Introduction: Training Methodology and Key Concepts of the Debate on Appropriate Technologies

Fabio Bargiacchi
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Coordinator of the Joint EC UNDP Task Force in Electoral Assistance
Presentation

Objectives

Training Agenda

Workshop Material and Evaluation

Definitions

Most Important Areas of Applications

Should and Should Not

Biometrics in Civil and Voter Registration Details
Objectives

- Present and discuss the first findings of the EC funded Study on “The Use of ICTs in Electoral Processes: Focus on Civil & Voter Registration and Data Transmission”.

- Discuss and Validate the Joint EC UNDP Task Force Operational Paper/ACE Focus On… “Procurement Aspects of Introducing ICT solutions in Electoral Processes: The Specific Case of Voter Registration”.

Organised within:

With the support of:

Spanish Ministry of Foreign Affairs and Cooperation

CIDA | OAS | IOM | SADC | ECF

Brazilian National Council of Justice
Training Agenda

- **Day 1:** EC and UNDP Framework, Lessons Learned, Electoral Cycle and New Approach
- **Day 2:** Case Studies on Voter Registration and Data Transmission
- **Day 3:** Further Case Studies, Validation Exercises and Procurement for ICTs in Electoral Processes
DAY 1

- An Electoral Cycle Approach toward the Use/Introduction of ICTs in Electoral Processes,
- UN Policy towards the Introduction/Use of ICTs in Electoral Processes,
- EU/EC Policy and Strategic Framework towards the Introduction/Use of ICTs in Electoral Processes
- UN/UNDP Resources and Services: Who does What? Global Programme in Support of Electoral Cycles and synergies with the Joint EC UNDP Task Force,
- EU Election Observation, Background, Methodology and Implementation
- Challenges of Observing Electoral Processes introducing ICTs in Voter Registration and E-Voting
- Introduction of ICTs: Implications for the Legal Framework and Conflict Management
Introducing ICTs in Brazilian Electoral Processes

Main First Findings of the EC funded Study on The Use of ICTs in Electoral Processes

Synergies between Voter and Civil Registration – Case Study: Zambia and Benin

In preparation for the Moldova Electronic Voter Register

Synergies between Civil and Voter Registration – The Case of Cabo Verde

Biometric Voter Registration: The case of Angola

Synergies between Voter and Civil Register – the Case of the OSCE Region

Working Groups ICTs and Synergies between Voter and Civil Registration

Networking-Social Event with the Forum of the EU Election Observers offered by the European Commission @ La Tentation - 28, Rue de Laeken - 1000 Bruxelles
Cost Effective Satellite Communications for Data Transmission
Internet Applications to Increase Political Financial Disclosure Transparency
Operational Planning and Budgeting of Biometric Voter Registration
Procurement issues of Biometric Voter Registration. The cases of DRC, Conakry, Zambia

Methodology

- Presentations
- Questions and discussions
- Working Groups
- Audio Video-material and eLearning:
- Evaluations
Methodology

- eLearning Course on Effective Electoral Assistance: main concepts and issues related to Electoral Assistance.

- Audio-Video Recording and Interviews: All the sessions, discussions and exercise will be audio-recorded and use to build up a dedicated e-learning course on the same topics of elections & technology that will be available later in 2010.
Methodology

- **Presentations:** are used to introduce topics and case studies to the audience. Resource persons are asked to limit their presentations to $\frac{2}{3}$ of the time dedicated to the topic and to allow for questions and answers from the participants.

- **Working Groups:** On two occasions, the participants will be divided into four working groups which will include participants representing different types of organizations and stakeholders.
Questions and discussions:

- Time has been allocated to questions and discussions among participants and resource persons in plenum debates after approximately three presentations.

- Here we encourage the audience to ask direct questions to the resource persons and/or to share experiences on the various topics under discussion.

- To keep the relatively strict time table, we encourage all to keep both questions and answers focused and short in order to allow for wide participation.
The first working group session will be organized on day 2 and deals with ICTs and the Synergies between Voter and Civil Registration: Key Challenges and the Way Forward.

The second working group session takes place on day 3 and provides the participants with the opportunity to come with feedback on the JTF Operational Paper/Ace Focus On “Procurement Aspects of Introducing ICT Solutions in Electoral Processes: The Specific Case of Voter Registration”.

The overall objective of the working groups is to create an environment for the exchange of experiences from the different perspectives that the participants represent.

Each working group will have a facilitator and establish a spokesperson that will bring back the thoughts and ideas discussed in the group in the following plenary session.
Workshop Material
European Commission  
United Nation Development Programme  
International IDEA  

**Joint Training on Effective Electoral Assistance**  
**Brussels 1-5 Dec 2008**  

**Evaluation Day 1:**  
*Opening, EU/EC and UN/UNDP Framework, Lessons Learned and the New Approach*

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**09.30 – 10.00**  
**FABIO BARGIACCHE** – UN/UNDP BRUSSELS OFFICE  
**Introduction: Concepts, Agenda & Objectives**  

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**COMMENTS**

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**10.00 – 10.30**  
**LINDA MAGUIRE** – UNDP BUREAU DEVELOPMENT POLICY  
**Historical Background and Focus on Effective Electoral Assistance**  

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**COMMENTS**

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**10.30 – 11.00**  
**DOMENICO TUCCHIARDI** – INTERNATIONAL IDEA  
**International Commitments for Democratic Elections**  

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**COMMENTS**
Evaluation of the EC UNDP Partnership on Electoral Assistance:

- Niall Mc Cann
- Adolfo Cayuso Martinez
The term *appropriate technology* came into some prominence during the 1973 energy crisis and the environmental movement of the 1970s.

