Implementing and Overseeing
Electronic Voting and Counting Technologies

Chapter 2.1: Making a Decision on E–voting or E–counting

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CHAPTER 2 IMPLEMENTING AND OVERSEEING ELECTRONIC VOTING AND COUNTING PROJECTS

This part of the manual takes the reader through the processes of implementing and observing electronic voting or counting projects, and is divided into three main sections discussed chronologically below. These sections address:

1. the decision-making process for adopting electronic voting or counting solutions;
2. building the electronic voting or counting solution; and
3. implementing the technology for an election.

The first section covers the needs assessment and decision in principle as to whether technologies exist that meet these needs, piloting these technologies, and the final decision on adoption based on a full assessment of pilots conducted.

The second section, focused on building the system, looks at issues such as the applicable standards with which electronic voting or counting must comply, the revision of the legal framework to properly regulate the use of electronic voting or counting technologies, the design and procurement of the new technologies, staff training and security requirements for the technology.

Finally, the third section outlines challenges associated with using electronic voting or counting technologies in an election. These include the management of electronic voting or counting projects; the education of voters on new technologies; the maintenance, storage and update of equipment and software; certification and testing; Election Day implementation; tabulation of results; challenges and recounts; post-election audits; evaluation of the system and Internet voting.

Each electoral environment will be different, and some of the issues outlined in this part of the manual may be more or less relevant in particular country contexts. However, all election management bodies considering the implementation of electronic voting or counting solutions should be aware of all of the implementation issues outlined below, and should ensure they have adequately considered and dealt with them. Likewise, electoral stakeholders such as political parties or civil society groups should be aware of these issues when planning a strategy for oversight of the process.

2.1 MAKING A DECISION ON E-VOTING OR E-COUNTING

The first step in implementing electronic voting or counting technologies is the decision-making process concerning the adoption of the technologies. This process has varied considerably in the countries that have used electronic voting or counting technologies. The institution making the decision has also differed; in some countries, parliament has made the decision through the passage of legislation, and in others the election management body has made the decision under its authority over operational matters.

But no matter which institution has decision-making authority, the way in which the decision is reached is vitally important. A decision is more likely to meet the needs of the electoral environment if it is made after consulting openly and widely with electoral stakeholders, based on comprehensive research into available technologies and judged against clearly identified objectives for the implementation of electronic voting or counting technologies. A decision based on these characteristics is also likely to be a far more stable decision that is less likely to face concerted challenges from electoral stakeholders.

Conceptually the decision-making process can be divided into three main phases. The first is the decision in principle, which consists, first and foremost, of assessing whether there is a problem with the current voting or counting process (i.e., a needs assessment), followed by assessing the technical feasibility of addressing that problem with the technology, anticipated benefits and potential risks, financial feasibility and stakeholder reactions to the technology. If the decision in principle indicates that an electronic voting or counting technology might be appropriate, the second stage of the decision-making process should be conducting one or more pilots of the technology. Finally, once pilots have been conducted, a decision can be made regarding the adoption of the technology.[27] Though all three of these stages may not have been followed in each instance where electronic voting or counting has been implemented, they provide a framework for understanding best practices when making such a decision.

An important component of a good decision-making process is the inclusion of a range of stakeholders and interests in dialogue about the possibility of adopting electronic voting or counting solutions. The use of such technologies affects many vital components of the electoral process, and the inclusion of a wide range of stakeholders in the debate helps ensure that all of the necessary perspectives are discussed. While it may be easier to exclude certain skeptical groups from the debate about the possible introduction of electronic voting or counting technologies, especially those who are very critical of such technologies, the perspectives that they bring to the debate may still be very useful and provide valuable insight. Engaging skeptical groups can often be a way to anticipate and address concerns that could later evolve into significant public resistance or that might threaten the integrity or security of the election.

27 This conceptual framework is offered as a model of good practice for sound decision making about the adoption of electoral technologies in Goldsmith, B. (2011) Electronic Voting and Counting Technologies: A Guide to Conducting Feasibility Studies.

