

Election Observation of New Voting Technologies

IFE International Congress on Technology & Elections
Mexico City

Overview

1. Observation of Elections
2. Experience with Observing NVT
3. Methodology for Observing NVT
4. Identified Areas for Improvement

Mandate of OSCE/ODIHR

- **Copenhagen Document 1990**
Establishes basic criteria for genuine democratic elections

- Paragraph 8 states:
“The OSCE participating States consider that the presence of observers, both foreign and domestic, can enhance the electoral process for States in which elections are taking place.”

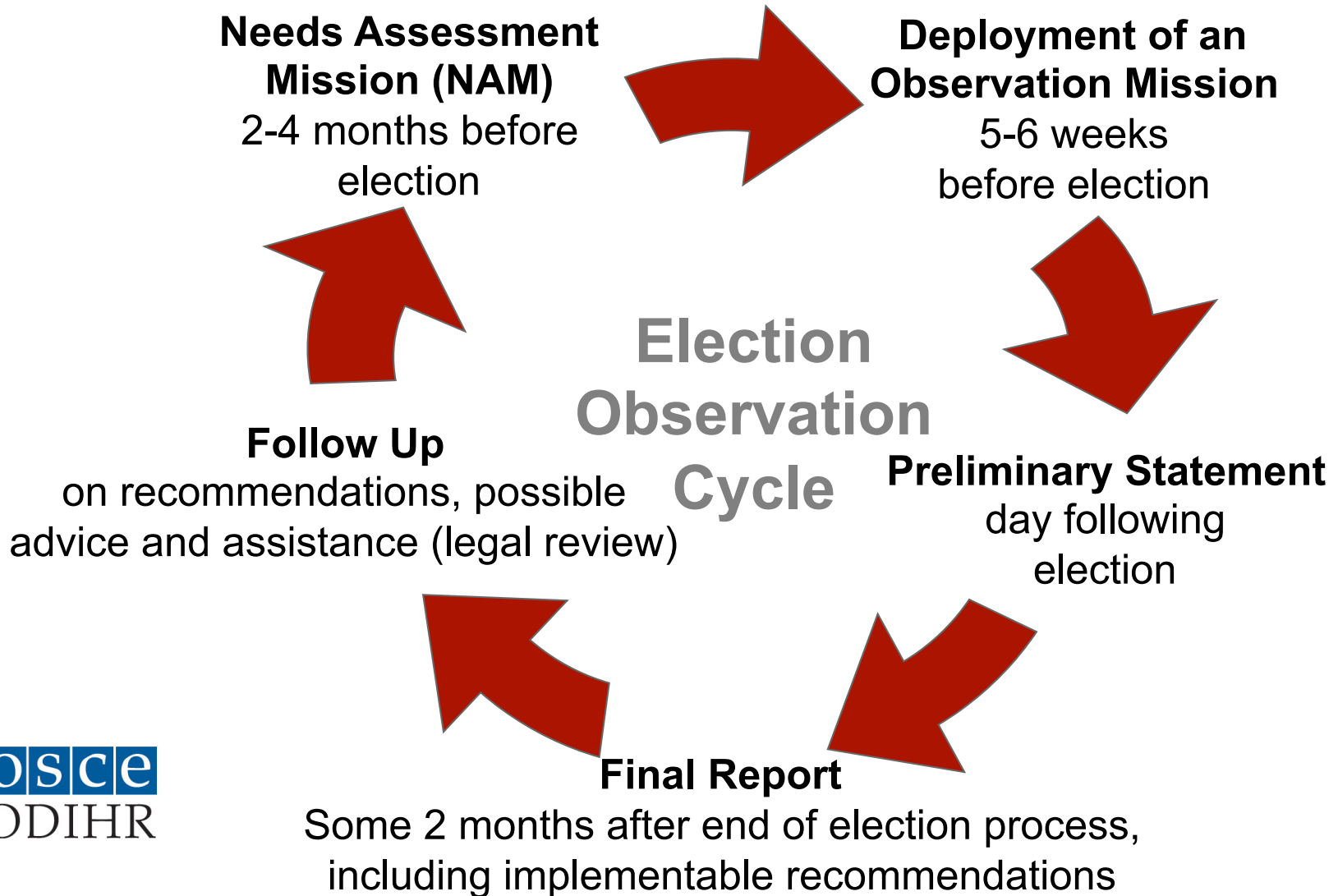
Why Observe Elections

1. Create confidence for contestants & voters
2. Enhance the integrity of the process
3. Deter possible fraud and intimidation

How OSCE/ODIHR Observes Elections

- **Process oriented** → only interested in results to the degree that they are reported honestly and accurately
- **Assess compliance** with international standards
- **Recommend ways** in which the electoral process can be improved

