

Date Printed: 11/03/2008

JTS Box Number: IFES_2

Tab Number: 9

Document Title: Brazil 1994 Election Technology
Assessment Report, February 28, 1995

Document Date: 1995

Document Country: Brazil

IFES ID: R01542



* F E 9 9 8 E 7 E - D A A F - 4 D C 7 - A 4 A 4 - 8 5 8 F 8 8 F 8 A 5 0 2 *



***DO NOT REMOVE FROM
IFES RESOURCE CENTER!***





IFES *International Foundation for Election Systems*

1101 15th STREET, N.W. • THIRD FLOOR • WASHINGTON, D.C. 20005 • (202) 828-8507 • FAX (202) 452-0804

Brazil

The 1994 Election: Technology Assessment Report

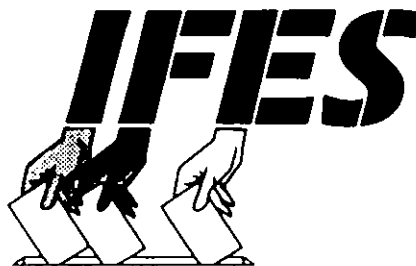
February 28, 1995
J. Ray Kennedy

BOARD OF DIRECTORS					DIRECTORS EMERITI
Charles T. Manatt Chairman	Patricia Hutar Secretary	Barbara Boggs	Peter G. Kelly	William R. Sweeney, Jr.	James M. Cannon
David R. Jones Vice Chairman	Joseph Napolitan Treasurer	Dame Eugenia Charles (Dominica)	Maureen A. Kindel	Leon J. Weil	Richard M. Scammon
		Judy G. Fernald	Jean-Pierre Kingsley (Canada)	Randal C. Teague <i>Counsel</i>	
		Victor Kamber	Peter McPherson	Richard W. Soudriette <i>President</i>	

BRAZIL
1994 Elections

Election Technology
Assessment Report

February 28, 1995



INTERNATIONAL FOUNDATION FOR ELECTORAL SYSTEMS

1994 Elections At a Glance

Voter registration and voting mandatory for literate citizens between 18 and 70 years of age; registration and voting optional for those between 16 and 18 years of age, those over 70 years of age, and the illiterate. Computerized voter registry. Estimated voting-age population: approximately 100,000,000

Paper ballot, hand counted at central location in each electoral zone; results entered into computers and transmitted by modem to state election office and on to national election office

Presidential and gubernatorial elections by majority of valid votes; second round if necessary. Two senators elected per state in 1994 on plurality. Federal and state deputies elected via open-list proportional representation in state-wide voting.

20 parties with permanent registration, 19 with provisional registration

	First Round (October 3)
Registered Voters	94,782,410
Votes cast	77,950,257
Blank votes	7,192,255
Null votes	7,444,197
Valid votes	63,313,805
Number of candidates	±35,000
Number of vacancies	±1,700
Municipalities	4,974
Electoral zones/judges	2,530
Polling stations	275,270
Poll workers	1,651,620



TABLE OF CONTENTS

1. Introduction	1
2. Historical Background	3
3. Brazilian Electoral System	6
a. Electoral Legislation/Regulations	6
i. General Framework	6
ii. Political Campaigning	7
iii. Campaign Finance	10
b. Electoral Administration	11
i. <i>Tribunal Superior Eleitoral</i>	12
ii. <i>Tribunais Regionais Eleitorais</i>	12
iii. <i>Zonas Eleitorais</i>	13
iv. <i>Juntas Eleitorais</i>	13
v. <i>Seção Eleitoral</i> or <i>Mesa Receptora de Votos</i>	14
c. Logistics	14
d. Parties	14
e. Voter Education	17
f. Voter Registration	18
g. Poll Worker Recruiting and Training	19
h. Voting	20
4. Technological Innovation in Brazilian Election Administration	24
a. 1983 Voter Registry Pilot Project	25
b. 1989 Presidential Election	27
i. Results Transmission	28
ii. Results Dissemination	28
c. 1990 Elections	29
d. 1994 Elections	29
i. Voter Registration	29
ii. Results Transmission	29
iii. Results Dissemination	34
e. Current Pilot Projects and Future Plans	35
i. Computerization of voter registry offices	35
ii. Computerized vote counting	35
iii. Electronic Plebescite	37
iv. Electoral Law Database	38
5. General Evaluation	39
6. Recommendations	41



Brazil 1994 Elections: Election Technology Assessment

1. Introduction

The 1994 elections were critically important in the democratic development of Brazil, the largest democracy in Latin America (nearly 100 million voters choosing from among nearly 35,000 candidates). For the first time since at least 1960, Brazilians voted for national and state offices - President, Senator, Federal Deputy, Governor, and State Deputy - simultaneously. This changed the dynamic of Brazilian politics significantly, since in previous elections candidates would often take a leave of absence from elected office to run for office at another level. If they lost, they returned to their previous position; at worst they would have to wait a year or two until the next major election. The 1994 elections were more of a political life-or-death event.

There was also apparently some apprehension among Brazil's political forces about the continuing modernization of election administration in Brazil. Under an agreement between the United Nations Development Program (UNDP) and the Brazilian government, the UNDP had been working with Brazilian electoral authorities since October 1993 to set up a new computerized results transmission system. Prior to the elections, the Democratic Workers' Party (PDT) asked the U.S. Embassy in Brasília for assistance in locating a U.S. firm to perform an audit of the vote tabulation software.

IFES took an early interest in Brazilian election administration in 1989, when newspaper reports there indicated that Brazilian election officials were looking into the possibility of adapting existing national sports lottery technology (based on optical scanning) to voting and vote counting. Brazil had also undertaken a pilot program beginning in 1983 to establish a nationwide computerized voter registry which would eventually allow election officials anywhere in the country to check the voter registry for duplicate registrations elsewhere in the country before registering new voters. As part of this process, the Brazilians also developed sophisticated

programs to detect and report suspected duplicate registrations already in the system. More recently, election officials in the Brazilian state of Santa Catarina had undertaken a pilot project to automate the electoral process using very inexpensive personal computer technology and a custom keyboard. We believe that Brazil may be developing cost-effective indigenous election technologies which would be appropriate for use in other developing countries.

Ray Kennedy, IFES Director of Information Resources, traveled to Brazil to study the October 3 election process there and to learn more about the technological innovations taking place in Brazilian election administration. Mr. Kennedy visited São Paulo, the largest state but also one of the least technologically advanced in election administration, and Santa Catarina, where the State Election Tribunal has been one of the most advanced in introducing computer technology in election administration. Following the election, he traveled to Brasília to watch the national vote tabulation and to meet with members and staff of Brazil's national election authority, the *Tribunal Superior Eleitoral - TSE* (Supreme Electoral Tribunal).

The report that follows will focus on the technological innovations in Brazilian 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

Brazil's contemporary electoral history can be said to begin in 1946, when democratic government was restored after nearly a decade of dictatorship. New political parties emerged, the voting age was lowered to 18 for men and women, and Brazil enjoyed a period of democratic governance until a military coup ousted President João Goulart in March 1964. (Jânio Quadros had been elected president in 1960 but resigned suddenly after only eight months in office; Goulart, his vice president, had succeeded to the presidency in 1961.)

The military regime suspended direct presidential and gubernatorial elections (they were to be elected indirectly by the National Congress and State Assemblies, respectively) as well as those of mayors of state capitals, border towns, and other "national security zones" (who were to be appointed by the respective governor). Existing political parties were abolished in 1965, and two parties - the pro-government National Renovating Alliance (*Aliança Renovadora Nacional* - *ARENA*) and the opposition Brazilian Democratic Movement (*Movimento Democrático Brasileiro* - *MDB*) were created. Congress was closed once (for most of 1969) during the depths of the military regime and again briefly in April 1977 (to enable the government to institute a series of unpopular electoral reforms). Since the military regime permitted elections for the national congress, state assemblies, and most local offices, though, Brazil's electoral history was more continuous than that of many of its neighbors. In fact, steady opposition gains in elections during the 1970s were a critical factor leading to the liberalization of the regime.

The dismantling of the dictatorship began in the late 1970s under General Ernesto Geisel. The artificial two-party system was abolished in 1979 and replaced by a multi-party system. Five parties emerged initially: the Democratic Social Party (*Partido Democrático Social* - *PDS*, ARENA's successor); the Brazilian Democratic Movement Party (*Partido do Movimento*

Democrático Brasileiro - PMDB, MDB's successor); the Brazilian Labor Party (*Partido Trabalhista Brasileiro* - PTB, a small-business party that had existed during the 1946-64 period); the Democratic Labor Party (*Partido Democrático Trabalhista* - PDT); and the Workers' Party (*Partido dos Trabalhadores* - PT).

In 1982, direct elections were held for governors, senators, federal and state deputies, mayors, and city councils. In those elections, a scandal erupted surrounding the computerized vote tally in the state of Rio de Janeiro, where Leonel Brizola, leader of the PDT and long-time opponent of the military regime, was running for governor.

The direct elections for governor in 1982 and the approach of the 1985 presidential elections led to a series of massive street rallies organized by the opposition to call for direct election of the president. Nonetheless, the constitutional amendment instituting direct elections failed to receive the necessary "super majority" by 22 votes. The opposition won the indirect election, however, and Brazil had its first civilian president in over 20 years.

The civilian government expanded the franchise in 1985 by giving illiterate Brazilians the right to vote, a right they first exercised in the 1985 elections for mayors of state capitals. These were followed by the 1986 elections for governors and members of the national and state legislatures, nationwide municipal elections in 1988, the 1989 presidential election (the first to be held since 1960 and the first ever to be held in two rounds), legislative and gubernatorial elections in 1992, and a 1993 constitutional referendum on presidential vs. parliamentary government and whether or not to restore the monarchy.

On October 3, 1994, nearly 100 million Brazilians were eligible to vote for president, governor, senator, federal deputy, and state deputy; slightly over 82% of them turned out on

election day. Fernando Henrique Cardoso, candidate of the Brazilian Social Democratic Party (*PSDB - Partido Social Democrático Brasileiro*), won the presidential race in the first round with over 54% of the valid vote. Since Brazilian law provides for a second round of presidential and gubernatorial elections if no candidate in those races receives at least half of the valid vote, a second round was held on November 15 to decide gubernatorial races in the 18 of 27 states where no candidate received the necessary majority on October 3. (The October 3 proportional elections in Rio de Janeiro state were also re-run on November 15 in the aftermath of allegations of widespread fraud during the vote count there.)

3. Brazilian Electoral System
 - a. Electoral Legislation/Regulations
 - i. General Framework

Brazil has an electoral code (*Código Eleitoral*) that establishes the general framework for elections. The Code deals with the organizations responsible for election administration; voter registration; the elections, including the electoral system, preparation for elections, materials for elections, voting, and vote counting; and other general items such as party advertising, challenges, and penalties for infractions. The current electoral code, Law 4737 of July 15, 1965, has been complemented and in some cases superseded by other ordinary laws and by the Constitutions of 1967 and 1988.¹

There is a separate Organic Political Party Law (*Lei Orgânica de Partidos Políticos*), the current one dating from July 1971, to regulate the formation and actions of political parties, and a Law of Ineligibility (*Lei das Ineligibilidades*) to define who is ineligible for particular offices.

Specific provisions for each election are established through ordinary laws passed by the National Congress and through regulations promulgated by the TSE, which have the force of ordinary law. The law regulating the 1994 election was Law 8713, dated September 30, 1993. It contains sections on candidate registration, ballot specifications, election monitoring, opinion polling, campaign financing, electoral crimes and the process of trying those crimes, and election advertising. Law 8713 was complemented by TSE Resolution 14,427 of July 21, 1994 on polling stations, which has sections on election preparations, polling stations, secrecy of the ballot, election supplies, the voting process, and measures to guarantee the free nature of the elections;

¹ See the table of contents of the *Código Eleitoral* in Appendix A.

and by TSE Resolution 14,545 of August 16, 1994 on counting centers, which contains provisions on the makeup of the *juntas eleitorais*; the counting process; counting teams (*turmas apuradoras*); monitoring of the counting process by the political parties; challenges, recount requests, and appeals; the proportional representation system; and declaration of winners.

Although the electoral law is supposed to be promulgated at least one year in advance of the elections (to prevent the recurrence of electoral "packages" such as the ones announced on short notice by the military government), there have been cases recently when it has been announced late or provisions have been changed less than one year in advance of the elections. (This has been especially true for regulations requiring incumbents to resign their current positions in order to run for office.) It is also a common complaint of the political parties that this system, despite the general framework of the *Código Eleitoral* (itself outdated), is much too unstable, since laws and regulations often change substantially from one election to another, sometimes well after campaigning has begun. The system also makes the laws and regulations the subject of intense pressure from interested parties in the period leading up to each election. (Law 8713 was the subject of 356 proposed amendments on the floor of the Chamber of Deputies after intense debate in committee.)²

ii. Political Campaigning

Law 8713 contemplates unfettered campaigning though displaying posters or similar material on private property and through distribution of flyers and booklets. Up to half of the billboard space in each municipality is to be made available by the owners on the basis of a lottery. Campaigning is formally prohibited on election day and punishable by up to three months detention, though many individuals do so despite the law.

² Joel José Cândido, *Direito Eleitoral Brasileiro*, 4th edition, São Paulo, Edipro, 1994, p. 334.

Paid advertising in print media is allowed up to election day, up to established maximum sizes. Free access to the broadcast media is provided during the *horário eleitoral gratuito* (free electoral hour), which is aired twice daily (morning and evening on television, morning and noon on radio) during the 60-day period preceding the first-round elections.³ Presidential candidates share an hour a day (7:00-7:30 am and 8:30-9:00 pm) four days a week, while candidates for the other offices share the other hour a day. Three days a week, the time is dedicated to presentations of party platforms. The time allotment varies by office:

- one third of the time allotted presidential candidates is divided equally among contesting parties and coalitions, while the other two thirds are allotted in proportion to the number of seats each party or coalition holds in the Chamber of Deputies;
- time allotted senate candidates is divided equally by party;
- one half of the time allotted gubernatorial candidates is divided equally among contesting parties and coalitions, while the other half is allotted in proportion to the number of seats each party holds in the Chamber of Deputies;
- one third of the time allotted candidates for federal and state deputy is divided equally among contesting parties (whether members of a coalition or not), while the other two thirds are allotted in proportion to the number of seats each party holds in the Chamber of Deputies.

At least partly in response to elaborate programs put together for the *horário gratuito* during the 1989 presidential elections, programs must now be shot in a studio and may not contain pre-recorded material other than music or a party jingle.

³ The *horário gratuito* begins 22 days before and stops two days before the second round. The time slots allotted for the second round are half as long as they are for the first round.

