

ICT and Elections

THEMATIC WORKSHOP

Information Technology and Elections Management Informed Decisions for Sustainable Outcomes

Result Management – Theories and Typologies

Michael Yard, International Foundation for Electoral Systems

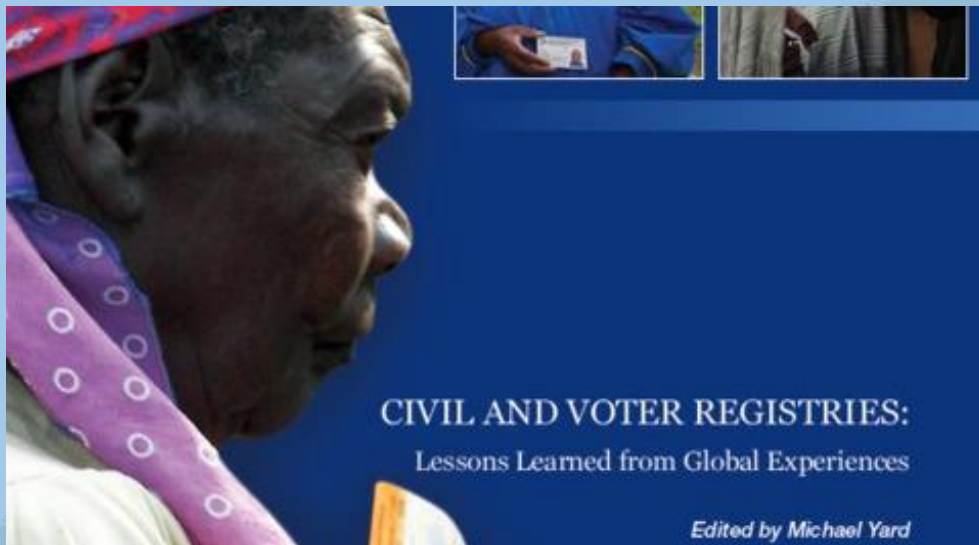


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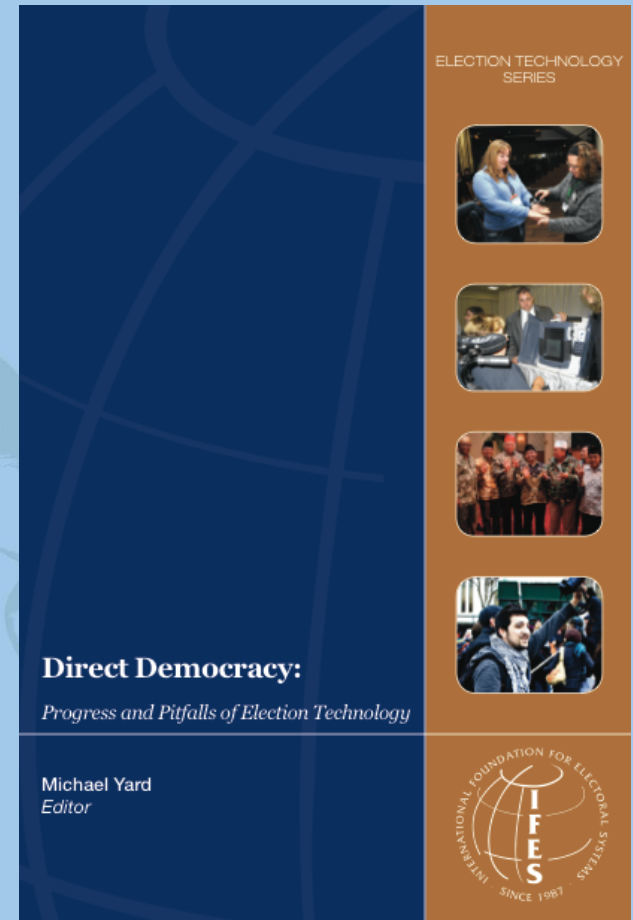


United Nations
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5 - 9 March 2012, Mombasa, Kenya



<http://www.ifes.org>



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107 percent turnout? Another side to Russia's vote

"Sounding somewhat exasperated, the Council of Europe representative urged Russia 'to just have a fair election', saying, 'It's not that difficult.'"