The Election Observation Cycle



Definition

Tools for conducting elections making use of information and communication technologies in casting, counting, and tabulating votes

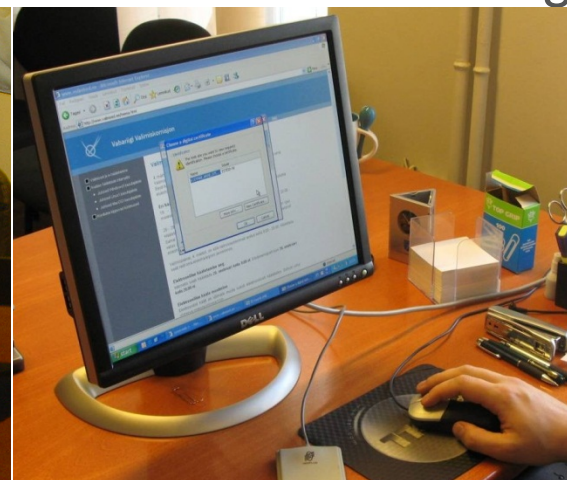
Ballot Scanners



DRE



Internet Voting



Some Assumptions regards to Observation of NVT

- With NVT **it is not possible to reach the same level of universal acceptance, trust and confidence** to understand as with paper voting.
- NVT can help offer **additional functionalities** to elections, i.e. **counting complicated and large volume elections, supporting handicapped or very remote voters** to participate in elections.
- NVT can **not help to build trust, but requires trust** for proper implementation

ODIHR Experience To Date

- **Preparations**

- Chairmanship Non-Paper 2005
- Two expert meetings in 2006, 2007
- Discussion paper on NVT in 2008

- **24 Missions in 13 States with Assessment of NVT**

Albania (2013), Belgium (2006, 2007), Bulgaria (2009), Estonia (2007, 2011), France (2007, 2012), Kazakhstan (2004, 2005, 2007), Latvia (2011), Mongolia (2013), Netherlands (2006, 2010), Norway (2011), Russia (2011, 2012), Switzerland (2011), United States (2004, 2006, 2008, 2010, 2012).

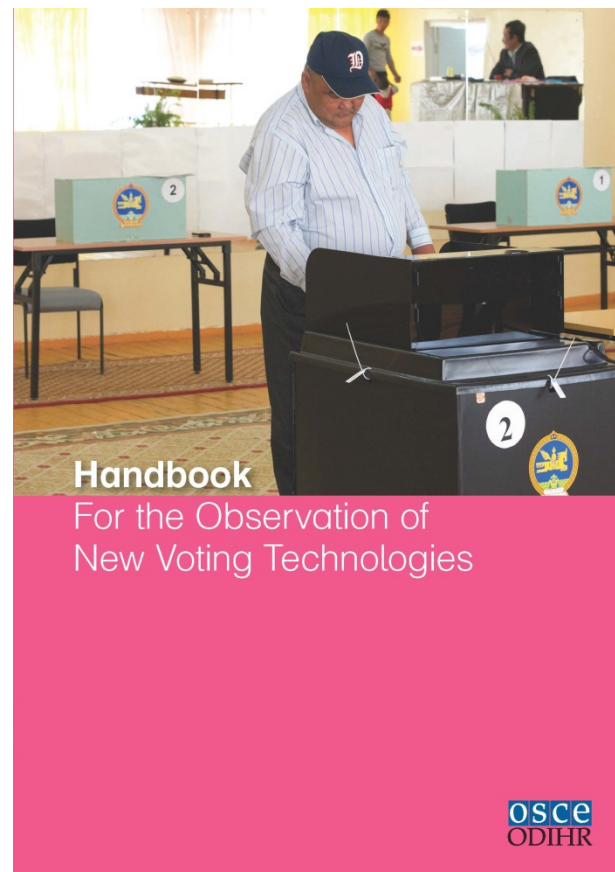
Missions with Assessment of NVT



- Ballot Scanner
- DRE
- Internet Voting
- Everything
- Ballot Scanner & DRE
- Ballot Scanner & Internet Voting
- DRE & Internet Voting

Methodology: Handbook for Observation of NVT

- To be released on Oct 1, 2013
- Looks at Context & NVT
- Hands-on Guidance for the EOM Members
- Seven Guiding Principles
 1. Secrecy of the Vote
 2. Integrity of Results
 3. Equality of the Vote
 4. Universality of the Vote
 5. Transparency
 6. Accountability
 7. Public Confidence



