

OSCE Election Assessment Team

Mission to Bosnia-Herzegovina

Final Report

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Office for Democratic Institutions and Human Rights

Chapter 11: Voter Registration

I. Background

In addition to administrative activities, the execution of steps involved with conducting a voter registration program for the 1996 elections in Bosnia and Herzegovina must also take into account infrastructure deficiencies, mines, a diaspora of the voting population with refugee and internally displaced persons status, uncertainty about personal identity documents, and other structural consequences of armed conflict. At the same time, voter registration will be one of the first challenges to the Provisional Election Commission (PEC) and the degree to which it is successful will play a significant role in determining the subsequent success of the implementation of the electoral provisions of the Dayton Agreement.

The voter registration system is inseparable from the election system which the Commission will have to identify. If the election system focus is on the entity and national constituencies, the voter registration would be greatly facilitated and political and ethnic tensions minimized when compared to a system of elections which are based on municipal constituents or cantons.

Quantifying the scale of the task lacks precision. Estimates for the number and location of eligible voters varies. For the 1992 independence referendum, the voting population was estimated at 3.15 million. In Sarajevo it was discussed with former election officials that there were an estimated 6,500 polling stations with a range of 200 to 700 voters in each, the voters register ranges from 1,300,000 to 4,500,000 voters averaging at 2,925,000. Then, there are questions about how refugees and internally displaced persons will be registered. One estimate of the number of eligible voting refugees residing outside of Bosnia and Herzegovina is shown by country below:

Estimated Number of Refugees by Country

Country	Total Population	Voters
Germany	400,000	132,000
Denmark	20,000	6,600
Sweden	76,000	25,080
Netherlands	42,000	13,860
Switzerland	32,000	10,560
Austria	65,000	21,450
United States	19,000	6,270
Turkey	33,000	10,890
Total	687,000	226,710
Croatia	463,000	152,790
Yugoslavia	330,000	108,900
Slovenia	24,000	7,920
Macedonia	6,500	2,145
Total	823,500	271,755
Bosnia	1,300,000	429,000
Total Voters		927,465

Note: Voter Population is estimated at one third the Total Population (Source: UNHCR)

It. Rationale for Voter Registration

The rationale for conducting a voter registration process is fourfold.

- 1.** A voters register clearly defines eligibility to vote and should be regarded as definitive in settling any disputes about eligibility.
- 2.** A voters register will be a control device which will deter efforts at voter impersonation, multiple voting, ballot box stuffing, and other fraud which capitalizes on gaps in election audit trails and reconciliation procedures and, consequently, results in diminished voter
- 3.** A voters register as a public document provides a vehicle to assist political parties and civic groups in communicating effectively with their constituencies.
- 4.** A voters register will quantify the inventory and distribution of balloting equipment and supplies to a pre-determined number of strategically placed polling stations providing baseline figures for good asset management.

For the purposes of this analysis, voters could be classified in one of three categories:

1) international absentee; **2)** domestic absentee; or, **3)** resident voters. International absentees include all voters residing outside of the borders of Bosnia and Herzegovina for reason of refuge, employment, or diplomatic posting. Domestic absentee refers to any voter residing outside of his or her intended address but within the borders of Bosnia and Herzegovina as internally displaced persons. Differences in registration categories will reflect differences in the voting procedures required and ballots voted.

III. Registration Process Options

Voter registration can be conducted under two general scenarios. The first scenario involves an “automatic” approach to registration while the second option is an advance registration program.

A. Election Day Registration

Under the first scenario, there is no voter registration in advance of the election and there is no registration transaction between the voter and the election authority. The voters register would be devised through a selection program developed for the 1991 census, extracting name, age, address, gender, identity number and other information from the file of

each eligible voter. Electors would be eligible to vote for the national parliament, presidencies, and entity assemblies. Municipal elections would be scheduled at a later date requiring a second registration step. Registration for cantonal and municipal elections would be conducted by municipal officials and would require the voter to act after having taken up residence in a particular canton and/or municipality.

