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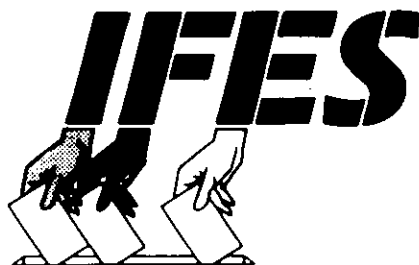
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**COLOMBIA
1994 Elections**

**Election Technology
Assessment Report**

March 24, 1995

**J. Ray Kennedy
Elisa Roller**



INTERNATIONAL FOUNDATION FOR ELECTORAL SYSTEMS

1994 Elections At a Glance

Voter registration: A national identity card is the only document necessary for voting; registration allows voters to select a specific voting location and to vote for Local Administrative Councils; citizens who do not register to vote in a particular location may vote in central locations for municipal and higher offices.

Computerized voter registry. New national ID card program began in 1993.

Estimated voting-age population: approximately 17,719,939, of which 8,928,399 men and 8,791,540 women

Voting is primarily by paper ballot, hand counted at each polling station, although officials are actively encouraging the development of automated voting systems by private vendors and have set up pilot automated voting locations. Results are transmitted from municipal to departmental level by various means and from departmental election offices to the national election office by modem or satellite.

Departmental deputies elected via closed-list proportional representation in state-wide voting. Mayors elected by plurality vote. Municipal councils elected by closed-list proportional representation in at-large voting.

26 parties with permanent registration

	October 30, 1994 Elections
Registered Voters	17,719,939
Votes cast (mayoral races)	7,670,867
Blank votes	153,434
Null votes	357,423
Number of candidates	24,966 candidates or candidate lists
Number of vacancies	15,022
Municipalities	1,043
Polling stations	48,819
Poll workers	292,914

TABLE OF CONTENTS

1.	Introduction	3
2.	Historical Background	5
3.	Colombian Electoral System	8
a.	Electoral Legislation/Regulations	8
i.	General Framework	8
(a)	1991 Constitution	8
(b)	Electoral Law	10
(1)	Programmatic Vote/ <i>Voto Programático</i>	10
(2)	Ballot Access	10
(3)	Campaign Financing	11
(4)	Political Campaigning	13
(5)	Miscellaneous Provisions	14
b.	Administrative Structure	14
i.	<i>Consejo Nacional Electoral</i>	14
ii.	<i>Registraduría Nacional del Estado Civil</i>	15
c.	October 1994 Elections	16
i.	Logistics	16
ii.	Security	16
d.	Voter Education	16
e.	Voter Registration	19
f.	Poll Worker Recruiting and Training	20
g.	Voting	21
h.	Vote Counting	23
i.	Vote Tabulation	24
4.	Technological Innovation in Colombian Election Administration	25
a.	Voter Registration and Fingerprint Identification	25
b.	Voting	26
i.	Electronic Ballot Voting System	27
ii.	Touch-Screen Voting System	28
c.	Results Transmission	30
d.	Results Dissemination	35
5.	Future Directions	37
6.	General Evaluation	38

1. Introduction

At the invitation of the National Civil Registry of Colombia and with the financial support of the Center for Democracy and Governance of the U.S. Agency for International Development's Bureau for Global Affairs, the International Foundation for Electoral Systems (IFES) sent Ray Kennedy, Director of Information Resources and former Senior Program Officer for the Americas, to Bogotá, Colombia to assess the technological modernization of election modernization in Colombia during the October 30, 1994 municipal and departmental elections. IFES has maintained a strong relationship with the RNEC for a number of years as a result of contacts at regional events and visits to IFES by Colombian electoral officials.

The technological modernization of election administration in Colombia began roughly ten years ago. The initial progress was slow, due to the caution with which the incumbent National Civil Registrar viewed computers and computerization. There was also resistance on the part of politicians, especially the older generation, who reportedly feared they would lose much of their control over the electoral process. With the arrival of Luís Camilo Osorio Isaza as National Civil Registrar and Chief Electoral Officer in 1990, the modernization process began a new and more active phase.

Largely as a result of progress in the period since 1990, election administration in Colombia has earned a reputation for professionalism, efficiency, and impartiality. Most election results are typically announced by midnight, an achievement which many countries in Latin America - and elsewhere - are anxious to emulate. Most recently, the computerization of the electoral process has been subjected to the scrutiny of external systems auditors, increasing the confidence of the Colombian population in the electoral process even further.

Beyond its current achievements, the RNEC has embarked on an ambitious pilot project with the assistance of a number of private firms to develop practical automated voting systems and on a project to integrate departmental and municipal offices into a nationwide network for data sharing.

The report that follows will focus on the technological innovations in Colombian electoral administration, the future direction of its modernization, and the applicability of the concepts and technologies involved to election administration in other countries.

2. Historical Background

The Republic of Colombia, as it is known today, was established in 1886. Two political parties, *Partido Liberal* or Liberal Party (PL) and the *Partido Conservador Social* or the Conservative Party (PCS), emerged and dominated the political scene for the next century. From 1948 to 1958, Colombians endured a decade of internal chaos with over 300,000 deaths as a result of the violence. This decade included a coup d'état in 1953 after which a dictatorship ensued led by General Gustavo Rojas Pinilla.

The decade of internal strife and violence came to an end with the signing of the Pact of Sitges in July 1957 by the Liberal and Conservative Parties. The pact stipulated that Liberals and Conservatives would participate equally in the government until 1970 under an umbrella group named the *Frente Nacional*, or National Front (FN). Constitutional reforms implemented in December 1968 extended the National Front until December 1974. The pact was then continued informally until 1979 despite dissident factions in both parties. This dissidence culminated in 1982 when the Liberal party split. In anticipation of the presidential election held that year, two Liberal candidates were nominated for the presidential election.

The traditional bipartisan era came to an end in the congressional elections of 1990 when the recently legalized *Alianza Democrática - 19 de Abril* or Democratic Alliance - April 19 Movement (AD - M19) won the second largest number of seats in the Chamber of Representatives. There are currently 26 political parties legally recognized by the *Consejo Nacional Electoral*. By far, the largest party is the *Partido Liberal*, followed by the *Partido Conservador*. Other parties include the *Movimiento de Salvación Nacional* (National Salvation Movement (MSN), *Alianza Democrática - Movimiento 19 de Abril* or Democratic Alliance - April 19 Movement (AD - M19), *Unión Patriótica* or Patriotic Union (UP), *Partido Demócrata Cristiano* or Christian Democratic

Party (PDC), *Movimiento Unitario Metapolítico* or Metapolitical Unitarian Movement (MUP), *Alianza Nacional Popular* or National Popular Alliance (Anapo), *Partido Comunista de Colombia* or Communist Party of Colombia (PCC), and *Partido Socialista de los Trabajadores* or Socialist Workers' Party (PST), as well as other minor political parties and movements. Following the last congressional election held on March 13, 1994, the make-up of the Congress was as follows:

POLITICAL PARTY	NUMBER OF SEATS
SENATE	
Liberal Party	52
Social Conservative Party	21
Democratic Alliance	1
Indigenous groups	2
Others	26
CHAMBER OF REPRESENTATIVES	
Liberal Party	89
Social Conservative Party	56
Democratic Alliance	2
National Salvation Movement	2
Indigenous groups	2
Minority Groups	2
Others	10

From 1990 until 1992, the Colombian government, under the presidency of César Gaviria Trujillo, attempted to reintegrate former paramilitary terrorist groups, such as the M-19 and the Popular Army of Liberation (EPL). However, in 1992, peace talks with the Colombian

Revolutionary Armed Forces (FARC) and the National Liberation Army (ELN) broke down. The M-19 representatives subsequently withdrew from the government. The Colombian government has also struggled with corruption, violence, and loss of legitimacy stemming from the infamous Cali and Medellín drug cartels.

To counter these problems, Colombian electoral authorities have been engaged in recent years in an effort to increase the citizenry's commitment to and participation in the electoral process. The result has been a marked improvement in the reputation of Colombian elections and those responsible for administering them.

1994 proved to be a busy year for Colombian electoral authorities. On March 13, elections were held for members of the Senate and Chamber of Representatives. On May 29, the first round of the presidential and vice-presidential election was held, followed by the second round on June 19 in which Ernesto Samper Pizano and Humberto De La Calle Lombana, both members of the Liberal Party, were respectively elected president and vice-president of Colombia. These were followed by the October 30, 1994 departmental and municipal elections which are the focus of this report.

- 3. Colombian Electoral System
 - a. Electoral Legislation/Regulations
 - i. General Framework
 - (a) 1991 Constitution

The Colombian constitution of 1991 directs that elections for president and vice president be held separately from any other election and that congressional elections be held separately from municipal and departmental elections. This has led to a rather congested electoral calendar in recent years.

It also establishes a system of proportional representation in cases where voters are allowed to vote for two or more individuals for an office. Seats are allocated according to the number of multiples of the electoral quotient received (result of dividing the number of valid votes by the number of positions to be filled), with remaining seats allocated on the basis of largest remainders.

The Senate consists of 100 members, elected in a single national district, plus two members elected by the country's indigenous communities. Candidates for the latter must have exercised a traditional leadership role in their community or have been a leader of an indigenous organization. Each department is represented in the House of Representatives by two members plus an additional member for each 250,000 inhabitants or fraction larger than half that number. Up to five additional members represent ethnic groups, political minorities, and Colombians residing abroad. (Those residing abroad have not yet been able to vote pending legislation to regulate that constitutional provision.)