Paid broadcast advertising is prohibited. The right of response is guaranteed to those candidates who are judged to be the subject of defamatory or otherwise injurious remarks. Although prior censorship or on-air cuts are not allowed, programs judged offensive may not be rebroadcast. Media infractions of established standards of fairness are punishable by temporary suspension of broadcasting rights. Broadcast debates are allowed as long as all candidates are invited to participate at least 72 hours in advance.

The question of opinion polls has been hotly debated in Brazil in recent years, even between the two houses of Congress as they worked on electoral legislation. The Chamber of Deputies, arguing that many of the polls are unreliable and that all are too influential in swaying voters, argued strongly prior to the 1989 elections for a ban on releasing polling results beginning 30 days before the first round and 10 days before the second. The Senate, arguing for the free flow of information, objected to restrictions on the release of such results.

Under Law 8713, firms releasing polling results after April 2, 1994 were required to submit to electoral authorities at least five days prior to their release:

- the person or organization commissioning the poll;
- the amount paid and source of funds for the poll;
- the methodology and period covered;
- the sampling plan and sample characteristics as related to gender, age, educational level, economic level, and geographical area;
- quality controls on the data collected.

This information is posted for public inspection and made available to any party or candidate involved in the relevant election, who are allowed to conduct an independent audit. The results

are provided directly to them as soon as they are released publicly. Infractions of these provisions are heavily punished.⁴

iii. Campaign Finance

Upon filing their candidacies, individuals must disclose all of their assets at their current value. Parties with presidential candidates must establish a National Finance Committee within five days of nominating a candidate and register the committee with the TSE. Parties with candidates for other offices must establish State Finance Committees wherever they have candidates and register these committees with the respective state election board (*Tribunal Regional Eleitoral - TRE*).

The law states that candidates are responsible for administering campaign funds directly or through a designee and must sign all campaign finance reports personally. Candidates violating campaign finance regulations are subject to forfeiture of their candidacy or elected office. Parties and candidates are to retain documentation of donations for a period of five years.

Funds come from the party finance committee, which receives funds from a common Party Fund, individual or corporate donations, or internal resources. Donations may not be accepted from any foreign entity or government or any Brazilian non-profit organization receiving funds from such foreign entity or government; public or publicly funded entity; government contractors; or labor organizations. Individual donations are limited to the greater of ten percent of the donor's gross income from the previous year or 70,000 UFIRs⁵, while corporate donations are

⁴ Imprisonment for two to twelve months or a fine, plus a penalty equivalent to the cost of the poll. The law also provides that infractions by the media will be punished as aggravated crimes.

⁵ The UFIR (*Unidade Fiscal de Referência*, or Fiscal Reference Unit) was an accounting unit, equal to about \$0.73 on Election Day. The UFIR is readjusted monthly.

limited to the greater of two percent of gross receipts from operations in the previous year or 300,000 UFIRs. Individuals may also make personal expenditures in support of a candidate up to a limit of 1,000 UFIRs as long as these expenditures are not reimbursable by the candidate, their committee, or their party.

All donations are to be acknowledged through a numbered receipt, called an Electoral Bond (*bônus eleitoral*). These bonds are issued by the Ministry of Finance to the parties in an amount equivalent to their spending ceiling and then passed on by the parties to individual candidates up to their individual spending limits. The practice of a second set of books is, however, thought to be common.

b. Electoral Administration

Election administration in Brazil is the responsibility of the Electoral Justice (*Justiça Eleitoral*) system. This system comprises the *Tribunal Superior Eleitoral*, which has jurisdiction throughout the country; the *Tribunal Regional Eleitoral* of each state and the Federal District, which has jurisdiction in its home state; *Juízes Eleitorais*, who have jurisdiction over electoral matters in a given geographical zone (normally a municipality, but some municipalities have grown to be larger than one electoral zone while others are smaller than their respective electoral zone); and *Juntas Eleitorais*, the first level of the system, whose members are responsible for overseeing the ballot-counting process.

Unlike several of its neighbors, Brazil's electoral system is not an independent government organ. Its members and staffs are generally on temporary assignment from another organ; many electoral tribunal members in fact must continue to discharge their normal duties in addition to

their electoral duties. This has also meant that there is no clear career path in the field of election administration in Brazil, no specialized training required of its practitioners.

i. *Tribunal Superior Eleitoral*

The TSE was established in 1932, abolished in 1937, and revived in 1945. It currently consists of seven members: three elected from among the members of the Supreme Federal Tribunal (*Supremo Tribunal Federal - STF*, Brazil's supreme court), two elected from among the members of the Supreme Tribunal of Justice (*Superior Tribunal de Justiça - STJ*, the federal appeals court), and two lawyers named by the President from among six distinguished lawyers nominated by the STF. Each member has an alternate, selected in the same manner. Members and alternates serve a two-year term, renewable once. The president and vice-president of the TSE are elected by the TSE members from among the three STF members. It is responsible for overseeing the administration of presidential elections. (As a result, the TSE was not directly involved in any of the elections from 1964 to 1989.)

TSE decisions are normally made on a majority vote; a majority of the members constitutes a quorum for most purposes. The decisions of the TSE are final except in cases involving constitutionality, *habeas corpus*, and restraining orders.

ii. *Tribunais Regionais Eleitorais*

The 27 TREs consist of two *desembargadores* (judges) of the state supreme court (*Tribunal de Justiça - TJ*), two judges chosen by the state supreme court, one judge of the local Federal District Court (*Tribunal Regional Federal*), and two lawyers named by the President from among six distinguished lawyers nominated by the TJ. The president and vice-president of the TRE are

elected by the TRE members from among the two TJ members. The TRE is responsible for overseeing the administration of congressional, state, and municipal elections. An electoral prosecutor sits on the Tribunal but has no vote. TRE meetings are generally open to the public and the press.

Challenges must be brought to the TRE within three days of an infraction unless they involve constitutional questions; each is assigned to a TRE member as principal case handler. The TREs' decisions are final except in cases involving constitutionality, declaration of winners, restraining orders, and *habeus corpus*, in which case appeal is automatic; and in the case of violation of a federal law or a difference in interpretation between two TREs. The case load of the TREs can be substantial, to the point that in late 1989 the TRE was still considering cases brought during the November 1988 municipal elections.

iii. *Zonas Eleitorais*

Each *Zona Eleitoral* (Electoral Zone) is presided over by a *juíz eleitoral* (electoral judge) appointed by the TRE from among the state court judges. These judges have extensive powers over the electoral process in their zone while remaining responsible for their normal judicial duties. In the electoral field, they are responsible for the recruitment and training of poll workers and vote tabulators and the credentialing of party poll watchers. There were 2,530 electoral zones in 1994.

iv. *Juntas Eleitorais*

The first level of the electoral justice system is the *Junta Eleitoral*, which oversees the counting of ballots and whose members issue initial rulings on challenges presented by party

delegates. The *Juntas Eleitorais* consist of two or four members, who can be ordinary citizens, and a president, who must be a judge.

v. *Seção Eleitoral* or *Mesa Receptora de Votos*

Voters cast their ballot at their assigned polling station (*seção eleitoral*). These are staffed by six individuals: a president, two secretaries, two members, and an alternate.

c. Logistics

Election supplies are dispatched from the TREs by mail to the *zonas eleitorais*, where they are under the jurisdiction of the electoral judge until they are collected by the president of the polling station. After the polls are closed, the ballot "bags" are closed and sealed and taken to a designated location, usually the local counting center.

d. Parties

The Brazilian political party system has been notoriously weak since the party liberalization of 1979. From the five parties that first emerged at that point, the system has grown to nearly 40 (half with permanent registration, the other half with provisional registration).

There has been an ongoing debate between those who favor the free formation and competition of parties and those who see greater benefit in a more stable, rational party system. The question of the communist parties (*Partido Comunista Brasileiro - PCB*, the more moderate Moscow-line party, and the *Partido Comunista do Brasil - PC do B*, the more militant Beijing-line

party) was especially delicate during the early 1980s, since any legislation or regulation that excluded them was seen as authoritarian rather than as an effort to promote greater stability in a highly factionalized system.

Less than half of the registered voters in 1989 belonged to a political party. Eighteen parties are now represented in the Chamber of Deputies following the 1994 elections, three of them with only one member each and four more with three members or less. These "microparties" have been a recurring problem in the Congress, since the "leader" of each one usually claimed the same prerogatives (larger offices, extra staff, additional telephone lines, car, etc.) as leaders of large party caucuses.

Under Law 8713, presidential candidates could only be presented by:

- parties receiving at least five percent of the valid vote in the 1990 elections for federal deputies, distributed among at least one third of the states;
- parties having at least three percent of the seats in the Chamber of Deputies as of September 30, 1993;
- coalitions which contained a party meeting either of the above requirements; or
- coalitions whose member parties totaled met either of the first two requirements.

Gubernatorial candidates could be presented by:

- parties meeting either of the first two criteria for presidential candidates;
- parties that received at least three percent of the valid vote in the 1990 elections for state deputies in that state;
- coalitions which contained a party meeting either of the above requirements; or
- coalitions whose member parties totaled met either of the first two requirements.

Law 8713 also guaranteed all sitting federal and state deputies a spot on the ballot for reelection unless otherwise decided by the **national** executive committee of their party, a definite boon for the drafters of the law, since they could not be excluded from the ballot by the local or state party offices.

Brazil, like Finland, utilizes an open list system for proportional elections, in that voters generally vote for an individual candidate rather than merely a party slate. Candidates for both state deputy and federal deputy run on an at-large basis in their state. Votes are counted for individual candidates and then summed to determine each party's total and the electoral quotient; seats are allocated to parties on the basis of the electoral quotient, and then assigned to candidates on the basis of their individual vote totals. In the past, each party was allowed to run two candidates for each open seat. This meant that with 15 parties contesting São Paulo's 60 seats in the federal Chamber of Deputies and 84 seats in the State Assembly, there could be more than 4,300 candidates running at-large in the proportional elections in that state alone. Parties are now only allowed to run one candidate for each open seat, with certain exceptions. The growth in the number of registered parties, however, has still led to an increase in the number of potential candidates in an election. The open list system for proportional elections generally leads to substantial competition between candidates of the same party and has tended to personalize politics and weaken the parties.

Parties were allowed to form coalitions for both majority elections (president, governor, senator) and proportional elections (federal and state deputy) in 1994, as long as the coalition was the same in all elections in a given jurisdiction; coalitions could and did differ significantly from one jurisdiction to another. For proportional elections, each coalition could present a candidate slate up to 1.5 times the number of seats to be filled, as long as no single party in the coalition put up more candidates than the number of seats to be filled.

Parties are guaranteed free access to each stage of the voting and vote counting process, including advance access to the computer programs used in totaling the vote, by Article 24 of Law 8713 and TSE Resolution 14,611 of August 30, 1994. Parties have 48 hours after receiving the computer programs to file a challenge. Under paragraph 5 of Article 24, parties are allowed to contract systems auditors, set up their own tabulation systems, and receive the same data that the TSE receives from the TREs.

The larger political parties have been successful in recent years in deploying large numbers of poll watchers to witness the voting, counting, and tabulation processes. They have also begun to recognize the importance of providing extensive training for their volunteers and the creation of parallel vote count systems.

The latter is facilitated by the existence in the counting centers of *comissões interpartidárias* (interparty committees), which receive a carbon copy of each tally sheet. These can then be copied by the various parties for input into their own parallel tabulation systems.

e. Voter Education

TREs are given up to eight minutes a day of radio and television time beginning 15 days before the election for the purposes of voter education.

The São Paulo TRE (TRE/SP) offered a telephone response line to assist individuals in locating their assigned polling place.

The Brazilian Bar Association (*Ordem dos Advogados do Brasil - OAB*) organized a program to provide information to voters and to encourage participation in the 1994 elections.

The Santa Catarina TRE (TRE/SC) launched a voter education program targeted at those between 16 and 18 in April 1994 in order to encourage them to register and vote. The president of the TRE/SC, Francisco Xavier Medeiros Vieira, felt strongly that if 16- and 17-year-olds began to think of voting as a right rather than an obligation, they would take it more seriously. The program, with extensive coverage from local media and financial support for voter information materials from the state bank, was a great success, as the electorate grew by more than double its normal rate in relation to the previous election (7 percent vs. 3 percent); of the 215,074 new voters, 127,991 were 16- or 17-year-olds, more than doubling the number of registered voters in that age category (from 100,902 to 228,893). The TRE set up special voter registration sites for this exercise, including many in local high schools and shopping centers.

f. Voter Registration

Voter registration is a continuous process in Brazil, although only those registered by a cut-off date 100 days before the elections are eligible to vote in those elections; transfer requests must also be submitted by this deadline. This allows the data processing centers to complete entry of information on new registrants and to run cross checks to detect duplicate or other irregular registrations. Individuals reaching the voting age of 16 after the cutoff but before the date of the election are allowed to register and vote.

The current voter registration card has no photo.⁶ Since registrations are subject to suspension or cancellation due to irregularities, voters are only allowed to vote if their names appear on the voters register at the polling place. They may use either their voting card or their national identity card to prove their identity.

⁶ See sample voter registration card in Appendix D.

Voter registration information is confidential and may only be released on judicial order; to the elector; or to the elector's close relatives. Voter registration offices are located in each *zona eleitoral*.

g. Poll Worker Recruiting and Training

Poll workers in Brazil are named 60 days prior to the elections. Their nominations are published in a supplement to the Official Record (*Diário Oficial*) of the state. The nomination includes an indication of the position to be filled (president, secretary, alternate, etc.)⁷ Individuals called for work at the polls have five days in which to present any valid reason why they should not serve as poll workers. These include:

- being a candidate or close relative of a candidate;
- being a party poll watcher or member of a party executive committee;
- being a police official or executive-branch political appointee;
- being an electoral official;
- being less than 18 years old;
- being a relative of another poll worker at the same polling station; or
- being a professional co-worker of another poll worker at the same polling station.

Under the electoral law, poll workers from the private sector receive a day of paid vacation on the day after the election in compensation for their work; if they are public employees, they receive two days.

⁷ See sample poll worker nominations from *Diário Oficial do Estado de São Paulo*, September 19, 1989.

h. Voting

Voting is mandatory for those between 18 and 70 years of age unless they are illiterate, and optional for the illiterate, those over 70, and those between 16 and 18 years old. Members of the military⁸, judges, and election officials can vote but may not join a political party. Voters residing abroad are permitted to vote in **presidential** elections at the nearest consular office. Those otherwise absent from their electoral domicile on election day go to the nearest post office to purchase, fill out, and mail an "electoral justification" (*justificação eleitoral*) to the electoral judge in their home district as proof that they were unable to vote.⁹ Non-voters who have not submitted a *justificação eleitoral* or other document such as a medical justification are punished by a fine of between two and ten times the minimum salary and by not being able to engage in official business with the government (including receiving paychecks in the case of government employees) until their situation is brought into compliance. The *Código Eleitoral*, in Article 367, provides that fines can be waived for those who make a sworn statement that they are poor, while also allowing electoral judges and tribunals to increase the fine up to ten times its original value if they believe that the original fine would be ineffective. Election officials have complained about the difficulties in enforcing the fine.