DECISION IN PRINCIPLE

The decision-in-principle stage of the decision-making process is vitally important, as it helps to establish the parameters for the consideration of electronic voting and counting technologies. This stage involves several essential steps:

- Provision of authority and clear mandate to an institution to consider the use of new technologies;
- An assessment of needs or challenges in the current voting and counting system;
- An assessment of the advantages and disadvantages offered by different technologies in addressing those needs;
- A comprehensive assessment of financial feasibility;
- Consideration of the proportionality of benefits vis-à-vis costs of implementation;
- An assessment of the necessary institutional capacity to implement the new technology;
- A legal framework review; and
- Consideration of support and opposition of stakeholders.

The first step in the decision-in-principle stage is that an institution needs to be provided with the authority to consider the use of voting and counting technologies. In some cases an institution (e.g., the election management body) will have standing authority to investigate and implement trial improvements in the procedure for conducting elections. In other cases this authority will have to be specifically provided.

Regardless, it is important that the mandate for the consideration of these technologies is clearly defined. The institution that will consider the introduction of voting or counting technology needs to be identified; the objectives of the

study should be well defined (i.e., whether it involves consideration of voting technology, counting technology, Internet voting, biometric voter identification, etc.); a timeline for the decision-in-principle process should be outlined, and the outputs expected from the process should be defined (e.g., a report, recommendations on technologies, suggestions on vendors, a plan for the conduct of pilots, an indicative budget for the adoption of the technology, etc.).

A comprehensive consideration of electronic voting or counting technologies should reflect on a number of issues. Initially these issues include an assessment of the current system of voting and counting and any existing needs for improvement in the system; an assessment of the advantages and disadvantages offered by the technologies; and a review of IT security issues related to the use of the technologies. The advantages of introducing these technologies should also be proportional to the full costs through the life cycle of its implementation – not only in financial terms but also in terms of staffing resources and other nonfinancial costs triggered by changing the voting or counting system, as outlined in more detail below.

This initial process should lead to the development of a set of requirements for any new technology and a list of anticipated benefits and challenges against which any future use or pilot of the technology can be assessed. Product information will need to be gathered from vendors of electronic voting and counting technologies to allow for a determination of technical feasibility (i.e., whether products are actually available that meet the requirements). If no products are found that meet the requirements, it may be that the requirements identified were too ambitious or that insufficient suppliers were contacted. Even after reconsideration, it may be that no products exist or can be developed that meet the requirements. The conclusion then would have to be that the available technology does not meet the needs identified. This would indicate the end of the decision-making process, with a finding that electronic voting and counting technology was not appropriate for use at that time.

In many cases, however, technology solutions will meet the electoral requirements identified, allowing the next steps in the decision-in-principle process to be conducted. These involve several additional components of assessment: a cost-benefit analysis; an assessment of institutional capacity; an assessment of the vendors' track records for timely delivery of technologies that perform reliably in conditions that exist in the country and under the timelines required by the electoral calendar; and an assessment of the legality of using electronic voting or counting technologies.

Even when electronic voting or counting technologies exist that meet requirements and can offer significant benefits in the conduct of elections, the financial feasibility and sustainability of their use must be assessed. In order to do this, a number of possible products must be selected for analysis, and a full assessment of all of the costs involved in the use of the technology compared to existing electoral procedures will need to be conducted. This assessment will need to take into consideration that, although the initial investment in electronic voting or counting technology might be high, the technology may be in use over several elections; thus, the initial investment costs must be spread over this period, and the additional costs associated with maintenance and software updates must be considered as well. There may also be significant costs incurred in the storage and disposal of equipment.

It may also be the case that the introduction of a new voting or counting technology will represent an additional channel of voting or counting, to be implemented alongside existing voting and counting systems. This is the case in some U.S. electoral jurisdictions, where voters at the polling station are offered the choice between paper ballots or electronic voting machines, and in some countries, such as Estonia, where both Internet voting and paper voting are available. In such cases the introduction of voting or counting technologies may be expected to increase the costs of conducting elections, possibly by a significant amount, but this could be justified

through the better realization of other electoral principles, such as greater accessibility for voters.

The use of electronic voting and counting technologies also requires very different skill sets for election management body and polling station staff if the voting or counting technology is being implemented in the polling station. Staff with suitable information technology skills will need to be identified and trained. The election management body will also need to educate voters and other stakeholders on any changes in the voting process, which will be a significant organizational challenge. The election management body will need to manage the change from the existing system to the use of the new voting and counting technologies. Managing such change is a huge project in itself. A realistic assessment of the organizational challenges involved in implementing voting and counting technologies will need to be made, and might impact the final decision on whether to adopt the technology.