The term is typically used in two ways:

- utilizing the most effective technology to address the needs of developing areas,
- and using socially and environmentally acceptable technologies in industrialized nations.
In practice, appropriate technology is often something described as using the simplest level of technology that can effectively achieve the intended purpose in a particular location.

The term *appropriate technology* can also take a different meaning, often referring to engineering that takes special consideration of its social and environmental ramifications.
Following the principles and approach of the Appropriate Technology, we need to look at another general term referring to the application of Information and Communication Technologies (ICTs) within the field of socio-economic development.

ICTs can be applied either in the direct sense, where their use directly benefits the disadvantaged population in some manner, or in an indirect sense, where the ICTs assist governments supported by aid organizations or non-governmental organizations in order to improve socio-economic conditions in a given country.
 ICT4D projects

- **Infrastructure**: providing suitable computer hardware, operating systems, software, and connectivity to the internet. These would include the affordability of software and hardware, the ability to share software.

- **Capacity building and training in ICT**: installing, maintaining, and developing hardware and software, digital literacy

- **Digital content and services**: (e-learning, e-health, e-business/e-commerce)

Mobile telephony is appropriate technology, as it greatly reduces the infrastructure required to achieve widespread coverage.

Free or very inexpensive web and email services using cooperative computer networks that run wireless ad hoc networks.

Satellite Internet access can provide high speed connectivity to remote locations, however these are more expensive than wire-based or terrestrial wireless systems. Other cheaper solutions can be Wimax, SAT3PLAY and forms of packet radio.
Technological Innovation and Effective Electoral Assistance Focus

- Quality and appropriateness of the methodological, operational and technological choices to be adopted for implementation on an electoral cycle

- Perceived not any longer as isolated event but as a process.

- Past imperfections and limited results should be seen as an additional motive to support electoral processes investing more in the institutions that administer the elections in a good governance perspective

- Importance of international/domestic observation missions, evaluations, post election seminar and peer review mechanisms.

- Importance of the synergies between election observation and electoral assistance
Any effort to make electoral assistance more effective must tackle the issue of the increasing use of technology in the electoral process.
While the principles of elections largely remain the same

Information
Communication
Technology

has in the past 25 years dramatically changed the operational methodology for elections
The electoral cycle
three main segments

- Post-election period (strategy)
- Sustainable Electoral Processes
- Pre-electoral period (preparations)

Electoral Period (operations)
What kind of technology is suitable for a particular electoral process?

- Challenge: how to ensure a sustainable, appropriate, cost effective and transparent use of technology in post-conflict elections and in fragile or emerging democracies?

- No fixed solution that can be applicable everywhere, but different ones for every context. General rule:

  - The level of technological upgrades suitable for a given country should always be directly related to the trust and independence enjoyed by the EMB, as this is the element that will in the end determine their acceptance by the public opinion.
Technology should be:

- implemented in time before an electoral event
- legally supported
- operationally appropriate
- cost effective
- transparent and add to integrity
- sustainable
“Not”

Technology should NOT be:

- driven by vendor or donor interests
- considered a proof of “development”
- suppress more important needs
Areas of Implementation

- Geographic Information Systems (GIS)
- Boundary delimitation
- Operational planning
- Public information
- Results analysis by public & contestants
Regulation of Parties and Candidates

- Registration of parties
- Campaign finance controls and information
- Candidate nomination and verification
  - Better and more precise ballots
- Voter education about contestants
Areas of Implementation

Public Outreach

- Web sites
- Mass emailing
- Mass SMS
- Call Centers of EMBs
- Better TV spots through animation
Areas of Implementation
Results Aggregation

- Results are data entered manually, or through OMR, locally and then electronically transferred and tabulated centrally
- Faster, more precise & more auditable results
- Cost effective modernisation
Areas of Implementation

Internal Administration

- Organisational modernisation
- Budget/finance, human resource systems
- Procurement, inventory, transport
- Internal communication
  - Distributed email
  - Secure intranets
Areas of Implementation
Voter Registration
An accurate and accepted voter registry is pivotal to a credible electoral process
Capture more data, faster and more precise
Capture biometric data: picture & fingerprint
Avoid double registration
Centralisation: detect fraud
Planning: more effective allocation to polling locations
Synergy with civil registry
Risks: sustainability, manipulation, trust
The “Automated Fingerprint Identification System” automatically checks one or many unknown fingerprints against a national database of known prints.

The intended purpose is to prevent multiple enrolment in an election.