Each polling station (*seção eleitoral*) is assigned between 200 and 500 voters. In populous localities, multiple polling stations are grouped in a larger location such as a school, community center, or gymnasium. Polling stations are generally located on public property, although private properties are used when public facilities are insufficient in number or offer unsatisfactory conditions. Under no circumstances can properties belonging to candidates, party officials, police officials, or their close relatives be used. Voting begins at 8 am and ends at 5 pm.

⁸ Except for those completing their obligatory military service.

⁹ See a sample of the *Justificação Eleitoral* in Appendix H.

On election day, Brazilian voters received two ballots: first, a white ballot for the federal Chamber of Deputies and the State Assemblies, then a yellow ballot for presidential, gubernatorial, and senatorial races. (Members of the Chamber of Deputies feared that voters would ignore the proportional elections if all races were on one ballot or if allowed to vote in the majority races first.) The white proportional-election ballots were "name off" ballots and therefore identical from one state to another; there was a line for federal deputy and a line for state deputy where the voter was to indicate one of the following:

- a candidate's number;
- a candidate's name (including registered nicknames or variations¹⁰, and varying numbers of decipherable phonetic variations);
- a party's number; or
- a party's acronym or name¹¹.

The yellow majority-election ballots were "name on" ballots - each presidential candidate and the gubernatorial and senatorial candidates for a given state were listed on that state's ballot.¹² The ballots are printed on plain paper with black stripes on the back to conceal the voters' intent from pollworkers when the voter deposits the ballot in the ballot box. The ballots supplied to each polling station do not have numbered stubs, making their control essentially impossible; ballots are signed by the polling station officials as needed before being handed to voters as a means of preventing use of ballots brought into the polling place by voters.

In response to concerns regarding the time a voter would take to complete the voting process and the need to accommodate up to 500 voters per polling station during a fixed time

¹⁰ Law 8713, Article 12, states that candidates in proportional elections can register up to two alternate names and that the electoral authorities are responsible for providing cross-referenced lists of candidates and their name variations by September 1, 1994 for use by vote counters.

¹¹ See sample proportional election ballot in Appendix E.

¹² See sample majority election ballot in Appendix E.

period, the TRE/SC set up a mock election to test a setup using five voting booths: three reserved for voting in the proportional elections, and two reserved for voting in the majority elections. The mock election was administered in a locale deemed representative of the general population, with a wide range of ages and educational levels represented. This exercise proved that a polling station with five voting booths could accommodate up to 500 voters during a nine-hour day. Other states ran similar experiments, some coming up with different polling-station arrangements in order to speed up the overall voting process.

The TSE has done a study on illiteracy and the ballot, and there appears to be general recognition in Brazil that the ballot style still inhibits voting by the illiterate and semiliterate. Although the Congress has authorized the use of colors and candidate portraits on the ballot, the implementation of these measures is in the hands of the electoral authorities.¹³

Despite protests from electoral authorities that placing the two ballots in the same ballot box would slow down the vote counting, the Congress decided that only one ballot box would be used in each *seção*. Having two ballot boxes would have allowed the majority-election votes to be counted and tabulated before beginning the count of proportion-election votes, which given the high number of candidates and the various acceptable ways of marking the ballot were much more difficult to count.

Fraudulent sample ballots were discovered in circulation in five states. These had some candidate positions switched, probably to lead the less educated to cast their ballots for a candidate other than the one of their choice, since these individuals are often taught to locate their candidate on the ballot by counting ballot positions from the top or bottom of the ballot.

¹³ Article 86 of Law 8713 permits the use of "instruments" to assist the illiterate in voting, but states that such instruments will not be furnished by electoral authorities. These include cardstock "guides" distributed by parties or candidates with their numbers cut out to allow the illiterate voter to trace the number onto the ballot.

In response to allegations of massive voter registration fraud in the new state of Tocantins, Brazil's Attorney General and a TSE member were dispatched to analyze the situation. The TSE stated that election-day registration might be required there, including asking prospective voters for their birth certificate or other document. In addition, armed forces were sent to the states of Alagoas, Acre, and Maranhão to prevent coercion of voters.

The TSE also faced complaints of twins, triplets, etc. throughout Brazil when in the process of cleaning the voters' lists they cancelled the registrations of all individuals having the same birthday and the same parents.

After voting, the voter is given a stub from the voters list to prove that (s)he voted. Stubs remaining in the poll book after the election are read into the computer system through a bar-code reader and the corresponding individuals marked as not having voted in the election.

4. Technological Innovation in Brazilian Election Administration

Brazil's first law dealing with the utilization of electronic data processing in election administration was passed in 1982 (Law 6996, June 7, 1982). This law allowed TREs to begin implementation of computerization projects authorized by the TSE and was followed by Law 7444 of December 12, 1985, which mandated the re-registration of the entire electorate in order to establish a nationwide computerized voter registry system.

Brazil has experienced contradictory pressures in its drive to modernize election administration. On the one hand, there has been some resistance to computerization, especially on the part of the political parties. Some of the traditional political bosses in rural Brazil fear losing the ability to decide electoral outcomes, while many who have been pressing for democratization fear that the elections could be more easily manipulated by the electoral authorities or the government.

On the other hand, the significant growth in the size and mobility of the electorate made manual recordkeeping increasingly difficult and computerization an increasing necessity. In addition, nationalist forces in the country pushed through a series of laws beginning in the mid-1970s reserving the domestic computer market to domestic firms in an effort to stimulate autonomous development and self-sufficiency in the sector. This led to the creation of a number of firms which would play a role in election administration, especially as contractors providing data processing services to the electoral authorities.

The current state of affairs in Brazilian election automation is also somewhat contradictory. There are interesting and very successful or potentially successful projects already underway, while at the same time there have been chronic problems in certain areas. According to the TSE, as cited in a UNDP project document:

- "• Procedures vary from state to state and are often incompatible, which makes integration and exchange of data difficult.
- There is no standardization of formats for computerized files.
- Printing facilities for reports, documents, etc. are very poor at state sites....
- Procedures for updating voter's data are inadequate at all levels: national, state, and municipal.
- Several [voter] registers are processed by private computer centers that are not committed to the electoral process and are responsible for the high number of misidentified irregularities, at high cost. The TSE has verified that when data entry, for instance, is outsourced, the number of errors is much higher than when it is done by staff hired and trained by the TSE."

In response to this situation, the UNDP has undertaken a project to develop a training plan, modernize the structure of election administration, and upgrade the information infrastructure available to election administrators.

a. 1983 Voter Registry Pilot Project

Citing the continuous and overwhelming growth of voters lists, the TRE in Rio Grande do Sul (TRE/RS) had begun a pilot project in the early 1980s to automate the voter registry. The goal of the project was to enable each TRE - and eventually each local registration office - to verify the registration status of any individual in the country. Relying on computerized registration records rather than hard-copy files would allow the TREs to detect attempts by individuals moving from one state to another to obtain a second registration and would increase

the speed and reliability of voter registration services. The TSE sanctioned the pilot project in 1982.¹⁴

As part of the pilot project, a voter database was structured to contain name, parents' names, address, date of birth, electoral zone, municipality, voting location, registration number, participation in the three previous elections, and party affiliation, including a flag if the person was a party official (which would bar them from election administration positions). The structure of the database has since been refined and expanded to include data elements not collected during the pilot project. In addition to the voter database, which was to reflect the current registration status of each individual, an historical database was structured to include all previous registration information such as transfers, changes in party affiliation, and cancellations.

The work on the computerized registry was slated to proceed municipality by municipality, enabling the project to be scaled back at any point without disruption of the overall system. The initial data was taken from the voter sign-in books from the 1982 elections and entered by election-system personnel. Subsequently, forms were developed for registration¹⁵ and updates¹⁶. A new voter registration card, with detachable receipt, was also developed for computer printing.¹⁷ Party affiliation cards were collected by the parties and forwarded to the voter registration office for data entry.

¹⁴ See Tribunal Regional Eleitoral (Rio Grande do Sul), *Sistema de Processamento Eletrônico de Dados: Justiça Eleitoral*, Porto Alegre, TRE/RS, 1983.

¹⁵ *Alistamento Eleitoral* form; specimen included in Appendix B.

¹⁶ *FASE (Formulário de Acompanhamento da Situação do Eleitor)*; a specimen is included in Appendix B.

¹⁷ *Título Eleitoral/Protocolo de Entrega do Título Eleitoral*; see specimen in Appendix D. The *Protocolo* (receipt) was given to the registrant once the information was verified and checked against existing records. After the card was sent to the electoral judge for signature, the voter was required to present the receipt in order to claim the registration card.

Other outputs of the system included a certificate of voter registration, a voter history, certificate of exemption from compulsory registration (such as for having reached the age of 70), voters' list by voting section, microfiche of voters' lists for backup use and for use by registration offices without computers, party rolls, party leadership rolls, notice of replacement card requests, notice of registration transfers, and other miscellaneous reports.¹⁸

The successful pilot project led to the complete re-registration of all Brazilian voters in 1985-86. Voters were given the opportunity to select their voting place at this time. In order to validate the new data, the TSE developed a new software program to search phonetically for existing duplicate registrations. By the time of the 1989 elections, the voter rolls had been cleared of thousands of duplicates and other errors. A statistical profile of the Brazilian electorate was published by the TSE in 1989.¹⁹

b. 1989 Presidential Election

In early 1989, the incumbent president of the TSE had mentioned in the press his interest in investigating the possibility of adapting for electoral use the optical mark scanning system already in use in the national sports lottery. Since the method of marking the lottery ticket was widely known (even among the many illiterate voters in Brazil, since many of them played the lottery regularly), this was seen as a possible means to speed the tabulation of votes. This approach was abandoned in the end because of its cost.

¹⁸ See Appendix N, *Opções do Sistema* (System Options), a screen print from the computer terminal at the TRE/RS.

¹⁹ Tribunal Superior Eleitoral, *Perfil do Eleitorado Brasileiro*, Brasília, TSE, 1989 (2 vols.) This work breaks down the electorate by state, state capitals, age, gender, level of instruction, and marital status.

There were approximately 82 million eligible voters for the 1989 presidential elections, of whom approximately 3 million were in the 16-17 age group and thus allowed but not required to vote.²⁰ Of the latter group, approximately 50 percent registered to vote.²¹

i. Results Transmission

In some states, the results were entered into a computer system by a contracted firm (often a state-owned firm), and returned to the TRE on diskette for transmission to the TSE by modem. In other states, the TRE was able to handle its own data entry and transmission. (In the state of São Paulo, regional centers were set up in São Paulo, Ribeirão Preto, Bauru, Presidente Prudente, Campinas, Santos, São José do Rio Preto, to receive tally sheets from electoral judges and to transmit the results to the TRE/SP. Santa Catarina also established seven regional centers to process vote totals and forward them to Florianópolis.) Each TRE received two personal computers to handle the transmission of results to the TSE.

ii. Results Dissemination

For the 1989 presidential elections, the TSE set up a sophisticated media center at the Brasília convention center to disseminate election results, which were being received by modem from each TRE. These were displayed on a series of monitors in the main press area, each monitor covering a large state or group of smaller states. Printed bulletins were also distributed at regular intervals. News conferences were held in the auditorium, which had the national results displayed on the wall behind the speaker. Television networks had direct read-only access to the TSEs computer, while radio and print journalists, each of whom generally had a booth of their

²⁰ Interview with Francisco Rezek, TSE President, 10/10/1989.

²¹ Interview with José Júlio dos Reis, TSE Secretary-General, 10/10/1989.

own, depended on the monitors and bulletins at the convention center for their information. Ample communications resources allowed the many journalists to file stories around the clock.

c. 1990 Elections

Building on their success in consolidating vote totals at seven regional centers in Santa Catarina during the 1989 presidential elections, the TRE/SC established 80 data processing centers, one for each electoral zone, for the 1990 elections. Using 300 personal computers and calling on 200 computer professionals, many of them community volunteers, the TRE/SC completed its vote tabulation in 60 hours.

d. 1994 Elections

i. Voter Registration

Processing of the state voter registries is distributed among several sites. The TREs of the following states maintain their own registries: Paraná, Rio Grande do Sul, Paraíba (also maintains Sergipe), Mato Grosso (also maintains Bahia and Espírito Santo), and Goiás. São Paulo's voter registry is maintained by the state data processing organ, PRODESP. The other registries are currently maintained by the TSE in Brasília.

ii. Results Transmission

The 1994 elections represented another significant technological advance in Brazilian election administration in that for the first time, vote totals were to be transmitted electronically from the counting centers themselves to the TREs and from there to the TSE. (In previous elections, the electoral judge from each electoral zone was responsible for transporting the results from his or her zone to the TRE.) The transmission system was put in place with technical

assistance from the United Nations Development Program (UNDP) as part of a broader project (Electoral Justice Computer System, or *SINJE - Sistema de Informática da Justiça Eleitoral*) to provide the Brazilian electoral system with a suitable information infrastructure, and from Oracle, the developer of the software application.

The SINJE project has three major components:

- the 1994 elections results-transmission system
- a new voter registry system to allow computer access to the registry at the registration-office level (rather than the current state-level access)
- administrative systems, such as case monitoring, planning and budgeting, and personnel management.

The core of the new system consists of a network of RISC²² computers (one at the TSE and one at each TRE) linked through Brazil's National Packet Data Network (*Rede Nacional de Pacotes - RENPAC*). Each of these RISC computers will serve a local-area network. Each RISC unit was configured on the basis of the size of the state to be served. Electoral zones will also have local networks, linked to the responsible TRE by dial-up line. Each RISC computer was loaded with the HP-UX operating system, a print server, Oracle, and Recital (the latter two are database management programs).

Since Brazil uses a central count system, the ballot "boxes" (actually canvas ballot bags with a rigid, sealable top) were transported from the voting stations to a counting center, usually a large gymnasium or community center, after the close of voting. The count began officially the morning after Election Day when Minister Sepúlveda Pertence, president of the TSE, drew the first ballots (one yellow majority-election ballot and one white proportional-election ballot) in

²² Reduced Instruction-Set Computer

Brasília and announced their content. Each TRE president then followed a similar procedure, and the counting process was off and running. Given the high number of candidates, the necessity of counting the ballots separately for each race, and the fact that each counting team was responsible for counting more than one ballot "box", the counting stretched into the night of October 4 in most locations and beyond October 5 in many.