Finally, an assessment of the electoral legal framework will need to be conducted. There are two aspects to this legal analysis. First, the existing constitutional and legal framework will need to be assessed to determine if the use of electronic voting and counting technologies complies with relevant constitutional and legal provisions. If the use of the technology is seen as breaching constitutional or legal provisions, then implementation would not be possible unless and until those provisions were amended.

Second, an assessment will need to be conducted as to whether the constitution and legal framework cover the significant changes in the way that elections are conducted due to the use of the new technologies. For example, the law may make reference to paper ballots and physical ballot boxes, which would no longer exist if electronic voting machines were used. Also, new legal provisions might be needed to address issues specific to electronic voting and counting, such as data privacy and proper disposal of obsolete data storage devices. A

comprehensive review of existing provisions and new provisions will need to be conducted, with recommended legislative amendments identified.

An important aspect of this decision-in-principle process is the inclusion of key stakeholder representatives. These stakeholders, especially political parties, civil society, and the media, will need to understand why voting or counting technology is being considered, the potential advantages and disadvantages, and the implications that the technologies have for the way that voting and counting are conducted. Once this understanding is achieved, the support or opposition of these stakeholders will be an important consideration.

The decision in principle will need to balance the various issues considered above – technical feasibility, benefits to be achieved, financial feasibility, proportionality of benefits vis-à-vis costs of implementation, institutional capacity to implement the new technology, legal implications, and support or opposition of stakeholders. Each electoral environment may find a different balance among these factors. For example richer countries or countries that can leverage donor funding may be more willing to invest significant resources for fewer anticipated benefits than less wealthy countries without donor funding.

A decision in principle that favors adoption of electronic technologies does not commit a country to adopting voting or counting technologies; it merely recommends progressing to the next stage of the feasibility assessment and overall decision-making process: the pilot project.

FIGURE 6 – THE RATIONALE FOR E-VOTING IN BRAZIL

Electronic voting in Brazil was introduced to reduce fraud in the results-tabulation process and increase voter accessibility to the ballot. Such problems had consistently compromised the integrity of elections, and electronic voting was seen as a method of combating previous shortcomings attributed to the Brazilian paper-ballot system.

The adoption of electronic voting in Brazil was initiated by the Superior Electoral Tribunal (Tribunal Superior Eleitoral or TSE), the judicial body charged with implementing Brazil's electoral laws. While outside actors had some input, the move to electronic voting was largely an autonomous process carried out by the TSE; and consequently, actors within the judicial institution made most major decisions.

The primary reason for adopting electronic voting machines was to combat endemic fraud in the paper ballot tabulation process. Due to the complex electoral environment created by Brazil's electoral rules, where voters would regularly have to choose among thousands of legislative candidates, the tabulation of votes was a complex and lengthy affair. Vote tabulation was also a huge logistical challenge, involving hundreds of thousands of vote counters who were often government employees from

the state-owned banks or the postal service. In the 1994 national elections, for example, vote tabulation required about 170,000 people. Because of the scale of the task, vote counting could take weeks, and the post-election period was a time of great uncertainty and tension.

Most importantly, the lengthy tabulation period increased the opportunity for vote counters allied with candidates to manipulate the vote count. While representatives of political parties could observe the vote count, the lengthy vote count period made it difficult for partisan and other civil society actors to fully monitor the process. The most common type of fraud was manipulation of the tabulation sheets, where vote counters who were allied with candidates would subtract votes from some candidates' tallies and add them to their favored candidates' counts.

A secondary motivation for switching to electronic voting was accessibility problems in the paper system. Because of the large number of candidates that ran in legislative elections, the TSE used paper ballots that required voters to write in the names or identifying numbers of their preferred legislative candidates. Because of the difficulty of casting and counting hand-written ballots, the fraction of blank and invalid votes approached 40 percent in legislative elections in 1994. For the approximately 20 percent (according to the 1990 census) of the electorate that was illiterate, writing a five- or six-digit sequence of numbers was not a trivial task. This was compounded by the fact

that, in legislative elections, voters vote for multiple offices and would have to fill in a total of 16 to 19 numbers if they were to cast votes for all offices. Furthermore, voters had no way to verify that the numbers they wrote on their ballots actually corresponded to the candidates or parties they intended to vote for.