The Colombian constitution sets out a number of other interesting provisions related to elections, among them the concept of the "programmatic vote" (explained below under Electoral Law); the requirement that the State

contribute to the organization, promotion, and training of non-governmental professional, civic, labor, community, youth, and charitable organizations, without detriment to their autonomy, as democratic representative mechanisms in various types of participation, accord, control, and vigilance over public administration....;¹

an "Opposition Statue" which guarantees parties and movements not in the government access to official information and documents; and the obligation of schools, both public and private, to require civic instruction "to promote democratic practices for learning of the principles and values of citizen participation."²

Article 103 establishes a wide variety of forms of citizen participation: political elections, plebiscites, referenda, *consulta popular*, town meetings, legislative initiative, and recall elections.³ Legislative initiatives must have the support of five percent of the electorate or thirty percent of the municipal councilors or deputies in the country in order to be considered by Congress. Referenda to rescind existing legislation (with the exception of treaties, budgets, or taxes) may be called with the support of ten percent of the electorate. The rescision is successful on a majority vote as long as at least 25 percent of the electorate participate in the vote.

¹ Article 103.

² Article 41.

³ All these are regulated by Law 134, May 31, 1994.

(b) Electoral Law

(1) Programmatic Vote/*Voto Programático*

Law 131 of May 9, 1994 defines the "programmatic vote," whereby Colombian governors and mayors are held accountable for compliance with their campaign platform. Recall elections cannot be held within the first year of the incumbent taking office; thereafter, they are held on petition to the RNEC of at least 40 percent of those who voted in the election in which the incumbent was elected. (This imposes on local authorities the responsibility for verifying that the petition signatures are those of individuals who voted in that election, who are also the only ones eligible to vote in the recall election.) A recall is successful if 60 percent of those who voted in the original election vote in the recall election, and if 60 percent of those voting in the recall election vote to recall the incumbent.

(2) Ballot Access

The National Electoral Council (*Consejo Nacional Electoral - CNE*), upon receiving a request accompanied by a copy of their statutes and platform, is required to grant recognition to political parties or movements that gather 50,000 signatures or that win either 50,000 votes or a seat in Congress. That recognition is withdrawn if the party or movement does not win 50,000 votes or Congressional representation in a subsequent election. Recognition is the only requirement for ballot access by parties or movements.

Independent candidates can gain access to the ballot through payment of a deposit and presentation of a petition signed by a group of citizens equivalent to at least 20 percent of the total electorate for an office divided by the number of positions to be filled, to a maximum of 50,000 signatures. (If there were 100,000 registered voters in a municipality and ten seats on the municipal council,

an independent candidate could gain access to the ballot for a council seat by presenting a candidacy petition signed by at least 2,000 registered voters; to gain access to the ballot for mayor in the same municipality, an independent candidate would have to present 20,000 signatures.)

(3) Campaign Financing

The parties are financed by an annual fund administered by the RNEC equivalent to 150 pesos (\$0.19) per voter plus any electoral fines collected. The fund has a minimum of 2.4 billion pesos (\$3 million).⁴ Parties have great freedom to decide how these funds are spent, with the provision that their budgets be subject to democratic debate and vote among party members.⁵

The costs of administering party primaries - ballot printing, voting booths, vote tabulation - are covered by the RNEC, as are elections for party officials when those elections are open to all party members. All party primaries are generally held on the same day; a party may request that its primary be closed if its membership list exceeds 50 percent of the number of votes it received in the jurisdiction in the last election.

Campaigns are reimbursed at different rates depending on the office contested:

- 400 pesos per vote for President in the first round, 200 pesos per vote in the second round;
- 400 pesos per vote for Congress;
- 250 pesos per vote for Governor or Departmental Deputy;
- 150 pesos per vote for Mayor or City Council
- Municipalities reimburse parties and movements for campaign expenses in Local Administrative Council elections; the amount is determined by each municipality.

⁴ The exchange rate was roughly 800 pesos to the dollar at the time of the October 1994 elections.

⁵ Title IV, Article 12, Law 130, March 23, 1994.

In elections for executive offices (president, governor, mayor), parties, movements, or candidates must receive at least five percent of the valid votes to receive reimbursements; in elections for legislative offices (national congress or departmental assembly), parties, movements, or candidates must receive at least a third as many votes as the least-voted successful candidate list in order to receive reimbursements.

Parties, movements, and candidates may also receive contributions from individuals or groups. The CNE sets a limit on campaign expenditures at least six months in advance of each election. Group or corporate donations must be authorized by a majority vote of the board of directors or general assembly of the group or corporation.

Parties and movements must submit reports of income and expenditures by January 31 of each year and campaign finance reports within one month of each election.⁶ These reports are published in a national newspaper after review by the CNE. Income must be broken down by member contributions, donations, investment income, event and sales income, loans, in-kind donations, and public funds. Names, addresses, and telephone numbers of contributors must be maintained for review by the CNE. Parties must set up internal audit procedures and are also subject to external audits at the discretion of the RNEC.

(4) Political Campaigning

Recognized parties are given access to the media.⁷ This access is divided into two categories: political advertising, restricted to diffusion of party principles, programs, achievements, and policy positions, which can be disseminated at any time; and campaign advertising, aimed at

⁶ Title V, Law 130, March 23, 1994.

⁷ Title VI, Law 130, March 23, 1994.

obtaining votes, which is restricted to a three-month period prior to the elections (30 days for television advertising). Paid political advertising on radio and in the print media is to be on equal conditions for all parties, movements, and candidates. During the 60 days before the election, advertising rates for political ads on radio and television are reduced to a maximum of 50 percent of the going commercial rate during the six months prior to the election. Parties and movements also receive a postage allowance for mailing flyers during the six months prior to an election.

Free access to state-owned media is given at any time for political advertising; 60 percent of the space allotted is distributed in relation to representation in congress. Free access to state-owned media is given during the 30 days prior to a presidential or congressional election for campaign advertising. Two 60-minute debates are allowed on state-owned media if jointly requested by the presidential candidates.

Access to public spaces for campaign advertising is granted on an equitable basis by local authorities after consultation with an all-party/candidate committee. Access to private spaces for campaign advertising is at the discretion of the property owner. All campaign advertising within 50 meters of a voting location must be removed prior to the start of voting. Campaigning, including wearing campaign advertising, is not allowed on election day.

(5) Miscellaneous Provisions

Publication of opinion polls is allowed up to the day before an election. Such publication must include who conducted the poll, who financed the poll, the complete results, the sample size and type, the questions asked, the geographical area and time period covered, and the calculated margin of error.

Parties, movements, or candidates who violate any portion of the electoral legislation in force are fined between 2 million and 20 million 1994 pesos; fines are adjusted annually in accordance with consumer price inflation.

Title IX of Law 130 mandates the creation within each party of a Code of Ethics and an Ethics Board to scrutinize the activities and conduct of civil servants, elected and appointed government officials, and party officials.

Unlike many Latin American nations, Colombia allows its political parties to be affiliated with international political parties.

b. Administrative Structure

i. *Consejo Nacional Electoral*

In addition to the RNEC, the Constitution also establishes a National Electoral Council (*Consejo Nacional Electoral - CNE*), with at least seven members who are elected by the *Consejo del Estado* (the country's highest administrative law court) for nonrenewable terms of four years. Recognized parties and political movements submit three-name lists of nominees for the CNE, which is required to reflect the political composition of Congress.

The CNE advises the government on electoral matters and may present legislative proposals. It is also responsible for administering campaign financing, for the recognition of qualified political parties and movements, and for assisting parties in holding candidate-selection primaries.

ii. *Registraduría Nacional del Estado Civil*

While the CNE, as the supreme body in electoral matters in Colombia, is responsible for the overall supervision of the electoral process, the actual administration of the process is in the hands of the National Civil Registrar (*Registrador Nacional del Estado Civil*), the country's chief electoral officer, who is elected by the CNE for a non-renewable term of five years.

The Registrar is assisted in his work by a professional staff currently numbering about 3,575, including departmental delegates who report directly to him.

Recognizing the importance of adequate facilities, in terms of both records storage and public service areas, to the work of registry offices, the RNEC has undertaken a nationwide program to renovate old offices and to establish permanent offices in departmental capitals or municipalities that previously lacked such facilities.

c. October 1994 Elections

i. Logistics

The furniture needed for setting up polling stations in Bogotá - tables, chairs, voting booth - was distributed by the Department of Public Works during the days leading up to the election. The distribution of the supply envelopes and the ballot boxes began at 2:00 am on election day and was completed prior to the opening of the polls at 8:00.

ii. Security

Security at the polling places was provided by police officers and officer trainees, beginning at 6:00 pm the day before election day and extending through about 7:00 pm on election day. For one voting location visited, seven police officers and eight trainees were providing security for nine polling stations. These received training beginning a month prior to the elections, with an intensive review of procedures during the week leading up to election day. The police training included role playing of various scenarios.

Identification of polling place officials and poll workers was good, but party poll watchers lacked clear identification.

The public prosecutor's staff is deployed to all electoral zones on election day to visit voting locations and receive accusations of electoral-law violations.