After each ballot "box" was counted, its tally sheet (*BU - boletim de urna*) was taken to the adjacent computer center for data entry and verification. A team of preparers generally inspected the BUs quickly prior to data entry for any obvious errors and then compared them carefully to the computer printouts prior to transmission. The TRE/SP estimated the time needed to input the proportional-election results from one ballot "box" at 20-25 minutes. (With fewer candidates running, the TRE/SC estimated the time needed at 15 minutes.) Once the print out of the BU matched the original, the vote totals were transferred to diskette and taken to another computer for transmission to the TRE. The printouts were given to the local inter-party committee. Passwords were used to gain access to any part of the system, with a user's level of access keyed to their password. Transmissions were encoded to enhance security. Diskettes were numbered systematically in order to facilitate retransmission in case a transmission was rejected. (Only 0.3% of the transmissions in the TRE/SC's pre-election tests were rejected.)

Totals for proportional races were computed at the TREs, while totals for the majority races were computed at the TSE. Although the electoral zones were free to set their own schedule in principle, the TRE/SP recommended that they stop counting each night in order to give vote counters a chance to rest. (São Paulo, with an electorate of roughly 21 million, had 374 electoral zones, 898 *juntas apuradoras*, 7,184 counting teams (*turmas apuradoras*), and 28,736 vote counters (*escrutadores*) and estimated that it would take four days to count the votes with each *turma* counting a maximum of eleven ballot "boxes". Santa Catarina election officials pushed to

have enough counters so that each counting team would only have to count an average of five ballot boxes, with a maximum of eight.)

Technical support for the *zonas eleitorais* came from TRE technical personnel assigned to each *zona*. These individuals were responsible for installing the system hardware and software, ensuring that the BUs were entered correctly, making periodic backups, and authorizing the generation of diskettes for transmission to the TRE. Backup support came from regional technical assistance units (*núcleos de assistência técnica - NAT*) scattered throughout the state and, as a final resort, from the emergency support staff at the TRE. There were 26 NATs in the State of São Paulo and 14 in Santa Catarina. NAT personnel were contracted by Embratel, the national telephone utility. Hewlett-Packard, the manufacturer of the RISC computers at the TSE and each TRE stationed one technician at each RISC site. The state power and telephone companies also had individuals on constant duty to respond to incident reports from electoral authorities.

The TSE organized training sessions for TRE technicians on data entry, communications, and technical support. The installation schedule for the project began on May 1, 1994 and extended through September 30. Communications tests were scheduled to run from early June through late July, with data entry/reception tests scheduled for August and full-system tests scheduled for September.

Santa Catarina took advantage of a provision in TSE Resolution 14,611 and sought computer equipment from "members of the community" (local banks, businesses, individuals, etc.) to supplement the equipment received from the TSE and speed the process of compiling and forwarding results through the system. (Over 600 personal computers were loaned to the TRE/SC through this initiative. The 12th Electoral Zone in Florianópolis, for example, received fifteen computers plus a backup for data entry on loan from the telephone company.) In many cases,

telephone lines were also loaned to the TSE for the election periods (September 27-October 10 and November 12-17). The computer operations staff at TRE/SC set minimum specifications for the equipment to be borrowed (386SX-based personal computer, 2MB RAM, 1 5/4" high-density floppy drive, 40MB hard drive, licensed copy of DOS 5.0 or later, dot-matrix printer, 800va UPS) and directed each electoral judge to solicit enough equipment from his or her community (one computer for every 20 ballot boxes) to complete the results transmission in 30 hours. (The TSE calculated distribution of computers on the basis of one for every 80 ballot boxes.) Each piece of equipment borrowed by the TRE/SC was entered into a registry for tracking.

Progress was tracked at each stage of the process: review of BU, submission to data entry, print out, corrections, submission for transmission. Each data entry clerk had a unique number so that errors could be traced to their origin. (To discourage fraud, terminals displayed a message to data entry clerks that unauthorized use of the terminal constituted a crime, that each clerk had a unique, nontransferable password, and that all data entry activity was identified, audited, and sent to the TSE.)

The TRE/SC had one 64Kbps line to the TSE for transmission of results to Brasília and two incoming 64Kbps lines for use by the *zonas eleitorais* in transmitting results to Florianópolis. Each *zona eleitoral* had received two telephone lines from the state telephone company. Each *BU* was approximately eight kilobytes (8KB) in length. The TRE made an initial backup copy of the operating system and tables of its main computer, backups of the application software every eight hours, and backups of the transmission logs every two hours. The *zonas eleitorais* were to backup their systems prior to each transmission and once every three hours. The final backups at the end of the data entry process were to be delivered to the TRE within 24 hours.

The TRE/SC technician responsible for setting up each data processing center carried all the necessary software as well as step-by-step procedure manuals developed by the TRE computer operations office. Once the systems were set up in each data entry center, tests were run to verify each phase of the operation: data entry and verification, transmission of data by the data entry center, reception of the data by the TRE, transmission from the TREs, and reception at the TSE in Brasília. Following conclusion of the tests and prior to the start of work on October 4, all equipment was reinitialized to remove test data and prepare the database to receive actual results. Only the Electoral Judge in charge of the respective *zona eleitoral*, using a password received in a sealed envelope from the TRE, could open the results database for input of actual results.

iii. Results Dissemination

TREs set their own schedules for disseminating results on state races, but the TSE central computer polled each TRE central computer every half hour for updated results on all races. The TSE began releasing results at 12:30 pm on October 4, four and a half hours following the nationwide beginning of the vote count. The TRE/SP scheduled the distribution of printed updates of proportional election results at 11:00 am and 6:00 pm, given the volume of information involved, while the TRE/SC scheduled on-line updates every two hours. Results from anywhere in the country could be checked from any point in the nationwide TSE network at the level of nation, state, electoral zone, or ballot "box." Results were also made available through the Internet. The TREs set aside computers in their offices for members of the inter-party committees (*comissão interpartidária*) to check results against the copies received from the *Juntas Apuradoras*.

Following the second round on November 15, counting began immediately, and the TRE/SP received the results from the first 18 ballot "boxes" at approximately 7:00 pm. By 1:00 am, approximately 96% of the vote totals had been received by the TRE/SP.²³

e. Current Pilot Projects and Future Plans

i. Computerization of voter registry offices

As mentioned in conjunction with the SINJE project, each voter registration office in Brazil is to be equipped with a local-area network, with communications links to the state election office. This network will allow the offices to process voter registration requests (including checking nationwide for previous registrations) locally rather than sending them to the state capital or Brasília for processing.

ii. Computerized vote counting

Following the success of decentralized vote tabulation in the 1989 and 1990 elections, the TRE/SC sought to move to the next level of automation, the computerized central counting of paper ballots in a municipal election. Working in partnership with the Federal University of Santa Catarina, a government computer agency, and a private contractor, the TRE/SC developed the software necessary to automate the vote counting process.

²³ This information on the second round comes from the report of Gustavo Villamil Rozo, director of computer operations at the *Registraduría Nacional del Estado Civil* of Colombia, the organization responsible for election administration in that country. At IFES' suggestion, the TRE/SP invited Mr. Villamil to São Paulo for the November 15 second round to learn about Brazilian election administration.

The system that was developed was based, as mentioned at the beginning of this report, on the federal sports lottery already in place throughout Brazil, as well as being similar to university entrance examinations familiar to many in the state. The card readers were produced by RACIMEC, the manufacturer of lottery card readers used throughout Brazil.

A ballot roughly 21cm x 8.25cm in size was designed with blocks for each mayoral candidate (a majority race) and for each party and candidate running for city council (a proportional race). In keeping with Brazil's open list proportional system, voters had to be given the opportunity to cast a party vote or a vote for an individual candidate. The party boxes contained the party's number and acronym. To vote for a candidate, voters had to mark both a party and an individual number, since with an average of 350 candidates for municipal offices in the larger cities of a small state such as Santa Catarina and a fixed ballot size it would have been nearly impossible to develop a workable ballot with an individual space for each candidate.

In counting the ballots, each *turma apuradora* was to have a computer workstation and ballot reader. Each ballot was fed into the card reader individually; the vote as read would be displayed on the computer screen and could be accepted, entered manually if it was unreadable, or modified by the computer operator if it did not correspond to the voter's intent. Once the operator indicated that all ballots had been counted, the system would print out the *boletim de urna*. The workstations were linked to a server, which totalled the results from each workstation and printed partial and final reports.

According to the TRE/SC's report on the project,²⁴ the proposed ballot represented an improvement over the traditional ballot because it:

²⁴ Tribunal Regional Eleitoral de Santa Catarina. "Projeto de Cédula Eleitoral e Apuração Automatizada." Florianópolis, May 1992, p. 9.

- did not require the voter to know how to write
- eliminated the problem of illegible ballots
- could be easily read by data processing equipment
- took advantage of existing technology
- satisfied the voters' desire for speedier results (an estimated three times faster)
- allowed manual counting where necessary.

Following public demonstrations of the new system, 61.4% of the voters found it easier, while only 21.4% found it more difficult; the remainder saw little difference.

The new system was first used in a municipal referendum on March 31, 1991 in the municipality of Urussanga, in which 6,500 voters cast their votes on a total of 40 personal computers. Subsequent local votes in Barra Velha (November 24, 1991) and Curitiba (March 15, 1992) were also successful.

Objectively, however, the system has a number of weaknesses as well. First, the complexity of having to mark two boxes in order to vote for an individual would require significant voter education. Second, the requirement that each ballot be fed individually and accepted or modified is significantly slower than the ideal automated process. Finally, and most importantly, the ability of the operator to modify the vote before it is tallied is a significant weakness in the reliability of the results.

iii. Electronic Plebescite

For several municipal referenda in 1993 and 1994, the TRE/SC had developed an electronic voting system based on a personal computer with a custom keyboard with six keys: begin, yes, no, blank vote, void ballot, and end. This system greatly increased the speed with

which the TRE/SC was able to announce final results. Contrary to their initial expectations, the system was most popular among voters with the least formal education.

Given the similarity between a plebescite and a second-round (i.e., two-candidate) election, the TRE/SC requested and received authorization from the TSE to conduct balloting in several locations for the November 15 second round using the equipment developed for the electronic plebescite project.

On February 12, 1995, this system was used for a two-candidate mayoral election in the town of Xaxim, Santa Catarina. Of the town's 14,659 registered voters, 12,204 voted in the election. 85 computers, including demonstration units, were set up at the municipality's 25 polling stations. The electronic election cost approximately \$38,000; election officials estimated that a conventional election would have cost three times that figure. The vote tabulation took 39 minutes, including about 20 minutes to repair an electrical fault at one location, rather than the five hours that would have been necessary to count the votes by hand and enter the results for tabulation. The president of the TSE was in Xaxim for the election and set as a goal the complete automation of the nationwide mayoral elections in 1996.

iv. Electoral Law Database

The TRE/SC, in order to facilitate access to the current body of electoral laws and regulations, has put in place a basic electoral law database with assistance from UNESCO. The software used in this project was Micro-Isis. The system allows users to view a dictionary of terms, formulate queries, and print their results. Information in the database is indexed by number of the decision or case, municipality, electoral zone, plaintiff, legislative reference, descriptors, and the Tribunal members responsible for the drafting the opinion.

5. General Evaluation

The 1994 elections proved the value of applying wide-area-network technology to election administration, while showing some of the inherent weaknesses that must occupy the attention of those responsible for carrying the modernization process forward.

- Problems were still being identified with the system during results transmission. This may have been the result of insufficient testing of the system under sufficiently "real" conditions prior to the vote tabulation. Patches were distributed by the TSE computer to the TRE computers to correct the problems, except TRE reports were that some of the patches were themselves incorrect. As a result, the TRE began to transmit results by fax.
- Problems with line noise and connection difficulties were isolated and did not indicate any substantive systemic problem.
- Results from some polling stations were transmitted from the counting center to the TRE, acknowledged by the TRE computer as having been received, and then lost, leading to the need for multiple transmissions.
- The final on-line results dissemination program only arrived at the TRE on election day, making it difficult to train the technicians and users on it.
- While results were searchable by polling station, municipality, state, and country, the political parties were accustomed to receiving the information by electoral zone. This points out the necessity of bringing parties fully into the process of implementing a new system so that they are aware of exactly what they will receive.
- Pilot projects can increase the enthusiasm for and acceptance of new technologies.
- Relatively low educational level is not a universally valid barrier to the acceptance or successful implementation of election modernization projects.

- Although most data entry clerks were bank tellers or others with similar computer experience, election officials in large urban centers often complain about the poor quality of the personnel they are loaned for data entry.

Among the more significant general observations regarding the election process are:

- There were general complaints about the lack of orientation of voters in how to evaluate opposing candidates and about the inability of voters to absorb and evaluate information on so many candidates.
- Party pollwatchers had difficulty in identifying and keeping track of the stacks of ballots as the vote counters were separating them.
- Once the stacks of ballots were complete, pollwatchers were unable to keep track of simultaneous counts.
- Pollwatchers also complained that the counters did not count the ballots by moving them from one pile to another, which would have made it easier to detect any effort at fraud.
- Support for the counting teams from TRE and *zona eleitoral* officials was good at counting centers visited in Florianópolis.

6. Recommendations

1. Work with Election Tribunal to develop an effective voter education program to address:
 - a. the new mixed-district voting system proposed by the TSE
 - b. encouraging participation in the electoral process in order to overcome the high number of non-voters
 - c. facilitating voting in proportional elections on a ballot considered by many to be difficult
 - d. presenting potential voters with practical means of evaluating candidates
2. Work with Election Tribunal to develop new procedures as part of transition to polling-place vote count or to mechanized/computerized central vote count.
3. Organize an Electoral Reform Symposium to assist in comprehensive modernization and consolidation of legal framework of election administration.