Hierarchy of Election Cheating

Inaccurate voter register

Vote buying and
intimidation

Ballot-box stuffing

Altering the count at
the Polling Station

Altering the count
during the tabulation



The purpose of Elections

Ballots, not
bullets

Mandate
to govern

Will of the
people

Human
Right



Back to Fundamentals

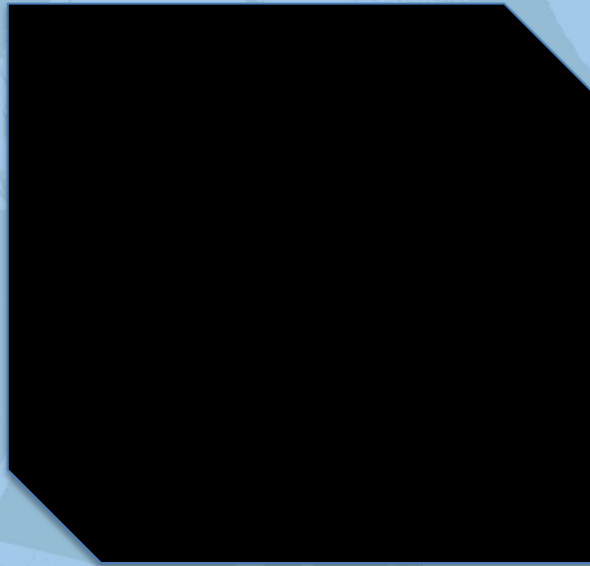
- A banking example:

Date	Payee	Amount
1/1/12	Amazon Books	93.27
1/2/12	Apple Computer	??????
1/3/12	Nairobi Java House	14.12
1/4/12	Godiva Chocolate	??????
1/5/12	????????	1,290.39
	TOTAL EXPENDITURES	1,397.78



Banking example 2

\$5,323



\$2,096

TRUST ME



Auditable Banking

Minimum requirements

- **Definitive list of deposits, payees, and transactions**
- **Paper trail with dates and times**
- **Someone who is accountable for every transaction**
- **Procedure for quickly resolving noted discrepancies**



Back to Fundamentals

- An election example:

Polling Station	Candidate	Votes
10001	Yes	203
10001	No	??????
10002	Yes	942
10002	No	??????
??????	Yes	1,290
??????	No	468
Total	Yes	2,435
Total	No	3,642



Auditable Results

Minimum requirements

- **Definitive list of polling stations, vote counts, accounting of all ballots**
- **Paper trail with dates and times**
- **Someone who is accountable for every transaction**
- **Procedure for quickly resolving noted discrepancies**



Appropriate Technology

- Origin of the concept:
 - Small is Beautiful: Economics as if People Mattered, by E.F. Schumacher
- Two types of technology
 - Techne
 - Politike Techne



"Shall I distribute political understanding (politike techne) the way the arts were distributed--that is, on the principle that one trained doctor suffices for many laymen, and so with the other experts? Shall I distribute justice and respect for their fellows in this way, or to all alike?"

"To all," said Zeus. "Let all have their share. There could never be cities if only a few shared in these virtues, as in the arts."

-- Plato, "Protagoras"