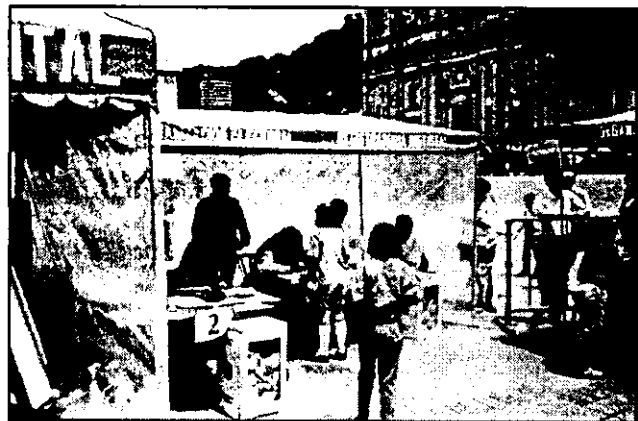
Voter Participation in Colombian Elections

Type of Election	Date	Number of Registered Voters	Total Votes	%
President	May 5, 1946	2,450,596	1,366,272	56%
President	November 27, 1949	2,866,330	1,140,646	40%
Senator	September 16, 1951	2,981,679	935,138	31%
Senator	March 16, 1958	5,365,191	3,655,474	68%
President	May 4, 1958	5,365,191	3,108,567	58%
Senator	March 20, 1966	6,609,639	2,917,863	44%
President	May 1, 1966	6,611,352	2,649,258	40%
President	April 19, 1970	7,683,785	4,036,458	53%
Senator	April 21, 1974	8,925,330	5,106,775	57%
President	June 4, 1978	11,251,178	5,075,719	45%
Senator	March 20, 1982	12,519,719	5,579,657	45%
President	May 30, 1982	13,734,093	6,840,392	50%
Senator	March 9, 1986	15,839,754	6,869,435	43%
President	May 25, 1986	15,081,343	7,229,937	46%
President	May 27, 1990	13,903,324	6,047,576	44%
Municipal/Departmental	March 8, 1992	15,455,122	6,661,240	43%
Senate	March 13, 1994	17,028,961	5,566,407	33%
President (1st Round)	May 29, 1994	17,146,597	5,821,321	34%

d. Voter Education

Colombia has experienced high levels of voter abstention in recent years (see chart). In order to improve this statistic, the RNEC undertook an aggressive advertising campaign in 1994 to encourage citizens to vote. The campaign's motto was "Together, Democracy is Ours." The theme of the campaign was "Only for Adults," which immediately attracted attention to the messages. These included messages showing how to vote, how to obtain additional information, how to run for office, and how to carry out poll worker duties. The photos used included young people, women, and the various ethnic groups present in Colombia.

Beginning with the 1994 presidential elections, Colombia joined many of its Latin American neighbors - as well as many other jurisdictions - in holding mock elections for children and youth between 7 and 17 years of age as a means of familiarizing them with the electoral process and to let candidates know how they are viewed by this segment of the population. Those interested in participating were required to register and voted in special locations set up for the purpose by the RNEC.



Children and youth administer and vote in their own mock elections in downtown Bogotá to learn about the democratic process

e. Voter Registration

Voter registration in Colombia differs significantly from numerous other Latin American nations in that the only document necessary for voting is a national identity card. Information for the civil

registry is collected from 1,676 points throughout the country, including 579 municipal registry offices; the other locations are notary offices, police stations, and magistrates' offices. Six local registration offices in the Bogotá area and six offices in large cities currently have on-line access to the RNEC's registration files, with others to be added in the near future.

Voters can register to vote at a particular location in their jurisdiction; otherwise, they are assigned to a "default" location and are ineligible to vote for neighborhood council members. The International Exposition Center in Bogotá was one such default location for the October 30 elections. Although polling stations there were set up for every 800 voters rather than the normal 400, many of them had registered less than a dozen votes by the end of the day; at some, only the poll workers themselves had voted. Voters are eligible to vote in the jurisdiction where registered unless they are proven to reside elsewhere, in which case their registration is cancelled.

The lack of notification of the RNEC of registration transfers from one locale to another has led to registration figures in excess of 1993 population census figures in some locations. As a result of concern over this, nearly 500,000 registrations from the period between the second round of presidential elections and the gubernatorial/municipal elections were cancelled.

f. Poll Worker Recruiting and Training

Ninety days before an election, municipal registrars request all public and private entities, political parties, and educational institutions to furnish lists of those eligible to be poll workers; if eligible individuals are left off the list, the person responsible is subject to a stiff fine. The registrars then name three poll workers and three alternates for each polling station; poll workers generally agree with alternates to rotate during the day, though those who worked in the morning must return in the afternoon to receive their "certificate of attendance". Poll workers must be between 18 and 60 years of age and belong to different parties or movements. Polling place supervisors and

security personnel are also rotated among voting locations in the same district from one election to another to inhibit fraud attempts. Individuals named as poll workers or alternates who do not fulfill this duty are subject to dismissal from government jobs or a fine of up to ten times the minimum monthly salary.

Training of the polling place supervisors was primarily based on videos; printed materials on polling place procedures were included in the envelopes of polling-place supplies.

In another step to involve Colombian youth in the electoral process, the RNEC trained 26,000 tenth- and eleventh-grade students over 18 years old to be poll workers through a pyramid training method and the design and distribution of a special training manual for the students. The manual, prior to going through the polling station procedures step by step, discusses fundamental aspects of democracy such as the nature of human society and the role and structure of the state, and the structure and functioning of election administration in Colombia.

Poll workers are entitled to a day of paid vacation during the 45 days following an election.

i. Voting

Each voting location has an information booth or table at which voters can request assistance or additional information on how to cast a ballot. At voting locations with large numbers of polling stations, the RNEC had placed high school/college students [VERIFY] as "Voting Guides" to assist voters find their polling stations. Some of these locations also had



Voting often takes place outdoors in Bogotá

information booths with online access to the voter registration database to assist voters in finding out which polling station they were assigned to. (The RNEC also operated a telephone system, including toll-free access from outside of Bogotá, to assist voters in finding out which polling station they were assigned to.)

Each polling station receives a list of voters which includes only the registration numbers of those individuals registered to vote at that polling station. Those numbers are marked with an "X" as the corresponding voters arrive to vote and present their identification card. The poll worker then marks the individual's order in voting on a pre-numbered form used to control the number of ballots used and indicates that number, the voter's name, and the voter's gender beside the voter's registration number on the poll sheet (E-11 form, List and Register of Voters - *Lista y Registro de Votantes*). The E-11 form has bar codes beside each voter's registration number which are used to capture the information on who has voted in a given election. (This information can then be used to derive a list of voters eligible to vote in a recall election.)

One of the poll workers signs the ballots before handing them to the voter. The voter then goes to the voting booth to mark the ballots. After marking them, the voter folds the ballot so that their vote cannot be seen, returns and shows the poll worker that the ballots are the same ones signed by them, and deposits the ballots into the ballot box.

Individuals who arrive to vote and who do not find their registration number at the polling station where they believe they are to vote must go to the nearest registration office to verify the situation. If it is found to be an error or omission, the voter is given a form which allows them to vote in a specific location.

Individuals who spoil their ballot are given another; the spoiled ballots are marked as such and placed in a separate envelope for accounting purposes. Unused ballots at the end of the day are also set aside in the envelope prior to the opening of the ballot box.

Two ballot boxes were used for the first time in the October 30 elections, one for the Local Administrative Council elections, the other for the other races. This enabled the poll workers to count the other races first and send those results off for processing before beginning the vote count for the Local Administrative Council race.

Colombia does not allow any individual to vote after 4:00 pm, even if they are in line. According to Colombian electoral officials, this is both to speed up the process of vote counting and to motivate citizens to vote early in the day rather than crowding into polling stations at the end of the day and possibly missing the opportunity to vote. Poll workers are expected to vote sometime during the day at the polling station where they are working.

Handicapped, blind, or elderly (80 or older) voters are allowed to take a person of their choice with them into the voting booth.

Colombia now distinguishes between a blank ballot, which is considered void, and a "none-of-the-above" vote (*voto en blanco*), which must be marked in the corresponding box on the ballot.

The fact of placing many voting locations outdoors in urban areas such as Bogotá often eases the burden on election administrators to find suitable indoor locations, but it also exposes voters and poll workers not only to the elements (wind was a problem at several voting locations on October 30, with voting booths being blown over and supplies scattered), but also to security risks (despite the strong presence of police and reserve forces at all locations).

i. Vote Counting

Ballot boxes are opened and counted at the polling place. The number of voters is first copied from the "Number of Voters" tally sheet used during the day to the E-13 form. The ballots are then emptied and separated into piles for each office, and each pile is counted to verify if the quantity coincides with the number of voters tallied. If there are more ballots than voters tallied, the ballots are put back in the ballot box and shaken; the number of excess ballots is then extracted at random and burned. If the number of ballots matches or is fewer than the number of voters tallied, the vote count continues. The ballots for each office are then separated into piles by candidate, each pile is counted, and the results are entered on an E-14 form, which is actually two copies of the same form side by side. The columns where the votes are recorded are placed side by side for easy comparison before the two copies are separated. One copy of the form is given to the polling place supervisor or RNEC representative for immediate delivery to the data entry center, while the other is placed in an envelope with the other polling-place forms and the voted ballots and delivered by the president of the polling station as soon as possible to the local civil registry office or representative.

i. Vote Tabulation

It is important to note that there are two vote tabulations in Colombia: an unofficial rapid tabulation carried out on the basis of the polling-place vote count using computer and communications systems that will be discussed in more detail below, and the official results tabulation, based on progressive consolidation of results recorded on official documents.