APPENDICES

- A.: Table of Contents of the *Código Eleitoral*, Law 4737 of July 15, 1965
- B.: Voter Registration Forms
 - 1) 1989 model
 - 2) 1994 model
- C.: Voter Record Change Forms
 - 1) 1989 model
 - 2) 1994 model
- D.: Voter Registration Card
- E.: Sample Ballots
 - 1) Majority election
 - 2) Proportional election
- F.: Sample *Boletim de Urna* (Ballot-Box Total Sheet)
 - 1) Santa Catarina
 - a. Majority Election
 - b. Proportional Election
 - 2) São Paulo
 - a. Majority Election
 - b. Proportional Election
- G.: Sample BU Verification Printout
- H.: Voter Away From Home Form (*Justificação Eleitoral*)
- I.: Layout of Typical Polling Station
- J.: Organization Chart of Vote Counting Center
- K.: Layout of Typical Vote Counting Center
- L.: Election Administration Structure

Brazil 1994
Election Technology Assessment
February 28, 1995
Page 43

M.: Organization Chart of TRE/SC

N.: System Options Screen (TRE/RS, 1989)

O.: Interviews

P.: Materials Collected for F. Clifton White Resource Center at IFES

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX A

Table of Contents of the *Código Eleitoral* (Law 4737, July 15, 1965)

SUMÁRIO

PARTE PRIMEIRA —	INTRODUÇÃO	(arts. 1º a 11)
PARTE SEGUNDA —	DOS ÓRGÃOS DA JUSTIÇA ELEITORAL	(arts. 12 a 41)
TÍTULO I —	Do Tribunal Superior	(arts. 16 a 24)
TÍTULO II —	Dos Tribunais Regionais	(arts. 25 a 31)
TÍTULO III —	Dos Juízes Eleitorais	(arts. 32 a 35)
TÍTULO IV —	Das Juntas Eleitorais	(arts. 36 a 41)
PARTE TERCEIRA —	DO ALISTAMENTO	(arts. 42 a 81)
TÍTULO I —	Da Qualificação e Inscrição	(arts. 42 a 51)
CAPÍTULO I —	Da Segunda Via	(arts. 52 a 54)
CAPÍTULO II —	Da Transferência	(arts. 55 a 61)
CAPÍTULO III —	Dos Preparadores	(arts. 62 a 65)
CAPÍTULO IV —	Dos Delegados de Partido Perante o Alistamento	(art. 66)
CAPÍTULO V —	Do Encerramento do Alistamento	(arts. 67 a 70)
TÍTULO II —	Do Cancelamento e da Exclusão	(arts. 71 a 81)
PARTE QUARTA —	DAS ELEIÇÕES	(arts. 82 a 233)
TÍTULO I —	Do Sistema Eleitoral	(arts. 82 a 86)
CAPÍTULO I —	Do Registro dos Candidatos	(arts. 87 a 102)
CAPÍTULO II —	Do Voto Secreto	(art. 103)
CAPÍTULO III —	Da Cédula Oficial	(art. 104)
CAPÍTULO IV —	Da Representação Proporcional	(arts. 105 a 113)
TÍTULO II —	Dos Atos Preparatórios da Votação	(arts. 114 a 116)
CAPÍTULO I —	Das Seções Eleitorais	(arts. 117 e 118)
CAPÍTULO II —	Das Mesas Receptoras	(arts. 119 a 130)
CAPÍTULO III —	Da Fiscalização Perante as Mesas Receptoras	(arts. 131 e 132)
TÍTULO III —	Do Material para a Votação	(arts. 133 e 134)
TÍTULO IV —	Da Votação	(arts. 135 a 157)
CAPÍTULO I —	Dos Lugares da Votação	(arts. 135 a 138)
CAPÍTULO II —	Da Polícia dos Trabalhos Eleitorais	(arts. 139 a 141)
CAPÍTULO III —	Do Início da Votação	(arts. 142 a 145)
CAPÍTULO IV —	Do Ato de Votar	(arts. 146 a 152)
CAPÍTULO V —	Do Encerramento da Votação	(arts. 153 a 157)
TÍTULO V —	Da Apuração	(arts. 158 a 233)
CAPÍTULO I —	Dos Órgãos Apuradores	(art. 158)
CAPÍTULO II —	Da Apuração nas Juntas	(arts. 159 a 196)
CAPÍTULO III —	Da Apuração nos Tribunais Regionais	(arts. 197 a 204)
CAPÍTULO IV —	Da Apuração no Tribunal Superior	(arts. 205 a 214)
CAPÍTULO V —	Dos Diplomas	(arts. 215 a 218)
CAPÍTULO VI —	Das Nulidades da Votação	(arts. 219 a 224)
CAPÍTULO VII —	Do Voto no Exterior	(arts. 225 a 233)
PARTE QUINTA —	DISPOSIÇÕES VÁRIAS	(arts. 234 a 383)
TÍTULO I —	Das Garantias Eleitorais	(arts. 234 a 239)
TÍTULO II —	Da Propaganda Partidária	(arts. 240 a 256)
TÍTULO III —	Dos Recursos	(arts. 257 a 282)
CAPÍTULO I —	Disposições Preliminares	(arts. 257 a 264)
CAPÍTULO II —	Dos Recursos Perante as Juntas e Juízes Eleitorais	(arts. 265 a 267)
CAPÍTULO III —	Dos Recursos nos Tribunais Regionais	(arts. 268 a 279)
CAPÍTULO IV —	Dos Recursos no Tribunal Superior	(arts. 280 a 282)
TÍTULO IV —	Disposições Penais	(arts. 283 a 364)
CAPÍTULO I —	Disposições Preliminares	(arts. 283 a 288)
CAPÍTULO II —	Dos Crimes Eleitorais	(arts. 289 a 354)
CAPÍTULO III —	Do Processo das Infrações	(arts. 355 a 364)
TÍTULO V —	Disposições Gerais e Transitórias	(arts. 365 a 383)

APPENDIX B

The voter registration form (*Formulário de Alistamento Eleitoral - FAE*) used in 1989 contained the following information:

1. empty field for data processing use
2. Fields 2-7 reserved for registry office use
 - a. flag for initial registration
 - b. flag for transfer
 - c. flag for revision
3. flag for pollworker status
4. state code
5. municipality code
6. electoral zone
7. voting place
8. full name
9. parents' names
10. municipality
11. neighborhood/district
12. street name
13. street number
14. floor/room/apartment
15. postal code
16. date of birth
17. gender
18. marital status
19. education
20. educational level completed or not
21. primary occupation
22. occupation code
23. state and municipality of birth
24. code for state and municipality of birth
25. national ID card number and issuing office

Fields 26-32 were to be copied from the voter registration card:

26. circumscription
27. electoral zone
28. voting section
29. registration number
30. municipality
31. municipality code
32. voter's name

Brazil 1994
Election Technology Assessment
February 28, 1995

Additional spaces were provided for the registrant's right thumbprint or signature, date and place of completion of the form, signature of the registration clerk, and for approval of the registration request by an electoral judge.

The form's instructions required the registrant to present either a national identity card, a birth certificate from the civil registry, or a military service certificate in order to register. In order to request changes, the individual was required to present their current registration card (or in case of a name change, the official document showing the change).

Note that the form is not pre-numbered, impeding adequate control of the stock of forms. The FAE form is a two-part form, with the second copy produced by a carbon interleaf.

ALISTAMENTO
ELEITORAL

RESERVES AND LIABILITIES

ମାମୁଳା ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ମାମୁଳାଗୁଡ଼ିକର ସମୀକ୍ଷା

02	INSC.	TRANSF.	REVISÃO	03	INDICACAO MESSARIO
	1	3	5		7

CE	MUNICIPIO	CE	ZONA	DT	LOCAL

01

09 FILIAÇÃO	
PAI →	
MÃE →	

[illegible]

13	NÚMERO	14	ANDAR, SALA, APARTAMENTO	15	C.E.P.
----	--------	----	--------------------------	----	--------

16 DATA DO NASCIMENTO	17 SEXO	18 ESTADO CIVIL	SEPARADO JUDICIALMENTE	DIVORCIADO			
	MASC.	FEM.	SOLTEIRO	CASADO	VÍUVO		
	2	4	1	3	5	7	9

19. GRAU DE INSTRUÇÃO					20. CURSO COMPLETO	
ANALFABETO	LÊ E ESCRIVE	1º GRAU	2º GRAU	SUPERIOR	SIM	NÃO
2	4	6	8	1	3	5

21	OCUPAÇÃO PRINCIPAL (DENOMINAÇÃO)	22	CÓDIGO
----	----------------------------------	----	--------

23	MUNICÍPIO E U.F. ONDE NASCEU	24	CÓDIGO	25	CARTEIRA DE IDENT. (SE POSSUIR) VOTO EMITENTE
----	------------------------------	----	--------	----	---

PREENCHER OS CAMPOS ABAIXO COPIANDO DO TITULO ELEITORAL

26	CIRCUNSCRIÇÃO	27	ZONA	28	SEÇÃO	29	Nº DA INSCRIÇÃO

30	MUNICIPIO		31	CÓDIGO	
----	-----------	--	----	--------	--

[illegible]

POLEGAR DIREITO <input type="checkbox"/>	REQUER O ALISTAMENTO E DECLARA SEREM VERDADEIRAS AS INFORMAÇÕES ACIMA PRESTADAS	ATESTO QUE, EM MINHA PRESENÇA, O ALISTANDO APÓS NESTE REQUERIMENTO.
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	LOCAL <div style="border: 1px solid black; height: 30px; width: 100%;"></div>	SUA ASSINATURA <input type="checkbox"/> POLEGAR DIREITO <input type="checkbox"/>
ASSINATURA OU IMPRESSÃO DIGITAL DO ALISTANDO	DATA <div style="border: 1px solid black; height: 30px; width: 100%;"></div>	ASSINATURA DO FUNCIONÁRIO OU PREPARADOR ELEITORAL <div style="border: 1px solid black; height: 30px; width: 100%;"></div>
	DEFIRO O ALISTAMENTO	DATA <div style="border: 1px solid black; height: 30px; width: 100%;"></div>
		ASSINATURA DO JUIZ ELEITORAL <div style="border: 1px solid black; height: 30px; width: 100%;"></div>

OBSERVAÇÕES AO ALISTANDO

- 1- PREENCHER A MÁQUINA OU EM LETRA DE FORMA, NESTE CASO, USAR CANETA AZUL OU PRETA.
- 2- PARA O ALISTAMENTO ELEITORAL, APRESENTAR UM DOS SEGUINTE DOCUMENTOS:
- a — CARTEIRA DE IDENTIDADE, EXPEDIDA POR ÓRGÃO OFICIAL COMPETENTE.
 - b — CERTIDÃO DE IDADE, EXTRAÍDA DO REGISTRO CIVIL.
 - c — CERTIFICADO DE QUITAÇÃO DO SERVIÇO MILITAR.
- 3- PARA A REVISÃO DO ALISTAMENTO, APRESENTAR O TÍTULO ELEITORAL E, EM CASO DE ALTERAÇÃO DO NOME, APRESENTAR TAMBÉM O DOCUMENTO COMPROVATÓRIO.
- 4- NO FORMULÁRIO NÃO PREENCHER OS ESPAÇOS RELATIVOS AOS ITENS 01, 02, 03, 04, 05, 06, 07, 22, 24, 31.
- 5- NOS ITENS 09 e 10 ESCREVER OS NOMES COMPLETOS.
- 6- NO ITEM 18 O ESPAÇO 7, SEPARADO JUDICIALMENTE, ABRANGE TAMBÉM OS DESOQUITADOS SEGUNDO A LEI ANTERIOR.

The voter registration form (*Formulário de Alistamento Eleitoral - FAE*) used in 1994 contained the following information:

1. empty field for data processing use
2. code for type of operation
 - 1 = initial registration
 - 3 = transfer within state
 - 5 = transfer between states
 - 7 = revision
 - 9 = request for second copy
3. empty field for general use; special codes are inserted to indicate such things as poll worker status, invalid birth date, twin or homonym, or special transfer
4. registration number; preprinted stickers are used for new registrations and transfers between states
5. state code
6. municipality code
7. electoral zone
8. voting place
9. full name
10. date of birth
11. gender
12. marital status
13. education
14. primary occupation
15. occupation code
16. state and municipality of birth
17. code for municipality of birth
18. previous voting location (in case of transfers between states)
19. previous voting state
20. previous registration number
21. municipality
22. postal code
23. street name, street number, floor/room/apartment, neighborhood/district
24. parents' names
25. empty field

Additional spaces were provided for the registrant's right thumbprint or signature, date and place of completion of the form, signature of the registration clerk, and for approval of the registration request by an electoral judge.

Brazil 1994
Election Technology Assessment
February 28, 1995

The form's instructions required the registrant to present either a national identity card, a birth certificate from the civil registry, or a military service certificate in order to register. In order to request changes, the individual was required to present their current registration card (or in case of a name change, the official document showing the change).

Note that the form is not pre-numbered, impeding adequate control of the stock of forms. The revised FAE form is a single-part form. A detachable receipt at the bottom is given to the voter once the form is completed.

LEON

APPENDIX C

The voter record change form (*Formulário de Acompanhamento da Situação do Eleitor -FASE*) form used in 1989 contained the following information:

- 26. empty field for data processing use
- 27. type of action (replacement or change of status)
- 28. voter registration number
- 29. state
- 30. municipality code
- 31. electoral zone
- 32. name
- 33. options
 - a. cancellation because of death
 - b. cancellation because of duplicate registration
 - c. cancellation for not voting
 - d. cancellation [suspension] during obligatory military service (all other military personnel are eligible to vote)
 - e. cancellation for age over 70
 - f. cancellation for physical incapacity
 - g. situation resolved by payment of fine
 - h. registration approved following hold
 - i. did not vote in assigned location
 - j. voted special ballot
 - k. other (from separate table of options)
- 34. date of situation necessitating change
- 35. additional information (from a separate table of options)
- 36. date of completion
- 37. registration clerk's name and number

FASE

02 COMANDO

2ª VIA 7

REGISTRO SITUÇÕES 9

01 PARA USO DO PROCESSAMENTO

03 Nº DA INSCRIÇÃO DO ELEITOR

3 6 6 7 6 6 1 0 4 6 9

04 U.F.

R S

05 MUNICÍPIO

CÓDIGO 8 8 1 3 7

06 ZONA

NÚMERO 1 5 7

07 NOME DO ELEITOR

IVARDIR CARDOSO

08 ASSINALAR COM UM "X" APENAS UMA DAS OPÇÕES.

019 CANCEL. (FALECIMENTO)

051 CANCEL. (MAIOR DE 70 ANOS)

086 INSCRIÇÃO LIBERADA

027 CANCEL. (DUPLA INSCRIÇÃO)

060 CANCEL. (INCAPACIDADE FÍSICA)

094 NÃO VOTOU NA SEÇÃO

035 CANCEL. (DEIXOU DE VOTAR)

078 QUITOU - SE POR MULTA

108 VOTOU EM SEPARADO

043 CANCEL. (PRAGA DE PRÉ)

INFORMAR O CÓDIGO, SE DIFERENTE DOS PREVISTOS NESTE FORMULÁRIO

VER TABELA DE SITUAÇÕES

2 2 1

09 DATA OCORRÊNCIA DA SITUAÇÃO

DIA MÊS ANO

1 9 1 0 8 9

10 COMPLEMENTO DA SITUAÇÃO (VER TABELAS DE SITUAÇÕES)

P D T

11 DATA PREENCHIMENTO

DIA MÊS ANO

1 9 1 0 8 9

12 MATRÍCULA E ASSINATURA DO FUNCIONÁRIO OU PREPARADOR ELEITORAL

0 1 4 0

The voter record change form (*Formulário de Acompanhamento da Situação do Eleitor -FASE*) used in 1994 contained the following information:

1. empty field for data processing use
2. type of action (already completed with code for Indication of Status)
3. state
4. electoral zone
5. date of completion
6. registration clerk's name and number