If a voter is “automatically” on the register, the only requirement on election day is to present identity documents at a polling station. Within each entity, a voter could select any polling site. In cooperation with host countries, voting activities will be required where significant numbers of refugees are located. Overseas voting could be conducted by mail.

If identity documents are not available, witnesses could testify on a voter’s identity. Names are recorded and also identity numbers if known. Although the Dayton Agreement states that the 1991 census must be used as a basis for eligibility, it also states that individuals not on the census may petition for the franchise. Under this scenario, each polling station would require the complete voting population from the census list on paper or diskette, and the creation of a list of those applying to vote and not on the census. Some means to evaluate petitions to vote on election day would also have to be established.

With election day registration, controls on voter impersonation, multiple voting and other ballot security measures are minimal, yet the difficulties of the distribution of balloting equipment and supplies is compounded with new unknowns. Using the registration process as a measure to build confidence and to collect updated demographic information are both lost under this scenario.

B. Advance Registration

The second option is to conduct advance registration. Under this scenario, the voter must take an action (completing a form with a registrar) to register to vote; it is not automatic.

Individuals would be deputized as voter registrars to conduct a registration program within the country starting 120 days before the election and lasting at least ten days. (Registration outside of the country would be on a different schedule discussed below.) Potential voters would complete the application at locations which would later serve as polling stations. Minimal information required for voter registration data capture includes name, national identity number, gender, current address, permanent address, intended address, date of birth, and signature.

Under this scenario, the voter registration effort is dependent upon the polling station site identification process. For the purposes of this election, voters should be instructed to cast their ballots where they registered to vote. By using such an arrangement, polling station list processing will be simplified; greater control on voter identity is created; and voter movement through the polls can be better managed.

However, registration can be conducted using different approaches. In this first approach, registrants present themselves to one of around 6,500 registration/polling sites within the boundaries of Bosnia and Herzegovina, and a yet undetermined number of registration/polling sites abroad, and the former Yugoslavia. Potential elector's children who have attained the age of 18 years since the **1991** Census would also be eligible to register. It is anticipated that local election officials, once identified and appointed, will be able to register those electors presently residing in the areas for which they are responsible. At these sites, the registrar completes a registration form, and checks the information against any identity documents. Identity documents include the national identity card or passport. The registrar reviews these documents and either approves them or returns them to the registrant for further information.

However, the PEC will also have to consider whether it is physically or politically realistic to expect local officials to carry out registration of displaced persons in their area of jurisdiction. The PEC should consider the option of extending the refugee registration procedure to internally displaced persons. To carry this out, the PEC would need to establish centralized registration - voting teams using international sources which may be provided with copies of census data and attempt registration on the spot. In the past, when an individual was registered he/she received an "invitation" with a registration number and the location of the voting place. A parallel system of either issuing such a numbered voter's invitation or giving each registered voter a voter's card, (with either document being color coded for the voting entity where the person is registered), would then facilitate the voting officials providing the voter with the appropriate ballots. Finally, if time and financial resources permitted, it would be highly desirable to set up a national computerized registration center where all the above data could be consolidated and adjusted as refugees and displaced persons returned to their communities.

However, since voters may petition for the franchise even if not on the census, verification can be conducted centrally with non-census list applicants being batched for special review. Comparison with the 1991 data will be performed at the PEC central offices and the results of the analysis will be distributed back through PEC field offices at the regional

and municipal levels. Within 45 days of the close of the registration period, lists of qualified electors will be posted at the registration sites. Lists will be posted for review for ten days. During this time, voters will have the opportunity to review the lists and file their claims or objections. The PEC will then have another 45 days to process the claims and objections and create the final lists. These final lists will be closed **10** days before the election.

Under this scenario, all registrants would be eligible to vote in the national parliament, presidencies, and entity assemblies. Where applicable entity elections were concerned, entity ballots would be made available, not only within entities, but all across the country in order to enable displaced persons and refugees to vote by providing them with the appropriate ballots depending on the entity of their registration. It is also conceivable that cantonal elections could be organized. In order to qualify for cantonal elections in the Federation, voters should be required to have established residence in the canton.