Electronic voting machines have been able to eliminate some of these significant problems, delivering results much more quickly and eliminating many of the means by which the results were previously manipulated, although they clearly brought new challenges to the conduct of elections.

FIGURE 7 – THE DECISION IN PRINCIPLE IN PAKISTAN

Pakistan's decision-in-principle process provides an example in which the relevant technical, operational, financial and legal issues surrounding electronic voting were taken into consideration.

To assess the potential for using election technologies, the Election Commission of Pakistan (ECP) established a Committee on the Use of Electronic Voting Machines (EVM Committee). Established in November 2009, the EVM

Committee consisted of staff from different departments of the Secretariat for the ECP as well as representatives from the International Foundation for Electoral Systems (IFES) office in Pakistan. The decision to form such a body originated from a presidential request. On the basis of this request, the EVM Committee engaged in a comprehensive feasibility study.

The EVM Committee established four smaller working groups composed of its own members to look at the different aspects of this study. These working groups assessed the strengths and weaknesses of the existing system, the potential benefits offered by new technologies, the likely cost implications of adopting new technologies and the legal implications.

The EVM Committee also arranged for leading electronic voting machine vendors to demonstrate their technologies to the Election Commission of Pakistan. Three vendors made the trip to Pakistan to demonstrate their products. Political parties, civil society and international stakeholders were invited to these demonstrations, and were able to provide their opinions on the possible use of electronic voting machines.

The findings of the working groups, the vendor demonstration and the consultation process were used to complete a final report and recommendations from the EVM Committee. This report detailed the requirements for an elec-

tronic voting system to be used in Pakistan, the challenges to meeting these requirements in the Pakistani context, the likely costs and benefits that could be achieved and the legal changes that would be required before an electronic voting system could be implemented.

The EVM Committee found that solutions did exist that could meet the needs of Pakistan. It recommended that the use of electronic voting machines be further explored through the conduct of pilot projects for electronic voting. The committee also recommended that Pakistani technology companies be encouraged to begin developing domestic electronic voting solutions, possibly in partnership with international electronic voting machine suppliers.

Since the report, Pakistan piloted electronic voting machines in by-elections. Voters cast their ballots by paper as normal, and these paper ballots were counted to generate the results; but each voter could also cast a test ballot on one of the electronic voting machines being piloted. A number of different electronic voting machines were piloted in this way.

KEY CONSIDERATIONS: DECISION IN PRINCIPLE

FOR IMPLEMENTING BODIES

- ☑ To what extent have key electoral stakeholders been consulted openly and widely in the decision making process on the adoption of electronic voting or counting technologies?
- ☑ Is the decision making process based on the research into available technologies and judged against clearly identified objectives?
- ☑ Does the implementing body have the necessary authority to consider the use of voting and counting technologies?
- ☑ Is the decision making process based on a needs assessment that identifies whether there are problems with the current voting or counting process?
- ☑ Do products which meet the requirements set out for the chosen technology exist and if such products do exist, has an assessment of their financial feasibility and sustainability of been conducted?

FOR OVERSIGHT ACTORS

- ☑ Have the primary reasons for considering the adoption of new technologies been clearly and publicly explained, including which specific problems technology is meant to address?
- ☑ Has the decision-making process assessed the current system; proportionality of advantages and disadvantages; costs versus benefits; technical feasibility; EMB institutional capacity; and legality of using e-technologies?

☑ Have key stakeholders, including parties, civil society, and the media, and the public been informed of the above assessments?

☑ To what extent have key stakeholders' support, opposition or other input been considered?

PILOT PROJECTS

Pilot projects are an essential assessment tool for evaluating the possible use of new technologies. They should be used to test assumptions about possible benefits and challenges in using new technology, as well as the costs of implementation and the reaction of stakeholders to the technology. The conduct and evaluation of a pilot project on the use of electronic voting or counting technology is a complex task. It needs to be resourced and managed effectively if it is to serve its purpose of providing an adequate assessment of the technology. The pilot process should be transparent and include mechanisms for feedback from stakeholders.