Long Time required for aggregation of data and double entry control in via AFIS - Postponement of elections.

Funded by State Budgets or Cofunded via Donor.
Areas of Implementation
Electronic Voting
Areas of Implementation
Electronic Voting

Opportunities:

- Longer term cost reduction
- Results faster and more reliable
- Better access for disabled
- Mobility of voters
- Facilitate out-of-country voting
- Higher turn-out through ease of voting
Areas of Implementation
Electronic Voting

- Risks:
  - Sustainability
  - Training
  - “Vendor dictatorship”
  - Lack of trust, ease of central manipulation

- Transparency is key
The Future of Electoral Technology?

- Synergies between civil and voter registration?
- Digital identities with biometric identification, digital certificates?
- Polling stations disappear replaced by internet voting and/or voting via mobile phone?
- Individualised voter education via internet?
- Direct/digital democracy
Local Capture of Information
The application contained can capture data manually inserted in the Vanguard. This data can be, voters information, as well as Voting results.

Transmission of Data
The kit is capable of transmitting all data and results from distributed locations to a central site.

Digital Camera
The digital camera is embedded onto the unit’s Official Panel and may be used to capture a voter’s digital photograph during registration.

Color Touch-screen
A touch-sensitive, full-color LCD screen displays easy-to-use controls for PenCom officials to use to incorporate or edit data.

Signature Pad
The signature capture device may be used to capture a user’s signature in electronic format during registration or authentication.

Printer
The attached printer can be used to print a voter registration card.

Fingerprint Reader
The main fingerprint capture device may be used to capture a fingerprint in digital form during registration or authentication.
Biometrics in Civil-Voter Registration: an Appropriate Technology?

- Political Factors, Sept 11 2001, Fight Against Terrorism, interests in population databases
- Nature of Vendors and Service Providers being large conglomerate working also with defense sector
- End of Production of Polaroid 35 mm Camera
- Technological Developments
- Business Opportunities
- Accuracy and/or Perception of Accuracy of Biometrics…
- Easy Concept of Biometrics and AFIS
- Inclusion in Legal Frameworks, DRC and Togo
- Vendor Driven? Supply Driven?
Five years of EC - UNDP Experiences

- Challenges of the biometric voter registration in the DRC electoral processes
- South-South Cooperation DRC-Togo
- Bangladesh, Conakry, Mozambique, Nigeria, Haiti, Tanzania, Benin...
- Work of the Joint Task Force
- EC UNDP IDEA Study
Governments of Belgium, Luxembourg and Italy that are funding an industrial consortium coordinated by the ESA.

DRC Independent Electoral Commission partner and beneficiary of the Pilot Project

The EC, UNDP, IDEA and the IEC DRC collaborate in the production of the E-Learning content of the Effective Electoral Assistance module and E-Learning module adapted to the Congolese Electoral Administration context.

The general objective is the testing of a particularly cost effective and sustainable satellite technology for data transmission in an African context targeting training and electoral data transmission.
Technology and Market forces drive History?

- Luddist Approach versus Advertisement Approach
- Joint Study on ICTs Civil/Voter Registration and Data Base Transmissions within the Global Training Platform
- EC, UNDP, IDEA, CIDA, IOM, OAS and...ACE

- Focus on civil/voter registration and transmission of electoral data
- Comparative assessment
- Auditing procedure
- Conduct an analysis of most appropriate manner of procuring these technologies and the related specialized services
Continuous and increasingly fast developments in ICTs applications available for electoral purposes

EC/UNDP are receiving many request from Governments and EMBs for support to civil and voter registration and digitalization of results aggregation processes

Factors to be reckoned with by all EMBs, donors, practitioners and electoral assistance providers

ICTs has already dramatically changed the way elections are conducted in the western world.

Unrealistic not to accept that this process will go on and affect more and more emerging democracies and post conflict countries in a leapfrog manner

We need to do our job and equip ourselves better…
Technology and Market forces do not drive History alone...

Change is induced by social needs expressed in new political demands, affected by new technical possibilities and by development in S&T exerted by changes in the political panorama in a given moment.

Hence advances in technology and market forces are not to be conceived as the mayor forces of change in the election sector in the past decades, somewhat they shaped new situations for competing political and economic forces.
Technology might reduce costs and improve sustainability

It opens up risks for governments, donors and assistance providers to become hostages of the vendors

Cost-effectiveness depends on the re-usability of the hardware for other elections or public administration purposes

Technological changes are not accompanied by adequate training and voter education efforts
Feasibility Studies
Study Tours
Technical Specifications drafted considering comparative experiences adapted to the country’s needs
Software and Hardware to be adapted to the country’s electoral laws and practices
Gradual Introduction at least 16-12 months prior to Election Day
Divide the country on different operational areas in view of rationalizing the resources
Accent on human resources, training, on site assistance from services providers
Cost Effectiveness and Sustainability
Pilot Tests, Validation Tests, Mock Registration
Civic Voter Education aimed at increasing all stakeholders’ trust in the technology
Plan synergies with civil registry and voter registration, ID for police etc..
Consider to extend the length of the operations

Best Practises