The rapid tabulation has assumed increasing importance in Colombia in recent years as local election officials charged with the official vote tabulation have come under increasing pressure from drug traffickers and their allies to change election results in exchange for large bribes. The

Colombia 1994
Election Technology Assessment
March 24, 1995
Page 23

rapid tabulation carried out by the RNEC has gained widespread credibility to the point that it is an effective check on local election officials.

4. Technological Innovation in Colombian Election Administration

Many changes have taken place in recent years in the area of communications and the computerization of the electoral process in Colombia. In October 1991, computers were used for the first time in Colombia as voting devices. In March 1994, during the congressional elections, a communications satellite was used for the very first time to connect the central electoral office in Bogotá with twelve Colombian cities: Cali, Medellín, Barranquilla, Bucaramanga, Pereira, Cartagena, Riohacha, Quibdó, San Andrés, Mocoa, Yopal, and Florencia. Using the satellite helped the RNEC tabulate 70 percent of the total votes. This in turn allowed the RNEC to officially announce the results of 90 percent of the vote count. The use of the satellite system increased both the speed and the security of the transmissions. In addition, the rapid transmission of results to the citizenry increased the transparency and credibility of the entire electoral process.

a. Voter Registration and Fingerprint Identification

Beginning in 1993, Colombia began issuing a new identity card to new registrants; the new cards will replace the old cards throughout the rest of the population in coming years. The new card includes a digital photograph and bar code; other security features of the cards include tamper-resistant substrate, microprinting, fluorescent and ultraviolet printing, and holograms. The photos are to be retaken every ten years, the estimated lifespan of the card, and are being stored on optical disk at the RNEC. The RNEC intends to produce the new cards within 24 hours of the initial request and send them out by mail. Forty-seven data collection

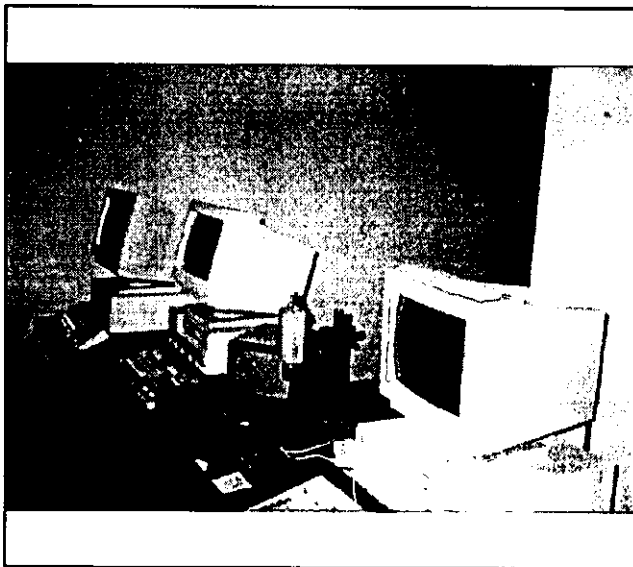


Existing manual registration records are well cared for at the new RNEC offices in Bogotá...

centers have been set up throughout Colombia for collecting information for producing new identity cards; communications from these centers to Bogotá are set up through dial-up lines, and satellite communications have been tested for future use.

Improvements in the area of fingerprint identification have also been made. In the past, this has proven to be one of the more difficult and tedious aspects of the identification and documentation processes to reform. However, technological advances in the last few years have allowed for the simplification of these processes.

The RNEC has been studying systems which analyze key points of a fingerprint to construct a numeric representation of them. If enough points are analyzed, this process can produce highly accurate data which allow positive identification of an individual.



... while new information is captured in electronic format and stored on optical disk.

Towards the end of 1992, the RNEC purchased an Aviiion 8000 computer with four processors and with the capacity to expand to eight. By means of a SCSI interface, the system allows for the simultaneous accessing of 160 drives with a capacity of 1 gigabyte of storage space each. The results of these reforms have been a solution to the problem of the process of fingerprinting, maximum benefits from the storage capacity, and a high level of performance of the fingerprinting process.

b. Voting

In addition to improvement of the ballot processing, communication, tabulation, and dissemination systems, reforms have also been made in the actual voting process. During the March 8, 1992 elections, a new computerized voting system was tested at several polling stations in Bogotá, Cali, Medellín, Manizales, Cartagena, and Bucaramanga, which consisted of a personal computer with a special keyboard simulating a ballot, known as the Electronic Ballot. The other system being tried is a touch-screen voting system based on the Apple Quadra computer.

On September 24, 1993, the RNEC convened a seminar on automated voting to bring together the vendors involved (NET Ltda. of Bogotá for the Apple-based system, Sistemas y Computadores of Bucaramanga for the PC-based system) for a discussion of the legal requirements and technological concepts involved in administering the 1994 election cycle.

Five million dollars have been invested in development of automated voting in Colombia, all by private firms; the RNEC has worked with the companies to ensure that their products meet all legal requirements (proposing legislative changes to the Congress when necessary) but has not put public funds into the development of the new systems.

i. Electronic Ballot Voting System

As originally developed by Sistemas y Computadores of Bucaramanga, the local IBM representative, the electronic ballot voting system initially used a touch-sensitive tablet with a ballot overlay in place of a keyboard. The ballot overlay could be changed from election to election. When there were multiple elections on the same day, such as the Senate and House of Representatives elections in March 1994 or the mayoral, city council, local administrative council, and departmental assembly elections on October 30, 1994, a separate touch-sensitive tablet was

required for each. On pressing the ballot position corresponding to a particular candidate, the voter was presented with the candidate's photo, number, and party on the screen and asked to confirm the vote by pressing the enter key.

The system has now been modified to use a pistol-type bar-code reader to read a bar-encoded ballot. The voter selects a candidate by aiming the bar-code reader at the candidate's bar code on the ballot, which displays the candidate's box enlarged on the screen, and pressing the enter key to accept. This system was used in the October 30, 1994 elections in Bucaramanga and Tunja.

ii. Touch-Screen Voting System

The Apple-based touch-screen computer system has proven to be very successful and popular among the citizens of Colombia, thus passing its initial test. Since its introduction in 1992, the RNEC has cooperated with various firms in the development of this touch-screen device in order to apply it on a much larger scale. Further tests in 1993 in seven areas of high illiteracy proved the viability of the system.

In the October 1994 elections, the touch-screen system was used in several voting locations in Bogotá and San Andrés. In Bogotá, the RNEC set up a children's voting site in front of the National Congress, allowing children to practice voting on both the traditional paper ballot and the new touch-screen voting system. In Bogotá's exposition



Experimental Touch-Screen Voting Location for Young Colombians in Downtown Bogotá

center, the RNEC set up another touch-screen voting location which included some of the city's oldest voters.

At the electronic voting station, there are a demonstration station, two master computers (one for backup purposes) with card readers, a printer for printing results at the end of the day, a number of individual voting booths, and backup power systems (both UPS - uninterruptible power systems - and generators). Each of the individual voting booths contains a card reader and an Apple Quadra 605 [?] computer with a touch screen. The Quadra, including a normal screen, cost roughly \$1,200, while the touch screen cost roughly \$700. Bar code readers cost roughly \$300 each.

After learning the proper voting technique on the demonstration station, voters present their identification card to the election official at the master computer. (Voters with recent voter cards already have a bar code on their card and merely swipe their card through a card reader; those with older cards receive a bar-code sticker when they arrive at the polling station; these are distributed along with the voters' list for the polling station.) The computer checks the voter registration database for that location to determine if that individual is registered there and whether or not they have already voted. Once that information is verified, the master computer assigns the voter to one of the numbered voting booths.

Following verification, the master computer assigns the voter to a particular voting booth. Arriving at the voting booth, the voter again swipes their card through a card reader to release the computer for voting. (This ensures that individuals only vote once rather than moving from voting booth to voting booth to vote multiple times.) Upon entering the voting booth, the voter is presented with a screen of candidates for the first office to be voted on which is similar to the paper ballot for that office. (The paper ballot layout is printed from the same computer file as the screen.) The screen contains multiple candidate photos, names, and party affiliations; if there are

more candidates for that office, voters are given the opportunity to move forwards and backwards freely through the screens of candidates for that office. After the voter selects a candidate by pressing the screen over the corresponding block, that candidate's block (photo, name, and party) is enlarged to fill most of the screen and the voter is asked to confirm the vote by pressing a white "Yes" ("Sí") button or a grey "No" button within fifteen seconds (the elapsed time is displayed in large numbers on the screen). If the voter selects "Yes", they are presented with the screen of candidates for the next office to be filled; if they select "No", they are returned to the screen of candidates for the first office. Once the voter has selected candidates - or chosen the blank vote (i.e., "None of the Above") - for each office, they see a screen thanking them for voting and hear a round of applause.

At the end of the day, the master system locks at 4:00 pm exactly to prevent further voting. The system is then turned off and back on to return to the main menu. There, the operator selects the option "Tabulate and Generate Report". A screen then appears requesting the input of the security codes of the individual pollworkers. Each code is verified and accepted or rejected. After all codes are input and accepted, the votes are tabulated, sent to the printer, and written to a diskette in a Windows format. The diskette is then taken to the central tabulation center by taxi for integration with other results.