Pilot projects require all aspects of election administration to be adapted to the new technology, but implemented on a smaller scale. Therefore, all of the issues listed in sections 2.2 and 2.3 are relevant when conducting a pilot project. These issues are not repeated here; instead, this section focuses on issues specific to pilot projects.

- **Implementing Agency** – The institution that is responsible for implementing the pilot project(s) will need to be clearly defined, as will any support that it can expect from other state institutions. The implementing agency will normally be the election management body, but this does not have to be the case, especially if electronic voting or counting technologies are piloted in nonpolitical elections (e.g., student

elections). It is recommended that, even if electoral stakeholders are not formally included in the project management body established by the implementing agency, they are included and consulted as much as possible throughout the pilot project process.

- **Resources** – The conduct of a pilot will require that financial resources are made available, not only for procurement of the technologies to be piloted, but also for other new aspects of the electoral process, such as testing and certification of the technologies, the conduct of voter education and IT support staff. Human resources will also be required to implement the project, and it is recommended that dedicated resources be allocated to manage and support the pilot project.

- **Mandate** – The mandate of the pilot project should be clearly identified. This mandate should include the technology or technologies that are to be piloted, the scale and locations of the pilot to be conducted, the kind of pilot to be conducted (i.e., in an actual election, in parallel to an actual election, or for a mock election), the issues to be addressed in the pilot and the evaluative criteria to be utilized in the pilot.

- **Timeline** – A clear timeline should be identified, for the conduct of the pilot as well as for delivery of the outputs from the process. The timeline for the conduct of the pilot project must be realistic given the likely need to procure and test the new electronic voting or counting systems, in addition to the other activities required to implement such projects.

- **Transparency** – The need for transparency cuts across all aspects of the implementation of pilot projects. There may be significant distrust about the potential change in the way that elections are implemented. Stakeholder concerns will best be addressed by including political

parties, civil society, the media and voters in the process through consultations and briefings as the process develops.

- **Technology Specification** – The decision-in-principle process should pass on a detailed specification for the procurement of the technology to be used in the pilot project(s). This specification should be based on the requirements of the electoral environment and an assessment of existing products. If this is not provided, then the pilot project management body will need to develop it based on the findings of the decision-in-principle process, and then use this specification for the procurement of the pilot technologies.

- **Legal Framework** – The legislative amendment process necessary to enable the conduct of pilot projects, if any amendments are required, may be different for a pilot than for a more general implementation of electronic voting or counting technology. Enabling legislation may be passed for a temporary period, during which the pilot(s) will take place; likewise, temporary rules or regulations may be passed to implement the pilots at a procedural level.

- **Testing of Assumptions** – The decision-in-principle process will make a large number of assumptions about the operational challenges of implementing electronic voting or counting technologies, the expected benefits and costs, and the way in which voters, election administrators, political parties and observers interact with and experience the new system. The pilot project must, to the extent possible, test and challenge these assumptions so that a final decision can be made based on as many facts – and as few assumptions – as possible.

- **Evaluation** – While the issue of evaluating the use of electronic voting and counting technologies is relevant in general terms for the

implementation of these technologies, it should play an especially important role during pilot projects. Extra efforts should be made to evaluate the performance of voting and counting technologies during pilots and also to evaluate the reactions of key stakeholders, including political parties, civil society and voters, to the use of the technology. Conducting audits of the piloted technology's performance will be an especially important aspect of this evaluation. These evaluation mechanisms will play a critical role in the next stage of the decision-making process: the decision on adoption.

- **Outputs** – The body responsible for conducting the pilot project should be directed as to the expected outputs of the process. The output could be as simple as a recommendation on whether to adopt the piloted technology. Alternatively, the pilot project might be expected to result in a comprehensive report on the pilot process, lessons learned, a plan for larger-scale implementation, a revised specification for the voting or counting technology, and so on.