The following information is then completed for up to 10 voters:

1. name
2. voter registration number
3. options
 - a. cancellation because of death
 - b. cancellation because of duplicate registration
 - c. cancellation for not voting
 - d. suspension during obligatory military service (all other military personnel are eligible to vote)
 - e. cancellation for age over 70
 - f. cancellation for physical incapacity
 - g. situation resolved by payment of fine
 - h. registration approved following hold
 - i. did not vote in assigned location
 - j. voted special ballot
 - k. cancellation because of transfer
 - l. cancellation by judicial order
 - m. cancellation because of foreign citizenship
 - n. justified not voting
 - o. selected to be poll worker
 - p. member of a political party
 - q. proven situation of twin or homonym
 - r. elected to public office
 - s. cancelled because of loss of political rights
 - t. political rights suspended
 - u. political rights reestablished
 - v. sentenced to prison
 - w. reactivated after erroneous cancellation
 - x. cancelled after choosing to exercise political rights in Portugal
 - y. provisional registration

Brazil 1994
Election Technology Assessment
February 28, 1995

- z. blind
 - aa. left political party
 - ab. coincident names
 - ac. unable to pay fine because of poverty
 - ad. valid birth date
 - ae. cancelled for electoral law infraction
 - af. requested to vote abroad
 - ag. cancelled because of irregular registration
 - ah. chose Brazilian nationality
 - ai. restored after resolution of coincident name with suspended registration
 - aj. restored after resolution of coincident name with individual whose political rights
were revoked
 - ak. voted absentee
- 4. date of situation necessitating change
 - 5. additional information (from a separate table of options)



FORMULÁRIO DE ACOMPANHAMENTO
DE SITUAÇÃO DO ELEITOR

FASE

01	OPER.	02	U.F.	03	ZONA
	6				

NOME DO ELEITOR	04	Nº DE INSCRIÇÃO
-----------------	----	-----------------

05	CÓD. SITUAÇÃO	06	DATA DE OCORRÊNCIA DA SITUAÇÃO	07	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	08	Nº DE INSCRIÇÃO
-----------------	----	-----------------

09	CÓD. SITUAÇÃO	10	DATA DE OCORRÊNCIA DA SITUAÇÃO	11	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	12	Nº DE INSCRIÇÃO
-----------------	----	-----------------

13	CÓD. SITUAÇÃO	14	DATA DE OCORRÊNCIA DA SITUAÇÃO	15	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	16	Nº DE INSCRIÇÃO
-----------------	----	-----------------

17	CÓD. SITUAÇÃO	18	DATA DE OCORRÊNCIA DA SITUAÇÃO	19	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	20	Nº DE INSCRIÇÃO
-----------------	----	-----------------

21	CÓD. SITUAÇÃO	22	DATA DE OCORRÊNCIA DA SITUAÇÃO	23	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	24	Nº DE INSCRIÇÃO
-----------------	----	-----------------

25	CÓD. SITUAÇÃO	26	DATA DE OCORRÊNCIA DA SITUAÇÃO	27	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	28	Nº DE INSCRIÇÃO
-----------------	----	-----------------

29	CÓD. SITUAÇÃO	30	DATA DE OCORRÊNCIA DA SITUAÇÃO	31	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	32	Nº DE INSCRIÇÃO
-----------------	----	-----------------

33	CÓD. SITUAÇÃO	34	DATA DE OCORRÊNCIA DA SITUAÇÃO	35	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

NOME DO ELEITOR	36	Nº DE INSCRIÇÃO
-----------------	----	-----------------

37	CÓD. SITUAÇÃO	38	DATA DE OCORRÊNCIA DA SITUAÇÃO	39	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------


NOME DO ELEITOR	40	Nº DE INSCRIÇÃO
-----------------	----	-----------------

41	CÓD. SITUAÇÃO	42	DATA DE OCORRÊNCIA DA SITUAÇÃO	43	COMPLEMENTO DA SITUAÇÃO
----	---------------	----	--------------------------------	----	-------------------------

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX D

The *Título Eleitoral* includes the voter's name, date of birth, registration number, electoral zone, voting section, municipality and state, date of issuance, and signature of the electoral judge on the front and the voter's signature or right thumbprint on the reverse. The *Protocolo de Entrega do Título Eleitoral* includes the voting location, voter's parents' names, voter's name, registration number, municipality of birth, gender, marital status, level of instruction, primary occupation, gender flag, marital status flag, level of instruction flag, course completed flag, occupational code, date of birth, birthplace/birthplace code, and a space for the voter's signature or thumbprint.


REPÚBLICA FEDERATIVA DO BRASIL
JUSTIÇA ELEITORAL

LOCAL DE VOTAÇÃO

PROTOCOLO DE ENTREGA DO TÍTULO ELEITORAL

FILIAÇÃO _____

NOME DO ELEITOR _____ Nº INSCRIÇÃO _____ BV _____

MUNICÍPIO _____ Nº _____ ESTADO _____ GRAU DE INSCRIÇÃO _____ OFICINA PRINCIPAL _____

SEXO		ESTADO CIVIL				GRAU DE INSCRIÇÃO				CURSO COMPLETO				CÓD. OCUP.	
MASC.	FEM.	SOLTEIRO	CASADO	VIÚVO	SEPARADO	ANULADO	REINTEGRADO	1º GRAU	2º GRAU	3º GRAU	4º GRAU	5º GRAU	6º GRAU	7º GRAU	8º GRAU
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DATA DE NASCIMENTO _____ LOCAL DE NASCIMENTO _____

ASSINATURA OU IMPRESSÃO DIGITAL DO ELEITOR

REPÚBLICA FEDERATIVA DO BRASIL
TÍTULO ELEITORAL

NOME DO ELEITOR _____

DATA DE NASCIMENTO _____ Nº INSCRIÇÃO _____ BV _____ ZONA _____ SEÇÃO _____

MUNICÍPIO _____ DATA DE EMISSÃO _____

JUIZ ELEITORAL _____

VALOR EM DÍGITO DO TÍTULO ELEITORAL

ASSINATURA OU IMPRESSÃO DIGITAL DO ELEITOR

PREENCHER AQUI

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX E

Sample Ballots

Majority Election
Proportional Election

JUSTIÇA ELEITORAL

PARA PRESIDENTE

<input type="checkbox"/>	45 - FERNANDO HENRIQUE	PSDB
<input type="checkbox"/>	15 - ORESTES QUÉRCIA	PMDB
<input type="checkbox"/>	36 - CARLOS GOMES	PRN
<input type="checkbox"/>	13 - LULA	PT
<input type="checkbox"/>	11 - ESPERIDIÃO AMIN	PPR
<input type="checkbox"/>	20 - ALMIRANTE FORTUNA	PSC
<input type="checkbox"/>	56 - ENÉAS	PRONA
<input type="checkbox"/>	12 - BRIZOLA	PDT

PARA GOVERNADOR

<input type="checkbox"/>	121 - NELSON WEDEKIN	PDT
<input type="checkbox"/>	251 - JORGE KONDER BORNHAUSEN	PFL
<input type="checkbox"/>	151 - PAULO AFONSO	PMDB
<input type="checkbox"/>	111 - ANGELA AMIN	PPR

PARA SENADOR

(ASSINALE COM "X" DOIS NOMES)

<input type="checkbox"/>	132 - PROFESSOR MARCOS HERTER	PT
<input type="checkbox"/>	152 - CASILDO MALDANER	PMDB
<input type="checkbox"/>	112 - LUIZ GOMES - LULA	PPR
<input type="checkbox"/>	362 - GIOVANI DE LIMA	PRN
<input type="checkbox"/>	252 - VILSON KLEINUBING	PFL
<input type="checkbox"/>	222 - HONORATO ANTÔNIO TOMELIN	PL
<input type="checkbox"/>	133 - LUCI CHOINASCKI	PT
<input type="checkbox"/>	153 - DUWE ADEMAR	PMDB

BACK

<div>3. DOBRA</div>		<div>JUSTIÇA ELEITORAL</div> <div><div></div></div> <div><div></div></div> <div>Visto Presidente da Mesa</div> <div><div></div></div> <div>Visto Mesário</div> <div><div></div></div> <div>Visto Mesário</div>

JUSTIÇA ELEITORAL

2ª DOBRA

PARA DEPUTADO FEDERAL

(NOME OU Nº DO CANDIDATO OU SIGLA OU Nº DO PARTIDO)

1ª DOBRA

PARA DEPUTADO ESTADUAL

(NOME OU Nº DO CANDIDATO OU SIGLA OU Nº DO PARTIDO)

BACK

JUSTIÇA ELEITORAL



Presidente

Mesário

Mesário

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX F

Sample Ballot-Box Total Sheet (*Boletim de Urna*)

Santa Catarina (Majority Election)
Santa Catarina (Proportional Election)
São Paulo (Proportional Election)

TRIBUNAL REGIONAL ELEITORAL/SC
ELEIÇÕES DE 03/10/94

URNA
(MAJORITÁRIA)

01 / 01

MUNICÍPIO COO. MUNICÍPIO ZONA SEÇÃO JUNTA TURMA COMPARTECIMENTO

QUADRO 100 PRESIDENTE

L N	NOME CANDIDATO	COL 1 Nº CAND	COL 2 VOTOS	NOME CANDIDATO	COL 3 Nº CAND	COL 4 VOTOS	NOME CANDIDATO	COL 5 Nº CAND	COL 6 VOTOS	COL 7 FECHAMENTO
01	ESPERIDIAO AMIM	11		HERNANI FORTUNA	20		ENEAS CARREIRO	56		
02	LEONEL BRIZOLA	12		FLAVIO ROCHA CURCEL	22		CAETANA BATATO JUNIOR	70		
03	LUIZ F. LULA SILVA	13		WALTER QUEIROZ	36		BRANCOS	95		
04	ORESTES QUERCIA	15		FERNANDO M. CARDOSO	45		NULOS	96		
97	SOMA			SOMA			SOMA			

QUADRO 200 GOVERNADOR

L N	NOME CANDIDATO	COL 1 Nº CAND	COL 2 VOTOS	NOME CANDIDATO	COL 3 Nº CAND	COL 4 VOTOS	NOME CANDIDATO	COL 5 Nº CAND	COL 6 VOTOS	COL 7 FECHAMENTO
01	ANGELA AMIM HELOU	111		PAULO AFONSO VIEIRA	151		BRANCOS	95		
02	NELSON TEDEKIN	121		JORGE K. BORRHAUSEN	251		NULOS	96		
97	SOMA			SOMA			SOMA			

QUADRO 300 SENADOR

L N	NOME CANDIDATO	COL 1 Nº CAND	COL 2 VOTOS	NOME CANDIDATO	COL 3 Nº CAND	COL 4 VOTOS	NOME CANDIDATO	COL 5 Nº CAND	COL 6 VOTOS	COL 7 FECHAMENTO
01	LUIZ COMES	112		ADEMAR F. DUKE	153		BRANCOS	95		
02	LUIZ C. C. OLIVO	122		HONORATO A. TOLEIR	222		NULOS	96		
03	LUCI T. CHOINACKI	133		VILSON P. KLEINBING	252					
04	CASILDO J. BALDANER	152		JOAO LIMA	362					
97	SOMA			SOMA			SOMA (Nº DOBRO DO COMPARC.)			

ATA

PART. 100/RUBRICA

Em _____ de outubro de 1994, foi precedida a apuração da urna acima especificada, cujos resultados constam dos quadros para eleição majoritária, integrando este boletim de urna para processamento.

Os pressupostos da abertura e apuração da urna foram devidamente verificados pela Junta/casa.

ESTA URNA FOI APURADA EM DEFINITIVO? ☐ SIM ☐ NÃO ☐ HOUVE IMPUGNAÇÃO? ☐ SIM ☐ NÃO
ESTA URNA FOI ANULADA E APURADA EM SEPARADO? ☐ SIM ☐ NÃO ☐ HOUVE RECURSO? ☐ SIM ☐ NÃO
HISTÓRICO/OBSERVAÇÃO: NO VERSO?

PRESIDENTE

SECRETÁRIO

HOVE REP. COMITE INTERPART.

ASS. DO REPRESENTANT

BURO

TRIBUNAL REGIONAL ELEITORAL/SC

URNA.

011 / 08

ELEIÇÕES DE 03/10/94

(PROPORCIONAL)

MUNICÍPIO

COO. MUNICÍPIO

ZONA

SEÇÃO

JUNTA

TURMA

COMPARECIMENTO

DEPUTADO FEDERAL

QUADRO 411 PARTIDO PPR

L		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
N	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	PAULO A. DUARTE	1101		VASCO FURLAN	1120		PAULO BAUER	1190		
02	JOÃO A. P. JUNIOR	1111		ANTONIO CHIZZO	1123		LEGENDA	11		
03	MARIO CAVALLAZZI	1112		HUGO BIEHL	1130					
04	JARVIS CAID	1113		FERNANDO HOFFMANN	1133					
97	SOMA			SOMA			SOMA			

QUADRO 412 PARTIDO PDT

L		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
N	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	LEONEL PAVAN	1201		CESAR DAMIANI	1213		DERCIO KNOP	1234		
02	ANTONIO VENTON	1210		ROCI PELIZZETI	1224		ORLANDO KRAUTLER	1261		
03	SADY CAVIALHEIRO	1212		WILSON LANG	1230		LEGENDA	12		
97	SOMA			SOMA			SOMA			

QUADRO 413 PARTIDO PT

L		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
N	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	ODAIR ANDRIANI	1310		WILTON OLIVEIRA	1333		VERA CASTELLAIN	1394		
02	INEIR WITTMANN	1311		JOSE FRITSCH	1340		LEGENDA	13		
03	VANIO DOS SANTOS	1313		JOAO SOCAR	1346					
97	SOMA			SOMA			SOMA			

QUADRO 414 PARTIDO PTB

L		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
N	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
	ROBERTO ZIMMERMANN	1414					LEGENDA	14		
97	SOMA						SOMA			

ATA

PARTIDO/RUBRICA

de outubro de 1994, foi procedida a apuração da urna acima especificada, cujos resultados constantes das quadras para eleição proporcional, bem como das folhas de Cargo, anexas, integram este boletim de Urna para processamento.

Os pressupostos da abertura e apuração da urna foram devidamente verificados pela Junta/mesa.

SIM

NÃO

SIM

NÃO

ESTA URNA FOI APURADA EM DEFINITIVO?

☐☐

HOUVE IMPUGNAÇÃO?

☐☐

ESTA URNA FOI ANULADA E APURADA EM SEPARADO?

☐☐

HOUVE RECURSO?

☐☐

HISTÓRICO/OBSERVAÇÃO NO VERSO?

PRESIDENTE

SECRETÁRIO

NOME REP. COMITE INTERPAT.