In the case of problems with the master computer, the backup computer can take over at any point. If both are damaged, the votes can also be recovered from the computers in the voting booths.

The software is easily adaptable to other countries, as the ballot information is digitized as a series of images; any language, or even any alphabet, could be used in conjunction with the system. In

fact, a bilingual version of the system was used in San Andrés, Colombia, an area inhabited by descendants of English-speaking slaves. The software can be purchased or leased.

c. Results Transmission

During the March 13, 1994 elections, 32 departmental delegations were set up to receive the electoral results from the municipal delegations that had been compiling the votes after the close of voting. Independent contractors were utilized in twelve of these departments. In each of the 32 departmental delegations, a computer system was installed that could rapidly tabulate and transmit the vote totals. The computer systems were designed to have contingency plans, which allowed the data entry and transmission to continue in case any of the major systems failed. In addition to the computer systems set up in the departmental delegations, systems were also installed in 83 municipalities, which were able to tabulate 70 percent of the general vote.

Since the equipment installed in the departments sometimes varies, each of the independent contractors has developed its own software, based on standards set by the RNEC. The external systems auditors analyzed compatibility questions intensively during their work prior to the elections.

Several technical procedures have been established for the collection, processing, and transmission of results following the close of voting. Once the polling stations close, the poll workers collect the ballots and proceed to develop an "Acta de Escrutinio" or "Poll Report." Once this has been accomplished, the documents are transported to the municipal headquarters, where the tabulation of results is completed by means of calculators and computers, the latter being the standard in voting areas with more than 20,000 voters. (In some voting locations, totals were transmitted directly via telephone to the departmental headquarters.)

Once this is completed, the results are generally transmitted to the respective departmental delegation fax or telephone using a standard telephone transmission form during the course of six hours after the closing of the polling stations; this involves transcription and re-entry of the data in the case of telephone transmission and re-entry in the case of fax transmission. Some municipalities have now been equipped with modems for results transmission to the departmental level. Alternatives in case of a problem include use of the National Police radio system or the use of Telecom's telegraph facilities.

Each departmental delegation is provided with technical resources proportional to the volume of information expected. A system has been developed in order to be able to receive this material in an efficient manner, based on a standard telephone reception form; for every 20 polling booths, there is one telephone for transmitting and one telephone for receiving results. Each municipal electoral official identifies him or herself with a personal code; once the official is recognized and accepted by the receiver, the results of the particular municipality are transmitted orally, candidate by candidate, using specific codes. This procedure is repeated between three to five times during the next several hours until the end of ballot tabulation. There is a team of electoral officials, as well as representatives of the external systems auditing firm, present at all times responsible for monitoring these telephone transmissions and receptions. The results are processed by the code of each polling booth and candidate, the number of votes for each candidate, and the total number of ballots that have been cast. Up to nine departmental bulletins are released during the course of the evening. Each consists of a listing by candidate number, an alphabetical listing by candidate, and alphabetical listing by party, and a listing by vote totals.

Each departmental delegation's responsibility is to transmit these results as rapidly as possible by simultaneously transmitting results to the public as well as to the RNEC's headquarters in Bogotá through satellite services and phone lines especially installed for transmission of results. Modem transmissions over dedicated lines are in the 2400 to 9600 BPS range, while dial-up lines are

generally slower. Fax transmissions are used in the event of a problem with the modem lines; the RNEC has ten fax machines allotted to results reception.

The satellite system consists of antennas located in twelve departmental delegations and the central antenna located at the RNEC in Bogotá. This has been used primarily as a back-up system in case the telephone connection system via Telecom malfunctions.

Results are encrypted at the sending end and decrypted at the receiving end to inhibit tampering with the transmissions. Technicians constantly monitor the status of communications lines and are in frequent contact with the departmental offices. As the results are processed on the MV40000, a copy of these results is automatically transferred through an Ethernet TCP/IP network to the Data General MV9600 system located in the same building. Once these results have been archived, anyone interested, the media or political parties, may access the Data General MV9600 by establishing communication with their own computer terminals. During the course of nine hours following the closing of polling stations, ten different national results are transmitted, accounting for nearly 95 percent of the vote. It is important to remember, however, that direct access to the Data General MV40000, where the official results are stored, is impossible.

An initial simulation of the results transmission was held a month before the election, with final tests during the week leading up to the election. Results of the tests showed a 98 percent accuracy rate when compared to the subsequent physical vote count.

Each data entry site was equipped with uninterruptible power supply units; some were also equipped with emergency generators. The RNEC is connected to two power substations so that a shutdown at one would not affect RNEC operations. RNEC technicians are sent to each department to assist departmental officials in case of technical difficulties. Technicians from the

local Data General and Xerox representatives are on hand at the RNEC, equipped with key spare parts, to assist in case of any problems with the mainframe computers or the laser printer. The MV9600 serves as a backup of the MV40000, with copies of the application software and constant mirroring of the election results from the MV40000. An off-site MV9500 is also prepared to act as a backup, with communications lines for receiving results from the departmental registry offices.

SISE (Sistematización y Servicios Técnicos), the independent contractor hired to conduct the vote tabulation for the city of Bogotá, set up a system with seven district collection centers connected to the main center's mainframe computers by dedicated lines and modems. A total of 180 personal computers (running a terminal-emulation program to communicate with the two mainframes) were used for data entry in these centers, with an additional ten terminals distributed among the centers for backup purposes. The Bogotá center was in turn connected to the RNEC, the Mayor's Office, and the President's Office by dedicated lines. An off-site data entry center was also prepared in case of interruption of activities at the main center. The power supply was assured by connections to three substations, an emergency generator, and a one-hour uninterruptible power supply.

The data entry, inquiry, and print routines were written in COBOL with CICS interfaces. Access to these routines is regulated by an access-control module. Data was accepted by the system only if it met strict controls:

- only pre-defined polling station numbers were accepted
- only pre-defined candidates were accepted
- only numerical data were accepted
- no vote totals over the maximum number of registered voters per polling station were accepted
- all fields were required to be filled

- each polling station had a check digit which was required for acceptance of the data

Physical access to the tabulation center was controlled by color-coded and computer-controlled badges. The names of authorized individuals were entered into a computerized access-control system along with their level of access. Each level of access corresponded to a different badge color, allowing for easy visual inspection by security monitors throughout the installations.

Prior to the beginning of the actual tabulation, a report is generated showing the files to be empty. A double backup is then run, with copies stored in the Internal Control Office vault and the insurance company's vault. Periodic copies of the data files are also generated during the tabulation and stored off-site in a similar fashion. This allows for resumption of activities with minimal duplication of effort in case of a system crash or other emergency situation. All activities are logged to provide an audit trail of the process.

Nearly 300 vehicles circulated throughout the city collecting results from polling stations and transporting them to one of the centers. At each center, the drivers were met by "runners" who gave the driver a receipt for the results and carried them to a reception window inside the data collection center, where they were checked in and verified. From there, they were taken to the data entry section for entry into the system. After entry, the printouts are taken to a verification section to be checked against the original by a different team, after which they are sent to the archive section to be filed. The data entry personnel were bank clerks with experience in similar operations. The district registrar and the senior SISE technician constantly monitored the progress of the work on monitors showing the number of polling stations entered and those entered and verified. Internal communications in the data collection center was by radio and kept key individuals in constant contact no matter where they were.

d. Results Dissemination

There are three ways in which results are presented: 1) Every half hour, a bulletin is printed on the 50-page-per-minute Xerox 4050 laser printer; 2) Computer terminals are located in the press center and in the headquarters of the political parties in order to release information related to the transmitted results from the departmental delegations and national headquarters; 3) At the national level, a multimedia system was developed by an Argentine firm which allows for the graphic representation of electoral results, voting behavior, and vote distribution. Results can be viewed on this system by department, municipality, or party using either on-screen lists or a point-and-click map. This system is a local area network connected to the central system. A separate network has also been established in order to maintain communication with the President of the Republic, political parties, the media and the Ministers of Defense, Government, and Communication.

This new communications system is the culmination of a renovation project initiated in 1991, when the Data General MV9600 was acquired and installed, and the existing MV20000 was upgraded to MV40000 by changing the processor and increasing storage capacity within the mainframe. The current mainframe can now simultaneously work with four parallel processors, which gives the system an extensive processing capacity. With this basic configuration, the RNEC has been able to keep up to date with the most recent technological innovations of the country and has been able to develop the electoral process more rapidly, securely, and efficiently.

5. Future Directions

Colombian electoral authorities have already begun looking at other advanced technologies to modernize electoral administration and to make voting easier for all Colombians.

One such technology is audiovoice technology, such as that used by banks to provide on-line dial-up account information services to customers. Two field tests of telephone voting have been completed in Medellín. These required the voter to call the telephone voting number, punch in their registration number, punch in a preassigned personal identification number, select the office to be voted for, and select the candidate to be voted for. Each selection was presented for immediate confirmation by the voter. Voters took an average of one and a half minutes to vote on the telephone. This system is being tested especially for the benefit of those unable to go to a regular voting location, by reason of a handicap or of incarceration. It would also allow Colombians to vote on election day no matter where they were in the country, since absentee voting is not currently allowed. Such a system would also decrease the number of poll workers required, though it would require special training for those who were needed.

Several alternatives have been considered for the upgrading and improvement of the communications system. The first alternative is using the satellite system as a first option rather than as a backup system. The current private network has a high purchase and maintenance cost.