FIGURE 8 – PILOTING ELECTRONIC VOTING IN PERU

In 2010 the Peruvian Congress called on its electoral institutions to explore electronic voting following delayed election results during regional and municipal elections earlier that year. As part of the exploration process, Peru's National Office of Electoral Processes (La Oficina Nacional de Procesos Electorales, ONPE) was charged with conducting a pilot of electronic voting tech-

nology. Because the ONPE had no previous experience with electronic voting, the International Republican Institute (IRI), with support from USAID, provided technical assistance to the ONPE in planning, conducting and evaluating the pilot.

The ONPE ran the e-voting pilot in the mountain town of Pacarán, chosen for its small size and rural location. While the location and demographics of Pacarán would challenge the introduction of e-voting machines, issues unique to remote communities had to be tested to ensure the technology would meet the needs of Peru's entire citizenry.

The pilot began with IRI working with the ONPE to conduct a baseline study to determine the most effective voter education and training tools. The results of the study helped to clarify the appropriate voting hardware and software for Pacarán. After determining the technical aspects of the pilot, the ONPE designed a plan for poll worker and voter outreach. The outreach plan provided technical training to poll workers and reached 86 percent of the 1,354 registered voters through a variety of e-voting technical training events, including community fairs, door-to-door outreach and scheduled informative workshops. On Election Day, voters also had the opportunity to practice on e-voting simulators prior to casting their ballots.

After the pilot, ONPE and IRI developed detailed recommendations, results and conclusions from the pilot. The main conclusion was that, although the many technical and logistical obstacles to implementing a national electronic voting

system might be overcome, implementing such a system would be very costly. Since the pilot evaluation, the Peruvian Congress has not demonstrated serious interest in allocating any significant level of funding for electronic voting. However, since the first pilot in 2011, ONPE has been asked by Congress to conduct additional small-scale pilots for local elections, most recently during July 2013 municipal elections.

KEY CONSIDERATIONS: PILOT PROJECTS

FOR IMPLEMENTING BODIES

- ☑ Has it been made clear which institution is responsible for implementing the pilot projects?
- ☑ Are sufficient financial and human resources available to implement the pilot project?
- ☑ Does the mandate of the pilot project define the technologies to be piloted, the scale and locations of the pilot, the kind of pilot to be conducted (i.e. in an actual election, or in parallel to an actual election, or for a mock election), and the issues to be addressed and evaluative criteria to be utilized?
- ☑ Is the timeline for the pilot realistic?
- ☑ Has a detailed specification for the procurement of the technology

been made for use in the pilot projects?

- ☑ Does the legal framework permit piloting of electronic voting and counting technologies, or are legislative amendments needed to enable the conduct of pilot projects?
- ☑ Does the pilot project test and challenge the assumptions about the operation challenges of implementing electronic voting or counting technologies, the expected benefits or costs, and the way in which voters, election administrators, political parties and observers interact with and experience the new system?
- ☑ Has an evaluation plan been developed for the pilot projects, and are the outputs of the pilot project clearly defined?

FOR OVERSIGHT ACTORS

- ☑ Is the process of procuring the pilot technology open and impartial to all vendors?
- ☑ Does the EMB provide periodic public updates and consultations related to the development and procurement of the pilot technology?
- ☑ Are voters aware of the existence of and rationale behind the pilot?
- ☑ Are stakeholders, including observer groups, political actors and voters, permitted and encouraged to observe the pilot process, and are they invited to provide feedback on the piloted technologies during the evaluation process?

DECISION ON ADOPTION

The decision on whether to adopt electronic voting or counting technologies should be a direct result of both the decision-in-principle and pilot project stages of the decision-making process. Regardless of whether the decision is to adopt, not adopt or conduct further pilots of technologies, the preliminary recommendation should be discussed with key stakeholders, and the reasons for the final decision should be well documented and shared with the public. A decision to adopt voting or counting technologies should ideally be based on successful pilots in different locations over time and should take into account lessons from those pilots.

The body authorized to make the decision on adoption, which may be the same body that conducted the earlier stages of the decision-making process, has a number of options available to it.

It may be decided that electronic voting and counting technologies do not meet the needs of the electoral environment, from a technical, cost-benefit, resource or stakeholder perspective, and that, therefore, the technologies should not be adopted. Even if this is the case, it is important that the reasons for the decision not to proceed with the technology are well documented in order to ensure accountability regarding the decision. This would provide the opportunity for the decision to be revisited in the future, if the factors supporting nonadoption change.