REP. COMITE INTERPAT. DO REPRESENTANTE

JUSTIÇA ELEITORAL
TRE/SC
ELEIÇÕES DE 03/10/94

BOLETIM DE URNA
COD. MUNICÍPIO ZONA SEÇÃO JUNTA TURMA

AUTENTICAÇÃO
PRESIDENTE SECRETÁRIO

DEPUTADO ESTADUAL

PÁGINA: 08/08

QUADRO 641 PARTIDO PSD										
L I N		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	FRANCISCO SILVA	41101		ALDO A. MAUL	41141		LEGENDA	41		
02	EVALDINO LEITE	41120								
97	SOMA			SOMA			SOMA			

QUADRO 643 PARTIDO PV									
L I N	COL 1	COL 2	COL 3	COL 4	COL 5	COL 6	COL 7		
	NOME CANDIDATO	Nº CAND.						VOTOS	NOME CANDIDATO
01	LUIZ C. MARTINS	43101			LEGENDA	43			
97	SOMA				SOMA				

QUADRO 644 PARTIDO PRP										
L I N		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	ALMIR O. SOUZA	4 4 4 4 4					LEGENDA	4 4		
97	SOMA						SOMA			

QUADRO 645 PARTIDO PSDB										
L N		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.	VOTOS	FECHAMENTO
01	RESIO TUMELERO	45101		ISMAEL DOS SANTOS	45123		LUIZ E. CHEREM	45188		
02	ANDERLEI ANTONELLI	45111		NELSON O. DE SOUZA	45133		OSVALDO DA LUZ	45195		
03	FRANCISCO A. KUSTER	45113		OLDIR CALDAS	45145		MARCELO A. M. RECO	45199		
04	ADMIR A. BORTOLINI	45120		JOSE C. FLORENÇA	45155		LEGENDA	45		
05	JOSE B. SILVEIRA	45121		OCTAVIO V. COSTA	45167					
06	PEDRO A. CAZANICA	45122		VILI MAZZINI	45170					
97	SOMA			SOMA			SOMA			

QUADRO 665 PARTIDO PC DO B										
L I N	COL 1	COL 4		COL 3	COL 4		COL 5	COL 6	COL 7	
	NOME CANDIDATO	Nº CAND.		VOTOS	NOME CANDIDATO		Nº CAND.	VOTOS	NOME CANDIDATO	Nº CAND.
01	JOAO CRIZONI	65165					LEGENDA	65		
97	SOMA						SOMA			

QUADRO 700 RESUMO DEPUTADO ESTADUAL										
L I N	SIGLA PARTIDO	COL 1	COL 2	SIGLA PARTIDO	COL 3	COL 4	SIGLA PARTIDO	COL 5	COL 6	COL 7
		Nº DO PART.	TOTAL DE VOTOS		Nº DO PART.	TOTAL DE VOTOS		Nº DO PART.	TOTAL DE VOTOS	FECHAMENTO
01	PPR	11		PSC	20		PV	43		
02	PDT	12		PCB	21		PSDB	45		
03	PT	13		PL	22		PC do B	65		
04	PTB	14		PPS	23		BRANCOS	95		
05	PMOB	15		PFL	25		NULOS	96		
06	PSTU	16		PMN	33					
07	PTBB	17		PSB	40					

1. SARGENTO SENNA



JUSTIÇA ELEITORAL
TRIBUNAL REGIONAL ELEITORAL/SP
ELEIÇÕES DE 03/10/94

BOLETIM DE
URNA
PROPORCIONAL

01 23

MUNICÍPIO CÔD. MUNICÍPIO ZONA SEÇÃO JUNTA TURMA COMPARECIMENTO

ATA		PARTIDO/RUBRICA
Em 03 de outubro de 1994 foi procedida a apuração da urna acima especificada, cujos resultados constantes dos quadros para eleição proporcional, bem como das folhas de Cargo, anexas, integram este boletim de Urna para processamento.		
Os pressupostos da abertura e apuração da urna foram devidamente verificados pela junta/mesa.		
ESTA URNA FOI APURADA EM DEFINITIVO?	SIM NÃO	
ESTA URNA FOI ANULADA E APURADA EM SEPARADO?	SIM NÃO	
HISTÓRICO/OBSERVAÇÃO NO VERSO?	SIM NÃO	
PRESIDENTE	SECRETÁRIO	NOME REP. COMITÊ INTERPART. ASS. DO REPRESENTANTE

DEPUTADO FEDERAL

QUADRO 411 PARTIDO PPR

L I N	NOME CANDIDATO	COL 1 Nº CAND.	COL 2 VOTOS	NOME CANDIDATO	COL 3 Nº CAND.	COL 4 VOTOS	NOME CANDIDATO	COL 5 Nº CAND.	COL 6 VOTOS	COL 7 FECHAMENTO
01	GASPARINI	1101		CARLINHOS	1125		ARNALDO F DE SÁ	1152		
02	ABREU NAPOLEÃO	1102		ZÉ DA ESTRADA	1126		PEDRO MACEDO	1154		
03	MARTELLO	1103		MANÉ DOS DOCES	1127		DR. WAGNER	1155		
04	MARAO	1104		ALTINO FILHO	1128		JOSÉ TROVATO	1156		
05	EDUARDO FERNANDE	1105		MARCILIO CARRA	1129		DONA HENRIQUETA	1157		
06	PEDRO PAVÃO	1106		BOLSONARO	1130		PAULO NAVARRO	1159		
07	EVALDO SILVA	1107		ANTONIO DE NOCE	1131		ROGER LIN	1160		
08	APARECIDO OTAVI	1108		JERONIMO	1132		CUNHA BUENO	1161		
09	CHIQUEINHO CENI	1109		REYNALDO COSENZ	1133		GERMANO SIGAUD	1163		
10	GETULIO HANASHI	1110		SERGIO MAURAND	1134		NADIR GIDEAO	1164		
11	DELFIN NETTO	1111		MANGEL CARLOS	1135		RENATO CORDEIRO	1166		
12	RICARDO IZAR	1112		SARGENTO BISPO	1136		MIGUEL FERNANDE	1168		
13	SILVIO ROCHA	1113		CLEMENTINO TORR	1138		JOA CAITANO	1170		
14	AIRTON LAURIANO	1114		URUBATAN	1139		ANTONIO ELIAS	1176		
15	TADASHI	1115		CHAFIC FARHAT	1140		ARMANDO PINHEIRO	1177		
16	JACY RIOS	1116		PAPAL NOEL	1141		GESOFATO VERNIN	1178		
17	EYMAEL	1117		WALDIR DE LIMA	1142		JURANDIR SALVAR	1180		
18	FRANCISCO MORAES	1118		MARCELINO ROMANO	1144		AMIRAH SABA	1188		
19	LAZARO ALVES DA	1119		GRECCO	1146		OSMIR BIFANO	1189		
20	BETO MANSUR	1120		COMENDADOR	1147		CORONEL BRAGA	1190		
21	GENILSON SENCHE	1121		DR. TOSHIO	1149		MARIA JOSÉ	1191		
22	ELISEU LEMES DA	1122		ALEXANDRE TOLIE	1150		SARGENTO SENNA	1194		
23	EGON BRAUN	1123		ALVARO BIANCHIM	1151			11		
97	SOMA			SOMA						

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX G

Sample BU Verification Printout

4- RELATÓRIOS

Espelho do BU

TRIBUNAL SUPERIOR ELEITORAL - TSE/RR
SECRETARIA DE INFORMATICA
ELEICOES GERAIS DE 1994 - DIGITACAO - Versao 1.3

000
09/09/94 as 16:42:2
Micro: 001 EL32018

ESPELHO DO BU - URNA APURADA - ELEICAO MAJORITARIA

DIGITADOR [909]
MUNICIPIO [03018] - BOA VISTA

[ZONA [0001] SECAO [0041] JUNTA [0017], TURNA [0002] APTOS : [0473]
COMPAREC.[0480]

QUADRO 100 - PRESIDENTE

		COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7
LIN	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	FECHAMENTO
01	ARMANDO	11	48	FRANCISCO	22	40	CAMILO	43	50	138
02	JORGE	12	52	PAULO CESAR	25	55	BRANCOS	95	54	161
03	MARCELINO	13	45	MAURO	41	38	NULOS	96	58	141
04	MARCOS	15	40							40
97	SOMA		185	SOMA		133	SOMA		162	480

QUADRO 200 - GOVERNADOR

	COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7	
LIX	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	FECHAMENTO
01	ANTONIO AIRTON	121	85	CESAR AUGUSTO	151	60	BRANCOS	95	40	185
02	ELYRIA ALZIRA	131	75	GETULIO ALBERTO	451	80	NULOS	96	60	215
03	NEUDO REBEIRO	141	80							80
97	SOMA		240	SOMA		140	SOMA		100	480

QUADRO 300 - SENADOR

	COL 1	COL 2		COL 3	COL 4		COL 5	COL 6	COL 7	
LIN	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	NOME CAND.	N.CAND	VOTOS	FECHAMENTO
01	ROBERTO JUCA	112	110	ANTONIO DE BRIT	143	210	FRANCISCO ADALB	142	52	372
02	JULIO AUGUSTO	122	115	BARAC DA SILVA	252	240	BRANCOS	95	35	390
03	MARIA MARLUCE	142	80	JAMIL JOSE	333	50	NULOS	96	68	198
97	SOMA		305	SOMA		500	SOMA		155	960

*** Comparecimento maior que aptos da secao (Abstencao negativa)

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX H

The *Justificação Eleitoral (JE)* includes the voter's name, state, electoral zone, date of birth, registration number, parents' names, place and date of completing the form, voter's signature or thumbprint, and stamp of the post office where the form was submitted. The form is pre-numbered. The detachable receipt includes the matching serial number of the form, the name of the voter, the place and date of completing the form, and the stamp of the post office where the form was submitted. The receipt serves as proof of good standing vis-a-vis the electoral authorities.

FRONT

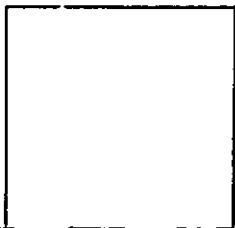
JUSTIÇA ELEITORAL Nº 4510927

JUSTIFICAÇÃO ELEITORAL

(NOME COMPLETO DO ELEITOR EM LETRA DE FORMA)

ATRAVÉS DESTA COMPROVANTE DE REMESSA DE JUSTIFICAÇÃO ELEITORAL, DE MESMO NÚMERO, CARIMBADO PELA AGÊNCIA DO CORREIO NA DATA DA ELEIÇÃO, OU PELA REPARTIÇÃO CONSULAR BRASILEIRA EM ATÉ 30 DIAS APÓS, E DIRIGIDA AO TRIBUNAL REGIONAL NELA INDICADO, PROVA, PARA TODOS OS EFEITOS LEGAIS, REGULARIDADE PARA COM A JUSTIÇA ELEITORAL.

LOCAL E DATA



Nº 4510927

Exmo. Sr. Dr. Juiz Eleitoral.

CONTROLE TRE

(NOME COMPLETO DO ELEITOR EM LETRA DE FORMA)

ELEITOR INSCRITO NESTA CIRCUNSCRIÇÃO, DE ACORDO COM OS DADOS MENCIONADOS A SEGUIR, ENCONTRANDO-SE AUSENTE DE SEU DOMÍLIO ELEITORAL, VEM COMUNICAR A V. EXª, NOS TERMOS DA LEGISLAÇÃO EM VIGOR, A IMPOSSIBILIDADE DE CUMPRIR A OBRIGATORIEDADE DO VOTO.

DADOS DO TÍTULO DE ELEITOR

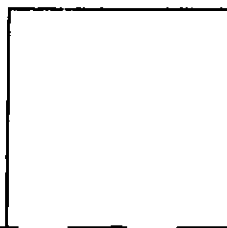
UF	ZONA	DATA DE NASCIMENTO	Nº DE INSCRIÇÃO
			TRE

FILIAÇÃO

NOME DO PAI :

NOME DA MÃE :

LOCAL E DATA



LOCAL E DATA

(ASSINATURA OU IMPRESSÃO DIGITAL)

POLÍCAR



EMPRESA BRASILEIRA DE CORREIOS E TELÉGRAFOS

JUSTIFICAÇÃO ELEITORAL



Ao

TRIBUNAL REGIONAL ELEITORAL

INSTRUÇÕES PARA O ELEITOR

- 1 - PREENCHA A MÁQUINA OU COM LETRA DE IMPRENSA E APRESENTE O FORMULÁRIO, NO DIA DA ELEIÇÃO, EM QUALQUER AGÊNCIA DOS CORREIOS OU REPARTIÇÃO CONSULAR, EM ATÉ 30 DIAS NA HIPÓTESE DE ESTAR EM TERRITÓRIO ESTRANGEIRO.
- 2 - O FUNCIONÁRIO QUE O ATENDER APLICARÁ CARIMBO DE RECEPÇÃO NA PARTE DESTACÁVEL, QUE LHE SERÁ DEVOLVIDA.
- 3 - A PARTE DESTACÁVEL, DEVIDAMENTE CARIMBADA, É DOCUMENTO COMPROBATÓRIO DA JUSTIFICAÇÃO. SE NÃO VAI VOLTAR A RESIDIR NA ZONA ELEITORAL DE QUE É ELEITOR, REQUEIRA TRANSFERÊNCIA PARA A CIDADE EM QUE FOR MORAR. O NOVO TÍTULO, EXPEDIDO EM DATA POSTERIOR À ÚLTIMA ELEIÇÃO, PROVARÁ A SUA QUITAÇÃO COM A JUSTIÇA ELEITORAL.