The municipal elections will also require residence for eligibility. These local elections will also require an additional registration act for voters. In order to register for the municipal elections, the voter will have to report to the local election officials. It is hoped that this registration could be combined with other registrations required of an individual moving back into a community. For example, combined with getting a replacement identity card, employing the concept of an “agency registration” program. No residency requirements should be established but some indication of resident status or intent should be requested.

Municipal voter registration lists would be developed. Otherwise, questions concerning municipality in 1991, currently, and intended should appear on the Voter Registration Form.

Registration outside of Bosnia and Herzegovina must involve cooperation from host countries as well as other international relief organizations such as the United Nations High Commission for Refugees, the International Committee of the Red Cross, and the United Nations Volunteers. Representatives of these groups and others would have to be deputized by the PEC as voter registrars.

“Customized” programs and information campaigns will have to be designed with each of the host countries. These program must take into account legislative restrictions (if any), the need for special exemptions, the support available from the host country of their election or other officials, the statistical data and other information on the refugee kept by the host country, the distribution of refugees and the relative ease or difficulty of contact and communication. Special registration teams could be established very early following the

appointment of the PEC to visit the host countries in order to design the various refugee registration plans. Field verification of census data could be conducted.

Registration need not occur at potential polling sites. In fact, polling stations may not be required if all refugee voters cast their ballots via mail. Voters may be required to drop off the ballots at designated locations for batching and shipment to the PEC. Otherwise, physical polling sites will be required at embassies, consulates and in other public buildings provided by host governments. Refugee voters will only be registered to vote in the elections for a national parliament, presidencies, and entity assemblies.

Registration for the cantonal elections would require the completion of further information on the registration form. One form can be used for all registrations. No cantonal registration can be conducted for any applications outside of the borders of Bosnia and Herzegovina. Just as in the case of municipal registration, no time period of residence is required but the voter should present some kind of indication that there is de facto residence in the canton. At the polls, cantonal voters could be noted on the voters register. Under this scenario, internally displaced persons outside of their canton of residence could vote for the national and entity offices only.

In all cases, voter information must be provided about the process and eligibility. The PEC must also make a determination about whether it wants to issue identification cards to those missing other forms of personal documents. Photographic identity cards could be issued as part of the registration exercise.

Five forms could be developed to implement these procedures. One voter registration form could be used to register international voters, internally displaced persons, resident voters, and also to designate a canton of residence. Conceptual illustrations of this form and others discussed in this section are shown as attachments.

The Voter Registration Form would have two sections: one for International Voters and the other for Resident Voters (which would include internally displaced persons). The forms contains a unique Voter Identification Number. This Voter Identification Number can be used as a mechanism to perform a transfer of voter residence. A code for the Registration Site should be pre-printed or filled in. The date of registration (with the month and year pre-printed) should appear. Other information from the voter includes their name, current address, permanent address, intended address, national identity number, date of birth, and gender. It should also contain the voter's signature and that of the registration official. The cantonal selection would be designated for eligible Federation voters. A registration receipt

could be provided to the voter.

The controls on voter registration forms should be comparable to those on ballots. A Daily Registration Accounting Form should be completed by each registrar which accounts for forms used, spoiled, and unused.

Claims to be enumerated on the voters register would be conveyed by the Voter Application Form which contains the voter registration data plus a narrative on the reason for applying and an explanation for not being on the census. The application should have a section where the deciding authority could place a mark of approval or disapproval.

Objections to registrations are recorded on the Challenge To Voter Form. This form contains data on both the voter filing the objection and the registration being challenged. It also contains a narrative portion where the reason for the challenge is described.

Each registrar is expected to attend a training session on registration procedures. The Training Participation Report Form combines feedback on the understanding of the instructions given and an evaluation of the presentation.