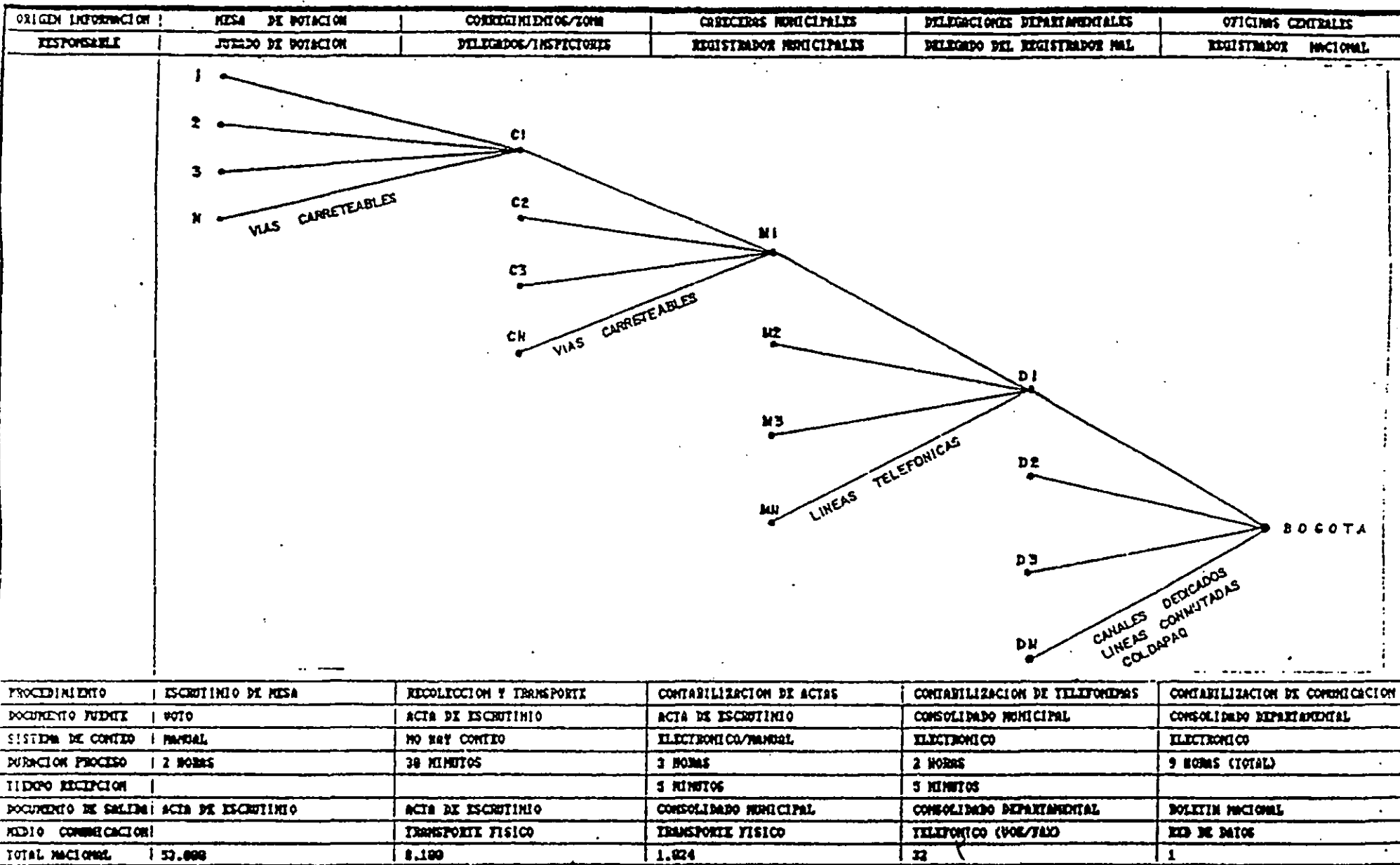
6. General Evaluation

All of these changes have led to a remarkable improvement in the efficiency and security in the electoral process, and the process of technological innovation is ongoing through upgrading and/or replacement of outdated technology.

APPENDIX A

Vote Tabulation Communication Diagrams for 1994 Elections

PROCEDIMIENTO DE COMUNICACIONES PARA ELECCIONES

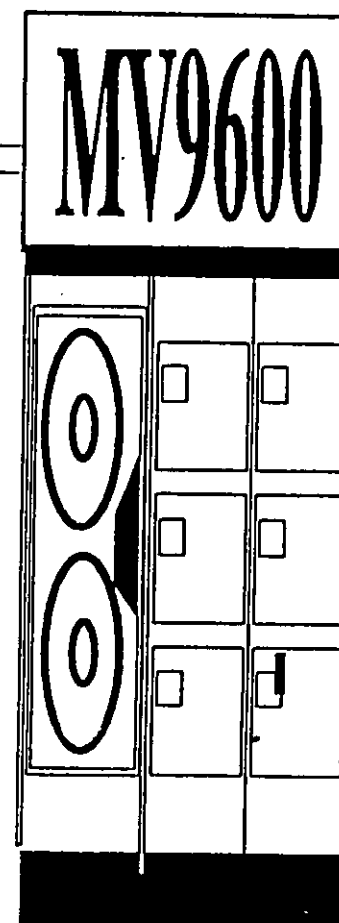
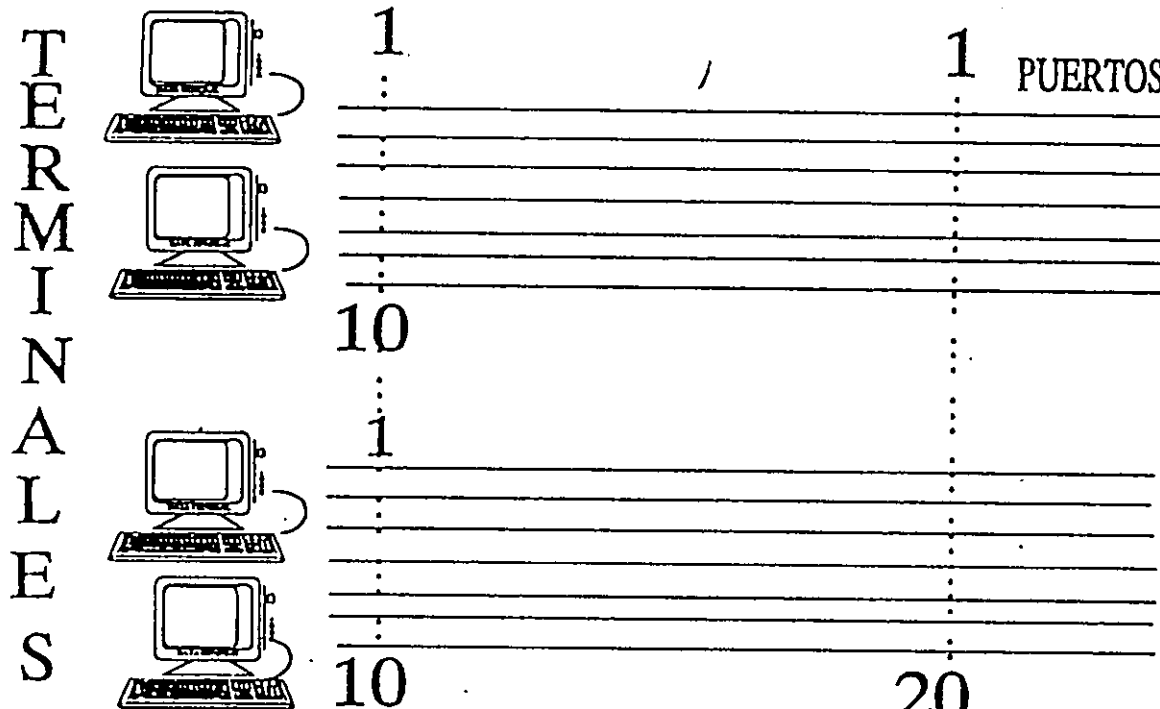


