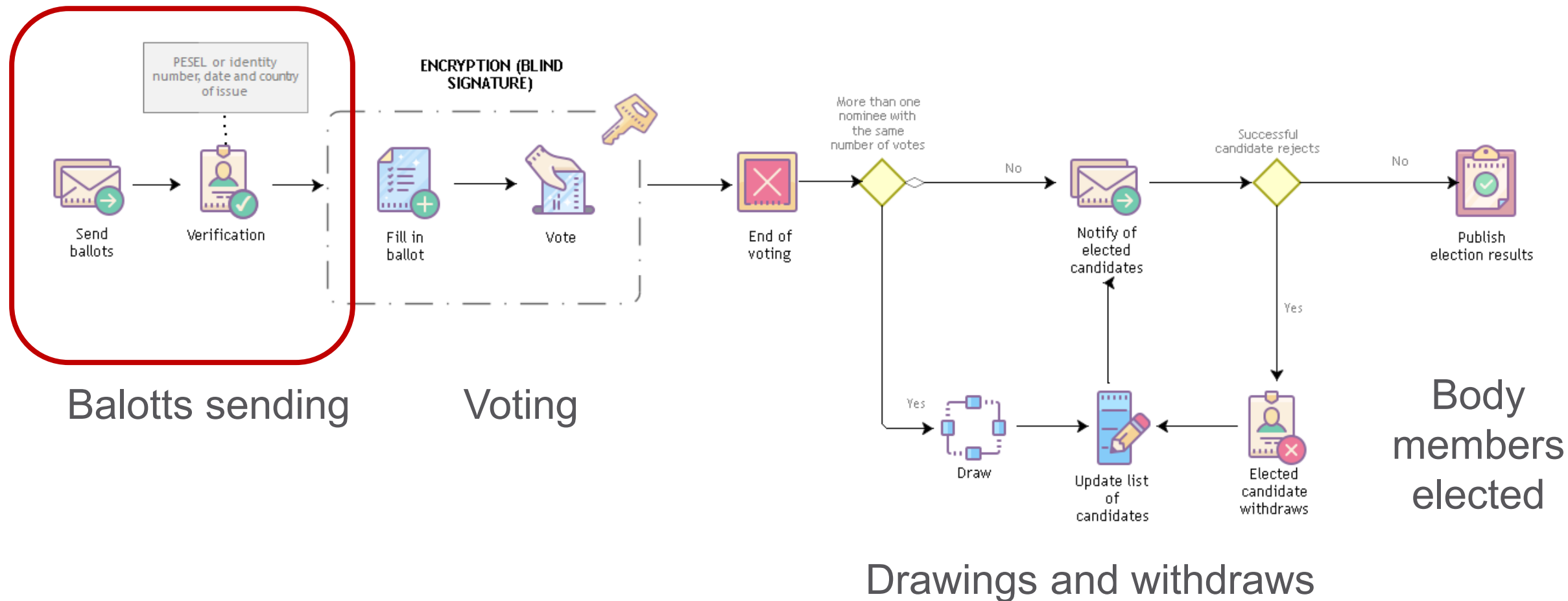
■ PhD with "habilitation" ■ Professor

Number of people eligible to vote by age



■ 60 and more ■ Under 40 ■ Under 50 ■ Under 60

Election - Voting

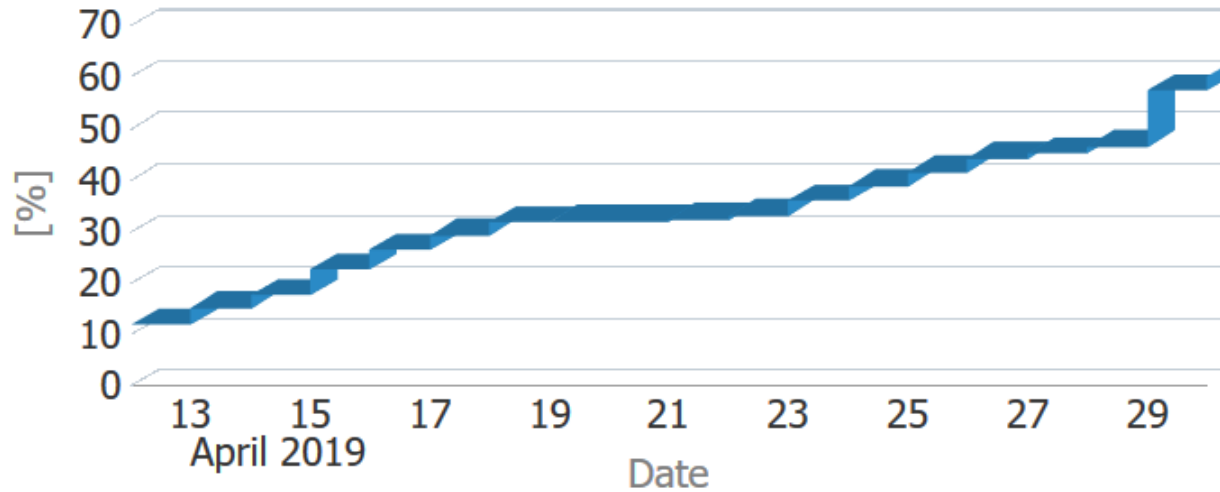


Election - Balance between security and availability

- Each voter receives an e-mail containing a URL address with a unique token, allowing access to his or her voting card.
- In order to vote, a voter had to have access to his or her email account. In addition, after activating the personal URL, it was necessary to provide some personal data.
- A blind signature is applied to enclose a ballot - it ensures voting privacy.
- A service does not log which user voted for which candidate at any point in the process.
- The transmission between a client machine and the voting server is encrypted

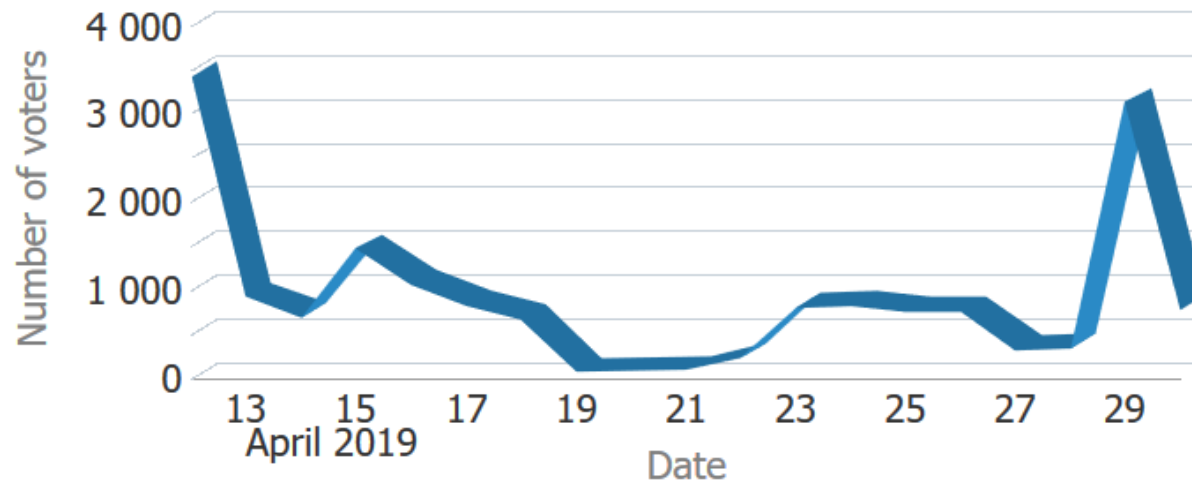
Results - selected statistics of votes

Voter turnout



The cumulative turnout of voters in succeeding days on the elections

Number of voters



The number of voters voting in each day of the elections

Results - selected statistics of votes

17 274

Number of voters

44 383

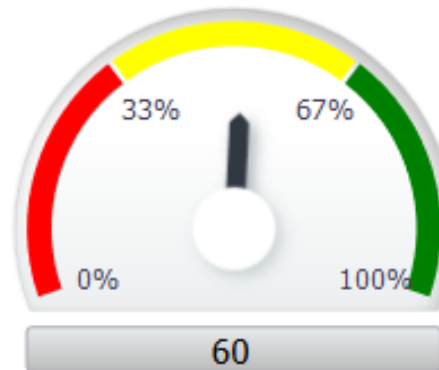
Valid votes

28 721

Number of eligible to vote

Each voter can vote in one or two disciplines.

Voter turnout [%]



Conclusions

1. The e-voting service was designed to support online elections for the council of scientific excellence in Poland in 2019.
2. Three phases of online voting: (i) candidate nomination; (ii) voter verification; and (iii) voting, which includes ballot distribution and verification of results.
3. The architecture and processes of the service focused on accessibility for users to the same extent as the security of voting to involve as many people.
4. Challenges:
 - Possible one case of unauthorised access to a ballot;
 - Verification of nominees should be more automated than it was.
5. The election was successful – the results were announced on 24th May 2019. The scientific council was elected.

Thank you for your attention


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ZALOGUJ SIĘ

BAZA WIEDZY | RAPORTY | API | O NAS

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 SZUKAJ



Wybory do Rady Doskonałości Naukowej

Zapraszamy do udziału w wyborach do Rady Doskonałości Naukowej. Głosowanie odbywa się wyłącznie poprzez elektroniczny system wyborczy i trwa od 12 kwietnia 2019 od godz. 6:00 do 30 kwietnia 2019 do godz. 23:59.

PRZEJDŹ DO SYSTEMU WYBORCZEGO

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