IV. Technical Considerations

The Bureau of Statistics computer architecture combines 433 1 and 43 8 1 IBM mini-computer mainframes which download data for queries and updates onto a network of three to four personal computers, each with 40 megabytes of memory. Downloaded data can be transferred to 3 1/2" diskettes. The operating system is MVS/TSO. Programming software used for the database is PLI. Data for each municipality is stored on separate data tapes. Census information from settlements is also stored on tape. Census information was scanned into the system using optical character recognition technology and can be programmed to be retrieved in specific data sets.

There are three such documents used to capture the census information, known as forms A-1, A-2, and A-3. Each family completes all three forms. For the purposes of voter registration, the relevant data is contained on form A-1. The other two documents pertain to families, where A-1 concerns information on individuals. Corresponding to this data, each citizen of majority age is required to obtain a personal identity card with photograph, signature, personal identity number, identity card number, name and other pertinent information. Census information which will need to be accessed for voter registration purposes include name, date of birth, personal identity number, gender, municipality, place of birth, and place of mother's birth. Such a data set will have around 80 characters per

record or 320 million characters for the anticipated voter registration database.

Optical Mark Recognition (OMR) is a technology which has been used by educational institutions and market research firms worldwide to capture billions of pages of data in machine-readable form. OMR provides technology for scanning a form for pencil marks occurring within specified cells of a grid. The computer then translates these marks into meaningful data, based upon which cells were marked. Forms are easily customized for a variety of data-entry needs. The scanners also provide “exception-handling” capabilities, whereby a computer program can validate data as it is scanned. All forms which do not meet the pre-defined conditions specified in the computer software are rejected. Two paper trays catch forms after they are scanned - one for “accepted” forms, the other for “rejected” forms.

The Provisional Election Commission might want to consider using OMR scanners to capture data on voter registration. Donors could be asked to provide the OMR Scanners and scannable voter registration forms. Each OMR Scanner can capture voter registration data at a rate equivalent to 100 good data entry clerks. Some high-end OMR scanners can scan forms at a rate of 7,200 per hour. Even the most optimistic projections for manual data capture estimate a rate of 60 forms per hour for a good data-entry clerk. It follows that it would take ten data entry persons (and ten computer terminals and work spaces) to keep pace with just one OMR scanner. Using these figures, adjusted to allow for equipment maintenance and down time, and a high-end estimate of 3.5 million voters, the following table illustrates a comparison of achievable schedules for scanner vs. manual data entry methods:

VOTER REGISTRATION DATA ENTRY IN BOSNIA-HERZEGOVINA --		
SCANNERS V.S. MANUAL ENTRY		
	Scanner	Manual Entry
Registrations	3,500,000	3,500,000
Forms per hour	4,500	60
Work hours per day	16	12
Forms per day per person/scanner	72,000	720
Scanner/persons days required	49	4,861
Number of scanners/persons	5	100
Total forms per day	360,000	36,000
Days to complete data entry	10	96
Error rate	0.10%	2.00%
Forms to be re-entered	3,500	70,000
Re-entry days	>1	2

The estimate of 3.5 million registrants is based on worst-case scenario in which all of the

Office for Statistics records would be re-entered in order to maintain compatibility with the new PEC relational database.

Testing of OMR scanners has demonstrated that scanned data can be easily converted to a standard database format. The data, once read by the scanners, and stored by the scanner software in a machine-readable format, can be readily imported into a *Microsoft SQL Server* or *Oracle* database which would serve as the repository for registration data.

The utilization of optical mark scanners would provide the PEC with the best opportunity to capture all of the voter registration data in the computer and produce a provisional voter registry in a timely manner. In addition, the use of optical mark scanners has other applications beyond voter registration. For example, the PEC could use the scanners for compiling the personnel and payroll records of the thousands of individuals it must employ in the election process. The scanners would also have uses in the areas of inventory control and financial management. Finally, optical mark scanning would enable the PEC and its successor, the Permanent Election Commission, to assist B-H government ministries in accomplishing future programs. These could include rapidly compiling information gathered through a new national census, health surveys, or educational testing.