SISTEMA DE CONSULTA LOCAL

2° PISO

1° PISO

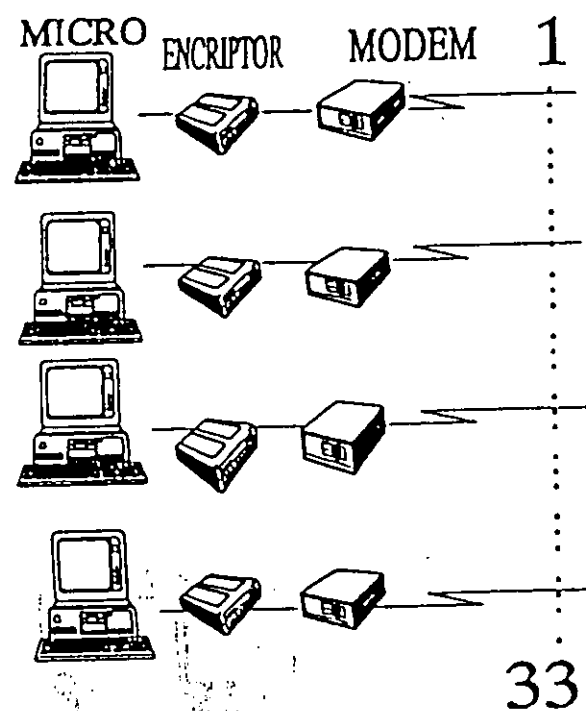
PRENSA INTERNACIONAL



IAC : Controladores de terminales
TCP/IP : Protocolo de comunicacion local

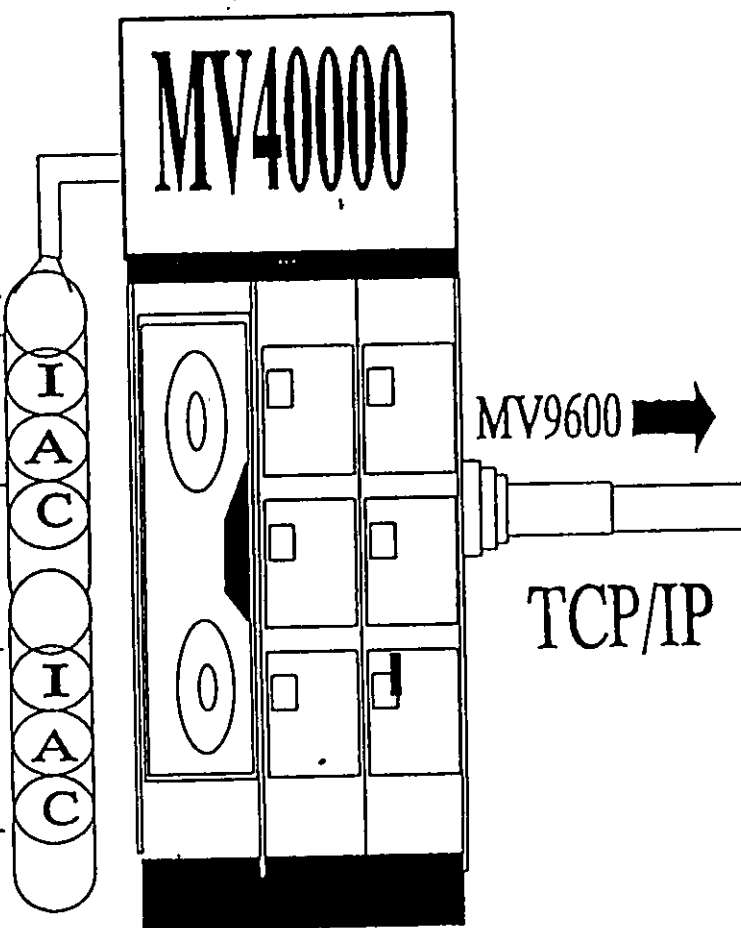
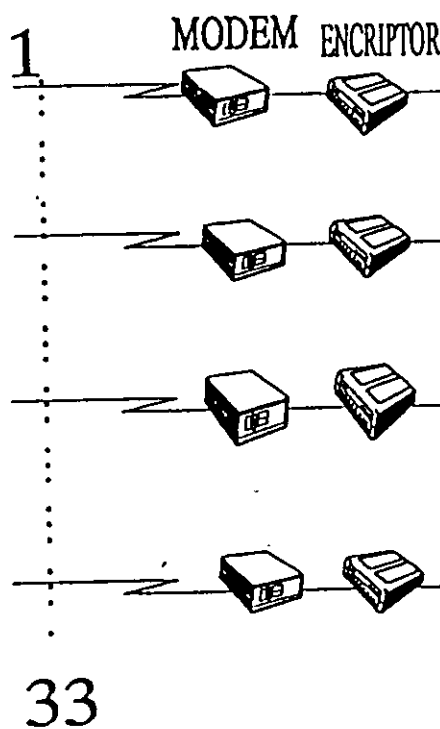
SISTEMA AUTOMATICO DE TRANSMISION DE DATOS

DELEGACIONES DEPARTAMENTALES



SOPORTE : LINEA CONMUTADA

LINEA DEDICADA

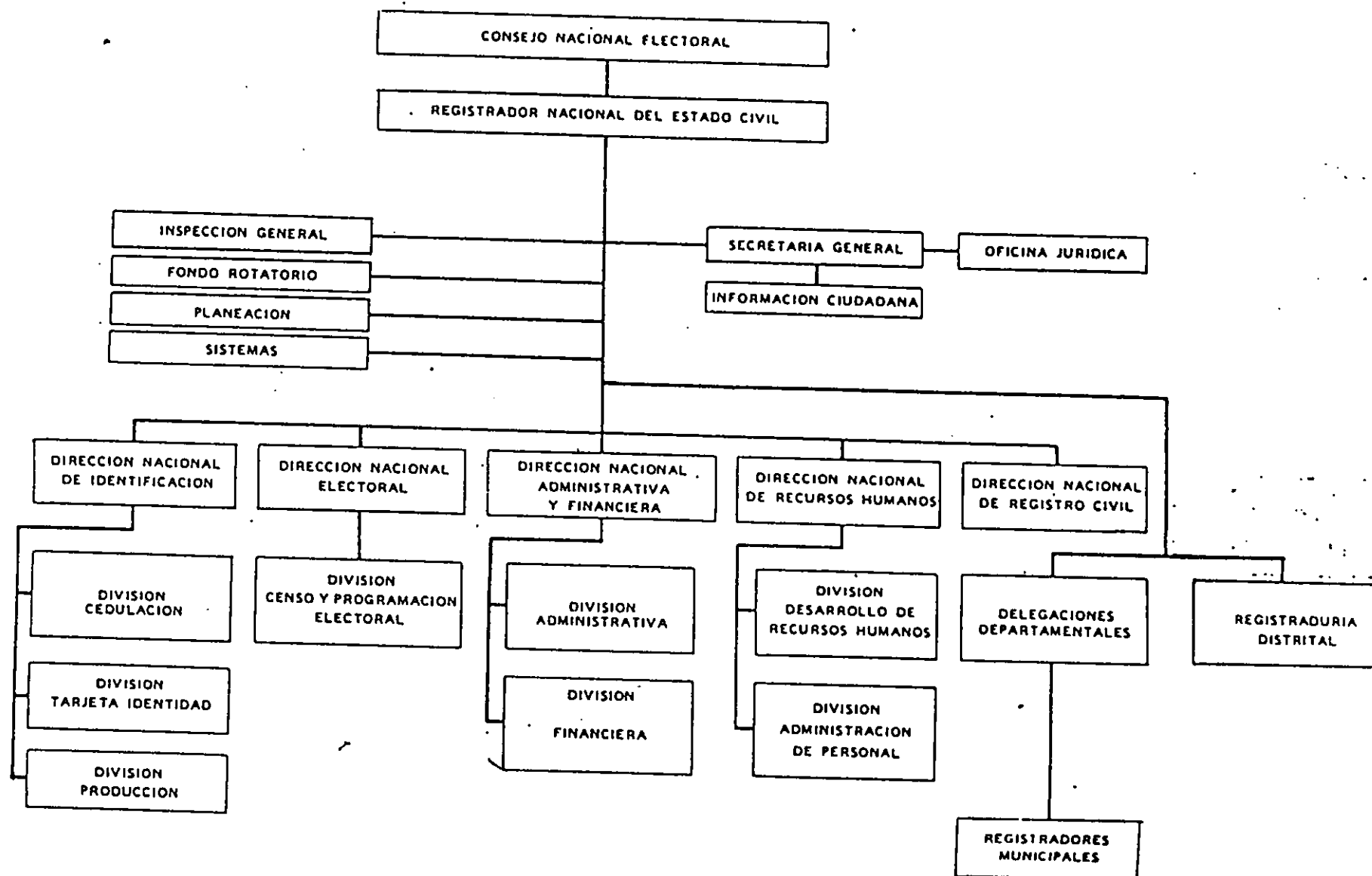


IAC : Controlador de terminales
TCO/IP : Protocolo de comunicaciones local utilizado

APPENDIX B

National Civil Registry Organization Chart

REGISTRADURIA NACIONAL DEL ESTADO CIVIL



APPENDIX C

Election Calendar: 1990 - 2000

DATE	TYPE OF ELECTION
March 11, 1990	< < Congressional, Mayoral > >
May 27, 1990	Presidential, Plebescite on Convening a National Constituent Assembly
December 9, 1990	National Constituent Assembly
October 27, 1991	Congressional, Gubernatorial Elections, Liberal Party Mayoral Primary in Bogotá
March 8, 1992	Municipal (mayors, municipal councils, local administrative councils); Departmental (departmental deputies);
March 13, 1994	Congressional Elections, Liberal Party Presidential Primary
May 29, 1994	Presidential (First Round)
June 19, 1994	Presidential (Second Round)
August 21, 1994	Party Primaries for mayoral, gubernatorial candidates
October 30, 1994	Municipal (mayors, municipal councils, local administrative councils); Departmental (governors, departmental deputies)
1998	Presidential
1998	Congressional
2000	Municipal, Departmental

APPENDIX D

External Computer Systems Audit Materials

CODE OF CONDUCT FOR SYSTEMS AUDITORS OF THE ELECTORAL PROCESS (AUDISIS LTDA. Auditors and Management Consultants)

For Audisis, having been contracted as the firm in charge of the external systems audit for the October 30, 1994 elections represents an enormous responsibility in relation to Democracy in the Republic of Colombia. Its mission consists of guaranteeing the propriety and transparency of the computerized processing of electoral data. To this end, the forms of conduct and professionalism which should be observed by all audit personnel taking part in the activity are the following:

1. Auditors have the responsibility of reviewing the sufficiency and effectiveness of the internal controls established by the Registry and its contractors in the operation and software of the computer, to ensure the reliability, precision, and speed of the electoral results.
2. Mental independence and independence of judgement are attitudes that auditors should adopt to guarantee objectivity in their judgements and results. Auditors should not subordinate their judgement regarding control and audit matters to aspects other than contributing to the success of the elections.
3. Auditors should demonstrate their excellent capacity to get along with others and their oral and written communication skills, skill in managing conflict, giving and receiving of assistance, and managing with discretion information received regarding problems that may arise.
4. Auditors should appropriately document the work that they do, in working papers that contain sufficient and valid information to support the general opinion, conclusions, and recommendations of the audit.
5. Auditors should act with the greatest diligence and professional responsibility throughout the audit, to help in avoiding the risks that might impede the transparency and precision of the electoral results.
6. Auditors should refrain from giving electoral information to the radio, newspaper, and television media. This information is only provided by the electoral authorities.
7. In case you are asked your opinion by the press, your comments should be limited to the normality with which the computer processing of vote totals has been developed and should always be oriented towards reassuring public opinion.
8. Auditors should always present themselves properly and observe rules of conduct appropriate to their professional level, the reputation of Audisis, and the importance of the elections to the democratic life of the country.