What to look at: Context

- Decision making
- Legal Context
- Electoral System
- Electoral Stakeholders



Reasons

Voter	Administration	Politicians
Increasing voter mobility	Count quicker and more reliable	Inclusion
Support for the voter in casting the vote	Improve voter register	Innovation
Increase accessibility for handicapped voter	Reduce costs on the long run	Change in the electorate (+/-)

What to look at: NVT

- Procurement
- Election Administration
- Multiple Voting Channels
- Oversight
- Risk Management
- Vendors
- Training of Election Officials
- Voter Education
- Secrecy
- Usability
- Public Testing
- Certification
- Verifiability
- Audits
- Observer Access



Overall Experience

- Time Schedule quite challenging – NVT starts earlier and finishes later than normal time frames
- Deployed one or more NVT analysts to join the Core Team
- Integrated approach to analyze NVT and to compare it to the existing (paper observation) experience
- More recommendations
- Considerable Follow-up



Legislation



- Further detail the procedures in the law – set-up, start, stop, counting, data destruction - needs to cover all the steps of the whole electoral process
- Formalize clear regulations for invalid ballots
- Important – show to the voter how his/her data is processed, and destroyed after not needed anymore - needs to give guidance to voters, candidates and administration how the system is operated and how it processes data

Oversight & Management

- Formalize a body to oversee internet voting
- Technical capacity for election management body
- Formalized separation of duties
- Develop a disaster recovery plan



Voting Process

- Develop time plan / election calendar
- Determine deadlines
- Co-operation with important stakeholders to protect the process against dDoS attacks
- Offer voter interface in multiple languages
- **Consideration of e2e verifiability** 4 voters & public



Secrecy and Integrity

- Use of paper based voter credentials or smart cards
- Quality of printing process, including the potential misuse of data, is of concern
- (Formalized) Separation of Duty
- Management of Secret Keys
- Review and Improvement of Encryption Model
- Meaningful Random Hand-recount of Meaningful Number

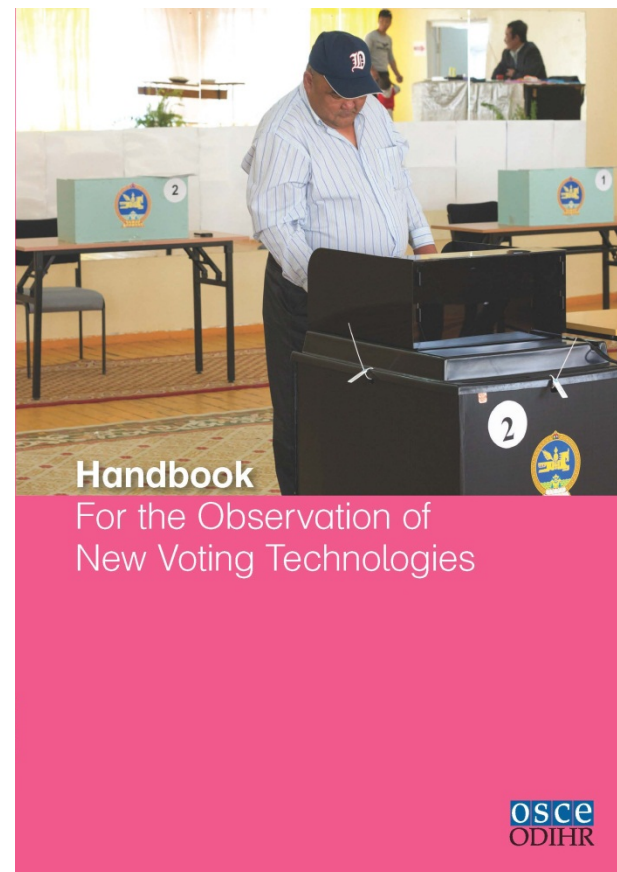


Testing, Evaluation, Certification and Auditing

- Conduct end-to-end tests in real world environments to identify problems especially with interfaces
- Use final software
- Compile command-level document including publish it, as basis for audits
- Elaborate detailed specifications for evaluation and with it certification of NVT
- Delegate audit, evaluation and certification to independent competent national bodies
- Publish audit, evaluation and certification reports

Summary

- While they are **new** they still have to **fulfill** the **existing commitments** and **standards**
 - NVT Observation takes **longer**
 - NVT Observation Methodology has emerged and will soon be released
- ➔ Handbook for Election Observation of New Voting Technologies



Contact

Dr. Robert Krimmer

Senior Adviser on New Voting Technologies

OSCE Office for Democratic Institutions and Human Rights

Elections Department

Miodowa 10

00-251 Warsaw, Poland

E-mail: robert.krimmer@odihr.pl