Alternatively, a decision might be made to adopt certain voting or counting technologies. This will likely only happen if the pilot is seen as successful and the anticipated benefits are achieved. Such a decision should not be based on a single small-scale pilot project, but ideally on the successful conduct of a series of pilots in different locations or over a period of time. Even where the deci-

sion is to adopt voting or counting technologies, it is important to recognize that there may be lessons to be learned from the pilot process and ways in which the voting or counting system could be improved when implemented on a larger scale.

The decision to adopt a voting or counting technology may also be implemented in a staggered manner, with some constituencies or regions adopting the technology first. However, while it may be beneficial to do so in order to manage the change more easily, this will entail different voting opportunities for different sets of voters. Some political actors might see this as problematic, if they view the opportunities presented by the voting or counting technology as being preferential to some voters, possibly along partisan lines.

A third alternative is that the pilot process should continue, with the final decision on adoption being delayed until further pilots can be reviewed. This option might be chosen in a number of scenarios: the pilots have indicated that an alternative technology that was not piloted might be more beneficial; the pilots were inconclusive; the pilots were not designed well enough to test the assumptions about challenges and benefits; or the pilot evaluation resulted in a revision of the specifications for the technology being assessed.

This third alternative highlights the fact that the feasibility process is not necessarily linear and may entail several iterations of pilot projects before a final decision can be made on the adoption of electronic voting or counting technologies.

FIGURE 9 – DECISION MAKING IN THE PHILIPPINES: ADVISORY BODY TO THE ELECTION COMMISSION

During the Philippines' transition to electronic counting in 2010, an advisory council was created to assist the Commission on Elections (COMELEC). While the formation and operation of this council came with several challenges, it provides an example of one type of mechanism that can help promote transparency and inclusiveness of decision-making processes on whether and how to adopt voting and/or counting technologies.

Mandated by the national legislature of the Philippines, the COMELEC Advisory Council (CAC) consisted of nine members from government, academia, the IT community and civil society. It provided recommendations and oversight to the COMELEC during all stages of the transition to e-counting technologies, including the following:

- Recommending the most appropriate, secure and cost-effective technology
- Observing and participating as nonvoting members of the Special Bids and Awards Committee, which was established to conduct the bidding and vendor selection process
- Participating as nonvoting members of the steering committee that implemented the new system

- Planning and testing the technology
- Identifying potential problems or inadequacies with the system
- Designing plans for the bidding process and the use and eventual disposal of the new system
- Conducting an evaluation of the new system after the election

The CAC's ability to provide guidance on key decisions during the 2010 elections was cited by many as an important factor in building trust and confidence during the transition from manual to electronic counting. The CAC also issued a number of recommendations for future elections in the Philippines, addressing issues such as the procurement process, timing, implementation, capacity building, legislation and technical aspects of automated elections.

While the creation of the CAC helped promote inclusiveness and transparency, it also came with challenges. The COMELEC decided to exclude CAC members with IT expertise from two key aspects of the transition process: (1) the design and selection of technology and (2) the procurement process. IT experts' participation was seen by the COMELEC as a potential conflict of interest if they were to become bidders. However, several civil society groups and IT experts criticized the decision to exclude those with IT expertise, noting that the selection of technology was then conducted without expert input from the IT community.

KEY CONSIDERATIONS: DECISION ON ADOPTION

FOR IMPLEMENTING BODIES

- ☑ Is the decision to adopt counting or voting technologies based on the successful conduct of a series of pilots in different locations or over a period of time?
- ☑ Have lessons learned from pilots been acknowledged in the decision?
- ☑ Are the reasons for recommending adoption, additional piloting or non-adoption of technologies well-documented and made public?
- ☑ Where adoption has been recommended, has detailed guidance been provided as to the kinds of technology that should be used, technical specifications, implementation steps and a timeline for adoption?

FOR OVERSIGHT ACTORS

- ☑ Are the reasons for recommending adoption, additional piloting or non-adoption of technologies well-documented and made public?
- ☑ If decision to adopt is made, is it based on successful pilots in different locations and/or over a period of time? Has the decision taken into account lessons from pilots?
- ☑ Is the preliminary recommendation discussed (i.e., through consultations) with key stakeholders?