OBJECTIVES AND SCOPE OF THE AUDIT

OBJECTIVES

This audit should meet the following objectives:

- Verify that the software of the contractors and of the RNEC is equipped with the necessary and appropriate controls for the circumstances of the October 30, 1994 electoral process.
- Verify that the Data Processing Centers at the RNEC and the national contractors are equipped with the necessary controls to ensure the success of the tabulation of results from October 30, 1994.
- Witness and verify the fulfillment of the contracts between the RNEC and the Processing Centers contracted by the RNEC at a national level.

SCOPE

All the efforts of the audit are focused on ensuring that the controls established offer appropriate protection to reduce three inherent risks of the electoral process:

1. **Inaccuracy of the electoral results** produced by the Data Processing Centers, caused by human error in the generation of data, its entry and processing in the computer, and the delivery of results.
2. **Electoral Fraud**, caused by the alteration of the electoral data in its generation, entry, processing, or announcement.
3. **Delays in the delivery of electoral results**, caused by technical problems, terrorist acts, sabotage, or any other malicious act.

METHODOLOGY TO BE USED FOR AUDIT DEVELOPMENT

In accordance with generally accepted auditing norms and the activities requested by the *Registraduría*, the methodology which is considered appropriate for auditing the computer systems consists of the following four (4) stages:

1. FAMILIARIZATION WITH THE SYSTEMS OF TABULATION AND DELIVERY OF RESULTS.

The objective of this stage is to determine the technical and operational framework in which the processing of electoral data will function (Form A1).

2. PLANNING OF THE AUDIT.

The objective of this stage is to elaborate a detailed plan for the development of Audit Forms A2, A3, and A4.

3. DEVELOPMENT OF THE AUDIT FORMS TO EVALUATE THE APPLICATION SOFTWARE, THE OPERABILITY OF THE ALTERNATE DATA PROCESSING CENTER, AND THE OCTOBER 30 ELECTORAL PROCESS.

The Systems Auditors assigned to each of the processing centers will develop the following audit forms:

Form A2: Evaluation of the reliability of the software used for tabulation and the transmission of electoral results.

Form A3: Evaluation of the functioning of the alternating center of contingencies provided for October 30, 1994.

Form A4: Evaluation of the October 30, 1994 electoral process.

4. DEVELOPMENT AND DELIVERY OF THE AUDIT REPORT.

FORM A1
EVALUATION OF THE AVAILABLE COMPUTING RESOURCES

1. Evaluation of the available resources in the Primary Processing Center,
 - 1.1 Location,
 - 1.2 Teams assigned for the processing of electoral data,
 - 1.3 Environment and support software,
 - 1.4 Application software,
 - 1.5 Reports which the software produces for the tabulation and transmission of electoral results,
 - 1.6 Communication equipment and lines for the reception of electoral data from the municipalities,
 - 1.7 Communication equipment and lines for the transmission of departmental data to the *Registraduría Nacional*,
 - 1.8 Back-up electrical generator,
 - 1.9 Persons with authorization to enter the Data Processing Center,
 - 1.10 Persons with authorization to access the application software and the electoral data files,
 - 1.11 Auditor's assessment of the available computing resources,
 - 1.12 Procedures for data, program, and key personnel back-up.

FORM A2
EVALUATION OF THE RELIABILITY OF THE SOFTWARE FOR THE
TABULATION AND DELIVERY OF ELECTORAL RESULTS AND THE DATA OF
THE PRELIMINARY FILES

I. Objectives of the audit of tabulation and delivery of electoral results software.

A. General Objectives

- Verify that the tabulation and delivery software for the October 30 election results satisfies the needs of the electoral process safely, reliably, and effectively.
- Verify the accuracy of the Political Division data on candidates and seats.

B. Specific Objectives

- Verify the reliability of the application software for tabulation and delivery of the results to be used in the primary processing location.
- Verify that the political and administrative division file is up to date and contains data only for the applicable department.
- Verify the accuracy of the data contained in the files of candidates for different offices.
- Verify the accuracy of the information presented in the bulletins generated by the application.

These objectives should be achieved for each of the offices that the department oversees; that is, apply the form to the processing of information for the tabulation of votes and delivery of electoral results for governor, mayor, assembly, council, and local administrative board.

II. Audit procedures

- A. Testing of the status of the application software and the parameter archives, before the initial data reception.
- B. Testing of the software for capturing data from the results transmissions,
- C. Additional testing of the software for capturing data from the results transmissions on the stand-alone microcomputers.
- D. Testing of the software for data reception for each polling station.

- E. Additional testing of the software for data reception for each polling station on the stand-alone microcomputers.
- F. Other compulsory testing in all of the levels and platforms.
- G. Auditor's assessment regarding the reliability of the application software installed in primary and secondary processing locations.

FORM A3
EVALUATION OF THE AVAILABILITY AND OPERABILITY
OF THE ALTERNATE PROCESSING CENTER

Objectives of the audit of the contingency plan:

1. Verify that the contractors or the RNEC have appropriate backup installations to ensure the continuity of electoral data processing in a location separate from the primary processing center.
2. Verify that the backup installations are provided with the necessary equipment, software, data files, personnel, and logistical and communications infrastructure to process electoral data within the time period equivalent to the margin of tolerance that the Colombian electoral process permits.

FORM A4
EVALUATION OF THE OCTOBER 30, 1994 ELECTORAL PROCESS

- I. Recommendations for the use of the form
- II. Tests to be conducted during the day of the elections
 - A. Activities prior to the beginning of the processing of electoral data
 - B. Tests conducted at the beginning of the electoral process
 - C. Tests conducted during the electoral process
 - C.1. Tests of physical and logical security
 - C.2. Tests of the reception of communications
 - C.3. Quality control tests of the municipal and departmental bulletins
 - C.4. Quality control tests of the departmental bulletins
 - C.5. Testing of the transmission of bulletins to the *Registraduría Nacional*
 - C.6. Tests of the last generated bulletin
 - C.7. Tests conducted once the processing of electoral data has been finalized

APPENDIX E

Materials Collected for the F. Clifton White Resource Center at IFES

**Materials Collected for the F. Clifton White Resource Center at IFES
COLOMBIA**

CIVIC EDUCATION

- Alcaldía Mayor de Santafé de Bogotá. "La Participación sin Misterios." Brochure published by the Mayor's office of Santafé de Bogotá with the purpose of educating children and young adults about the importance of voter participation. Alcaldía Mayor de Santafé de Bogotá: 1994.
- Audiotapes with recordings of radio advertisements promoting voter participation for the 1994 elections.
- Jorge Molina & Asociados. "Campaña 1994." Compilation of various advertisements used to promote voter participation in all the 1994 elections. Advertisement firm was contracted by the Registraduría Nacional del Estado Civil. Santafé de Bogotá: 1994.
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SAMPLE BALLOTS AND DOCUMENTS

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- Sample ballot for the first round of the presidential and vice-presidential election held on May 29, 1994.

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- Sample ballot for the governor of the department of Cundinamarca in the October 30, 1994 election.
- Sample ballot for the mayor of the department of Santafé de Bogotá in the October 30, 1994 election.
- Sample ballot for the governor of the department of Boyacá in the October 30, 1994 election.
- Sample ballot for the municipal council of the municipality of Soledad in the October 30, 1994 election.
- Sample ballot for the departmental assembly for the department of Cundinamarca in the October 30, 1994 election.
- Sample ballot for the local administrative council of Usaquén, Santafé de Bogotá in the October 30, 1994 election.
- Sample ballot for senator in the election held on March 13, 1994.
- Sample ballot for member of the Chamber of Deputies, Santafé de Bogotá in the election held on March 13, 1994.
- Sample ballot for member of the Chamber of Deputies, Antioquia, March 13, 1994.
- Sample *Actas de Escrutinio* of various polling stations for the October 30, 1994.
- Sample voter list
- Sample Identification Cards
- Sample Identification Card forms
- Form for the transmission of results
- Documentation to accompany voter if voter's name is erroneously omitted from the registration list for whatever reason
- Receipt of results from polling stations
- Receipt of electoral documents from polling stations

- Forms used to process polling staff replacements
- Candidate registration form
- List of voters whose names were omitted from the registration list

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