Techné

- Trust a few experts
- Centralized control

Politike Techné

- Trust many eyeballs
- Control in hands of the many

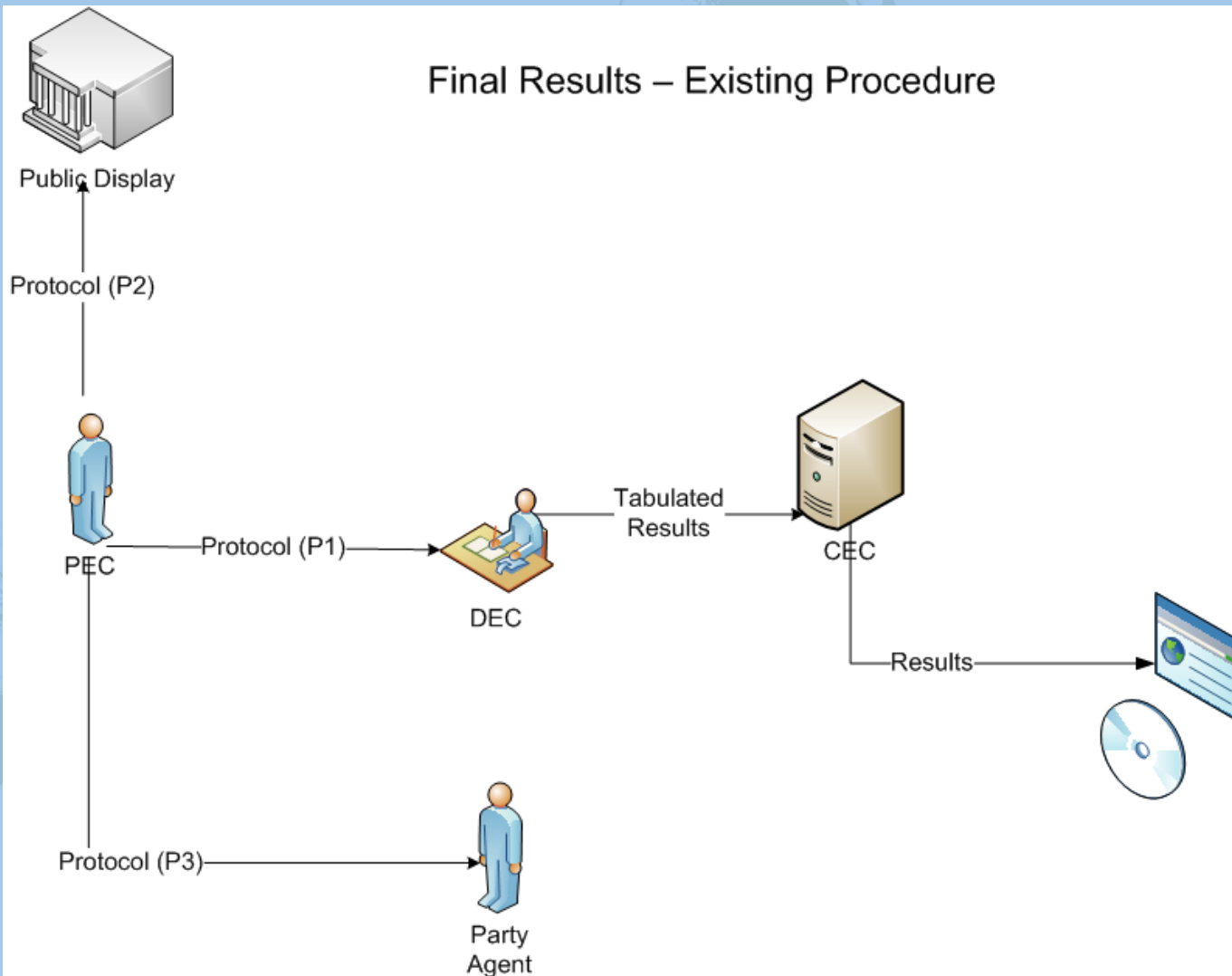


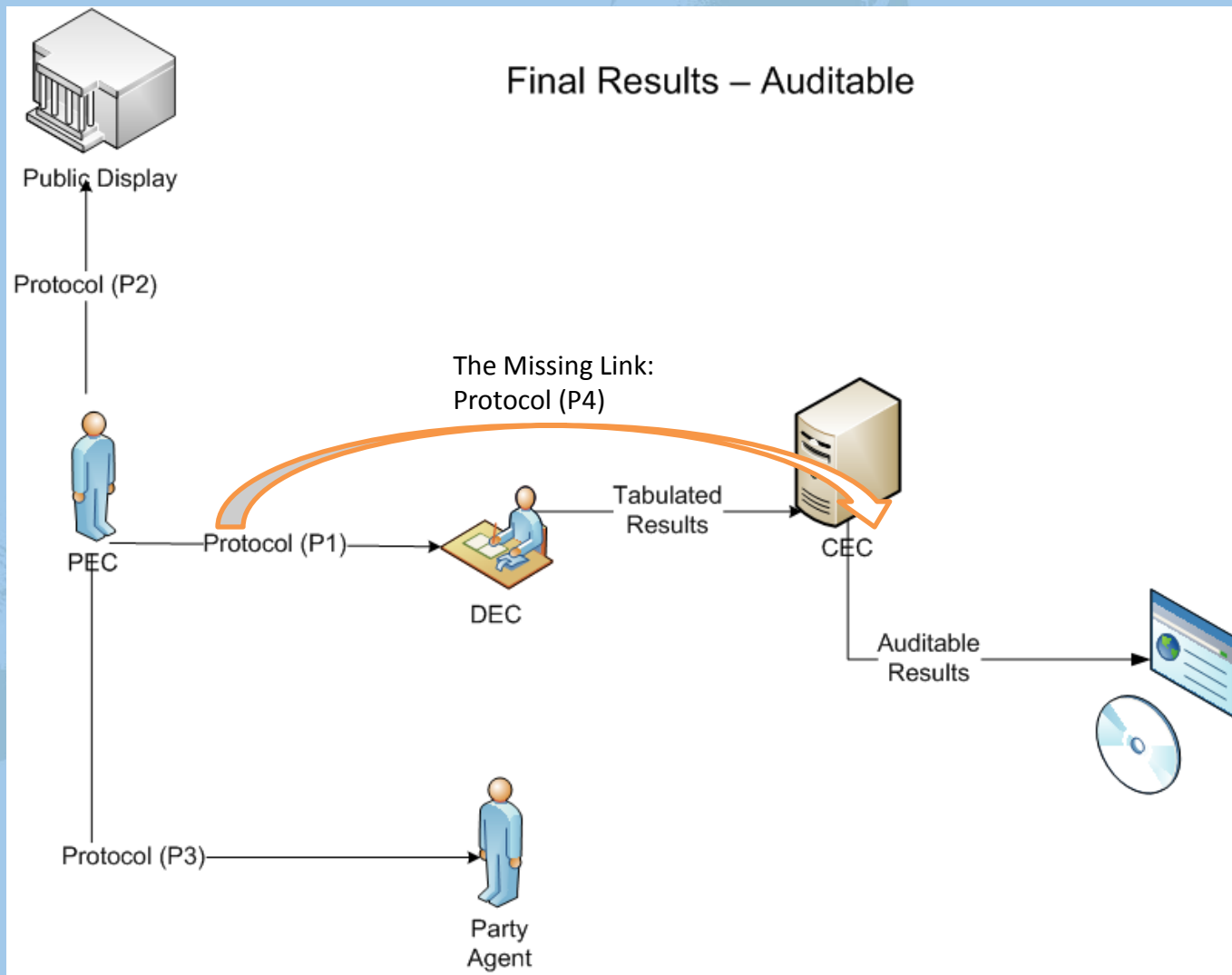
Basic Questions

- How will we transmit data?
- Partial or Final?
- Provisional or Official?
- Are the results auditable?



Final Results – Existing Procedure





Validation of Results

- Minimal: ballot accounting
- Improved – set red flags for investigation
 - 100% turnout – or much higher than ave. turnout
 - 100% votes for 1 candidate
 - All votes divisible by 100 or even by 10
 - Benford Analysis (see Walter Mebane, 2nd digits)



Conclusion

Basic Principles

- Respect for equality of all voters
- Allow for broad scrutiny (many eyeballs)
- Definitive list of polling stations, vote counts, accounting of all ballots
- Paper trail with dates and times
- Multiple transmission paths to ensure auditability
- Someone who is accountable for every transaction
- Procedure for quickly resolving noted discrepancies