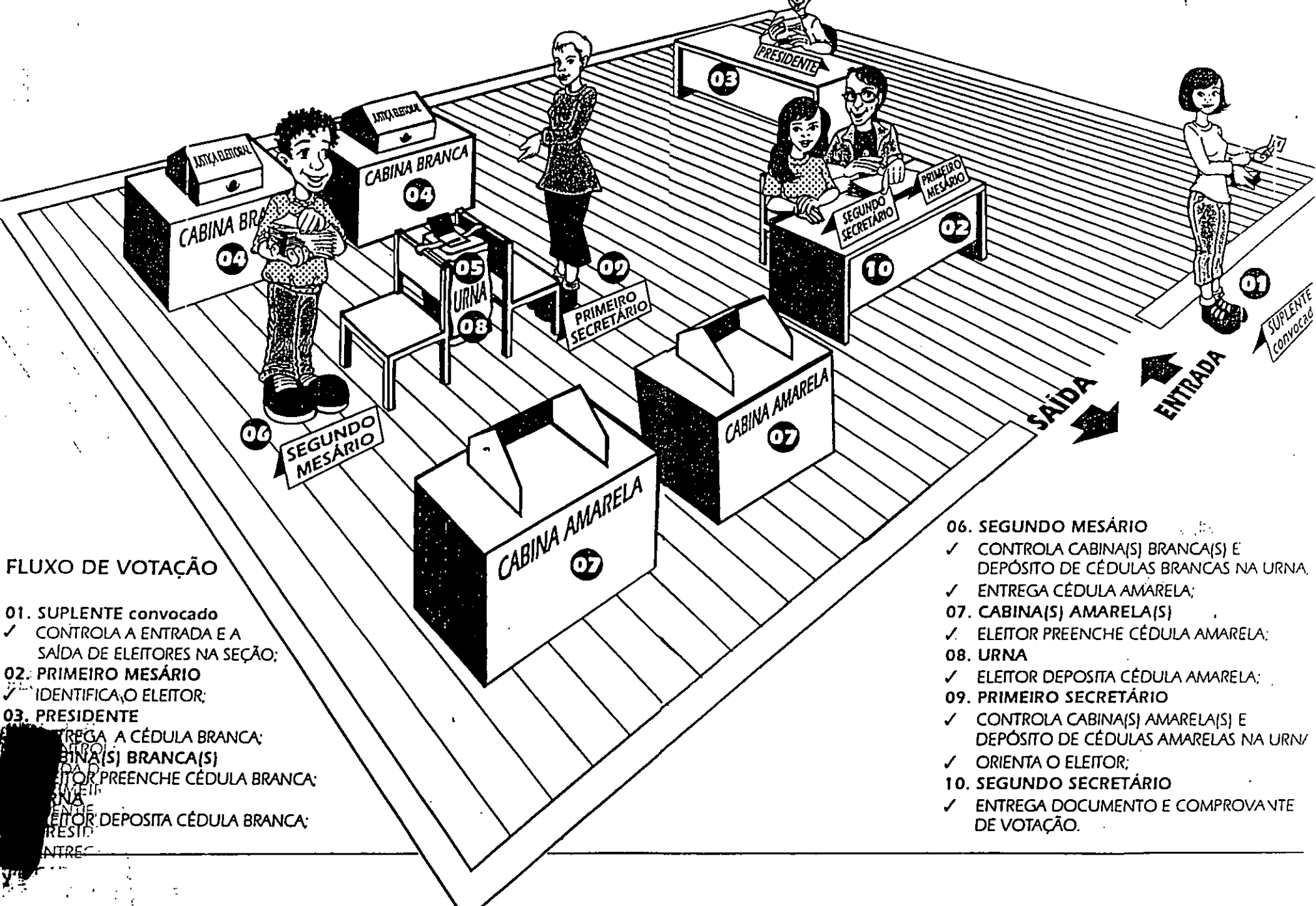
BACK

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX I

Layout of Typical Polling Station

EXEMPLO DE SEÇÃO ELEITORAL COM 4 CABINAS



FLUXO DE VOTAÇÃO

01. SUPLENTE convocado
- ✓ CONTROLA A ENTRADA E A SAÍDA DE ELEITORES NA SEÇÃO;
02. PRIMEIRO MESÁRIO
- ✓ IDENTIFICA O ELEITOR;
03. PRESIDENTE
- ✓ ENTREGA A CÉDULA BRANCA;
- ✓ CONTROLA CABINA(S) BRANCA(S) E DEPÓSITO DE CÉDULAS BRANCAS NA URNA;
- ✓ ELEITOR PREENCHE CÉDULA BRANCA;
- ✓ ELEITOR DEPOSITA CÉDULA BRANCA;
- ✓ PRESIDENTE
- ✓ ENTREGA

06. SEGUNDO MESÁRIO
- ✓ CONTROLA CABINA(S) BRANCA(S) E DEPÓSITO DE CÉDULAS BRANCAS NA URNA;
- ✓ ENTREGA CÉDULA AMARELA;
07. CABINA(S) AMARELA(S)
- ✓ ELEITOR PREENCHE CÉDULA AMARELA;
08. URNA
- ✓ ELEITOR DEPOSITA CÉDULA AMARELA;
09. PRIMEIRO SECRETÁRIO
- ✓ CONTROLA CABINA(S) AMARELA(S) E DEPÓSITO DE CÉDULAS AMARELAS NA URNA;
- ✓ ORIENTA O ELEITOR;
10. SEGUNDO SECRETÁRIO
- ✓ ENTREGA DOCUMENTO E COMPROVANTE DE VOTAÇÃO.

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX J

Organization Chart of Vote Counting Center

JUNTA ELEITORAL - ORGANOGAMA

JUIZ PRESIDENTE

SECRETARIA GERAL

SECRETÁRIO GERAL
2 SECRETÁRIOS

1ª TURMA APURADORA
MEMBRO EFETIVO

2ª TURMA APURADORA
MEMBRO EFETIVO

3ª TURMA APURADORA
MEMBRO EFETIVO

4ª TURMA APURADORA
MEMBRO EFETIVO

5ª TURMA APURADORA
MEMBRO EFETIVO

6ª TURMA APURADORA
MEMBRO SUPLENTE

7ª TURMA APURADORA
MEMBRO SUPLENTE

8ª TURMA APURADORA
MEMBRO SUPLENTE

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

5 ESCRUTINADORES
1 SECRETÁRIO

Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX K

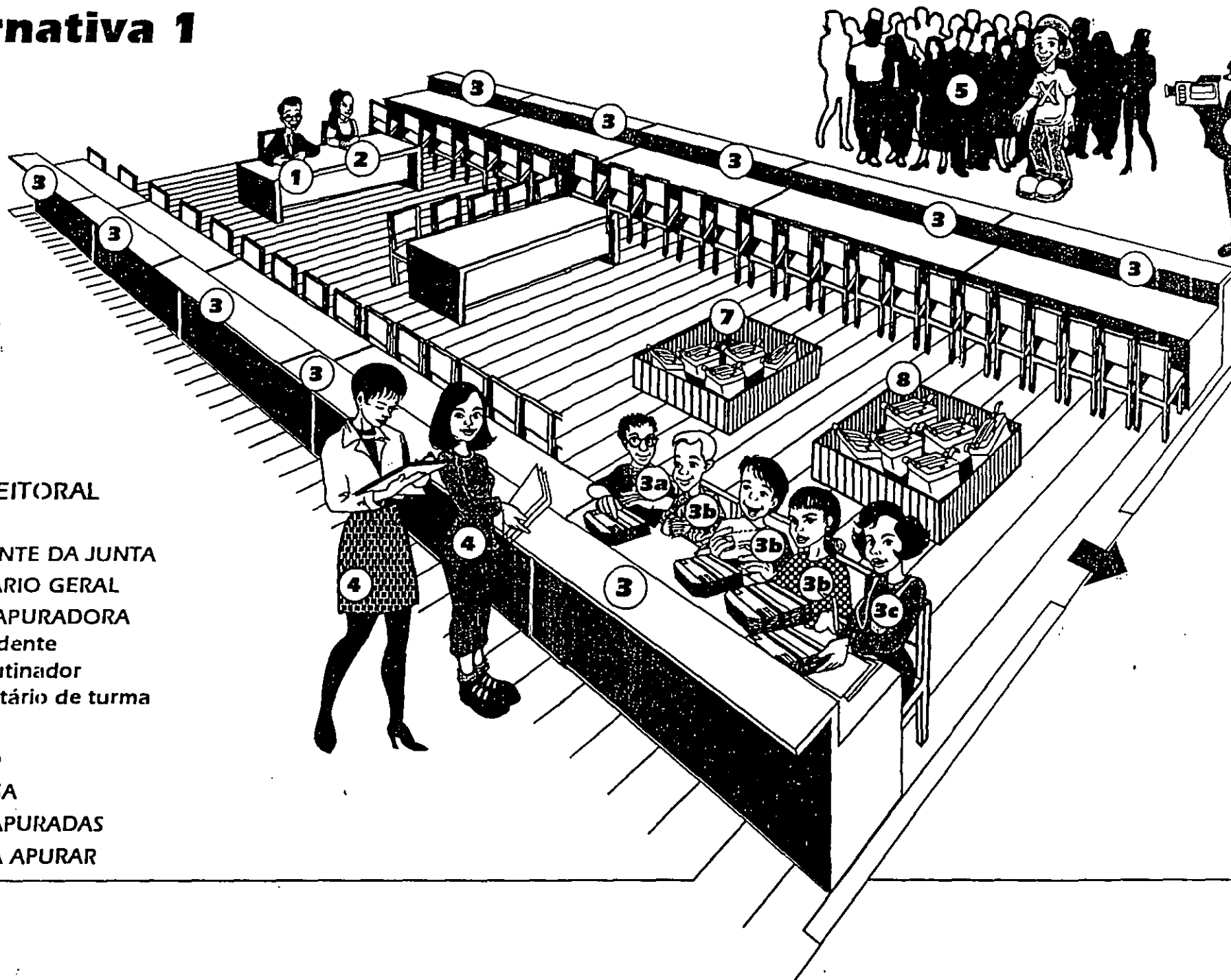
Layout of Typical Vote Counting Center

JUNTA ELEITORAL

Alternativa 1

JUNTA ELEITORAL

1. PRESIDENTE DA JUNTA
2. SECRETÁRIO GERAL
3. TURMA APURADORA
 - 3a. Presidente
 - 3b. Escrutinador
 - 3c. Secretário de turma
4. FISCAL
5. PÚBLICO
6. IMPRENSA
7. URNAS APURADAS
8. URNAS A APURAR



Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX L

Election Administration Structure

Brazil 1994
 Election Technology Assessment
 February 28, 1995

Brazil	Regional Electoral Tribunals	Electoral Zones (1993)	Polling Stations (1993)	Registered Voters (1993)
Tribunal Superior Eleitoral	Acre	8	766	237,001
	Alagoas	53	4,347	1,041,236
	Amapá	5	469	169,409
	Amazonas	57	3,067	1,012,167
	Bahia	229	22,821	6,701,738
	Ceará	101	15,124	3,809,457
	Distrito Federal	11	2,628	908,429
	Espírito Santo	50	5,735	1,618,431
	Goiás	120	8,064	2,514,553
	Maranhão	78	9,265	2,590,598
	Mato Grosso	36	4,128	1,196,767
	Mato Grosso do Sul	47	3,599	1,127,470
	Minas Gerais	300	31,642	10,116,796
	Pará	72	9,678	2,645,323
	Paraíba	75	7,851	1,986,939
	Paraná	173	17,823	5,495,947
	Pernambuco	137	13,551	4,246,992
	Piauí	94	5,123	1,553,389
	Rio de Janeiro	117	22,454	8,732,024
	Rio Grande do Norte	68	5,094	1,417,805
	Rio Grande do Sul	168	22,196	6,069,273
	Rondônia	19	2,258	661,331
	Roraima	2	370	101,947
	Santa Catarina	82	11,172	2,974,926
	São Paulo	365	41,143	19,812,703
	Sergipe	33	2,852	891,788
	Tocantins	30	2,050	621,900

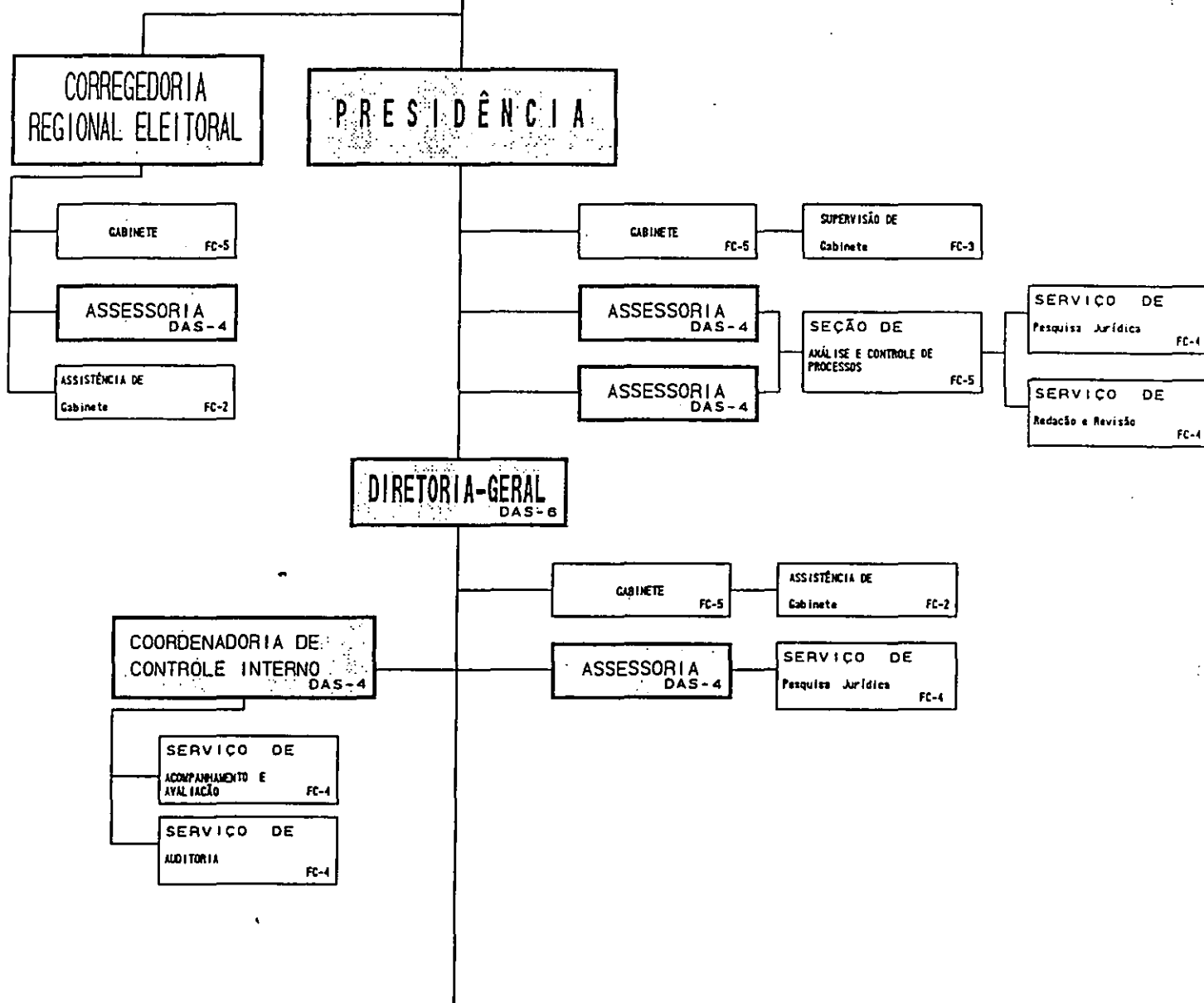
Brazil 1994
Election Technology Assessment
February 28, 1995

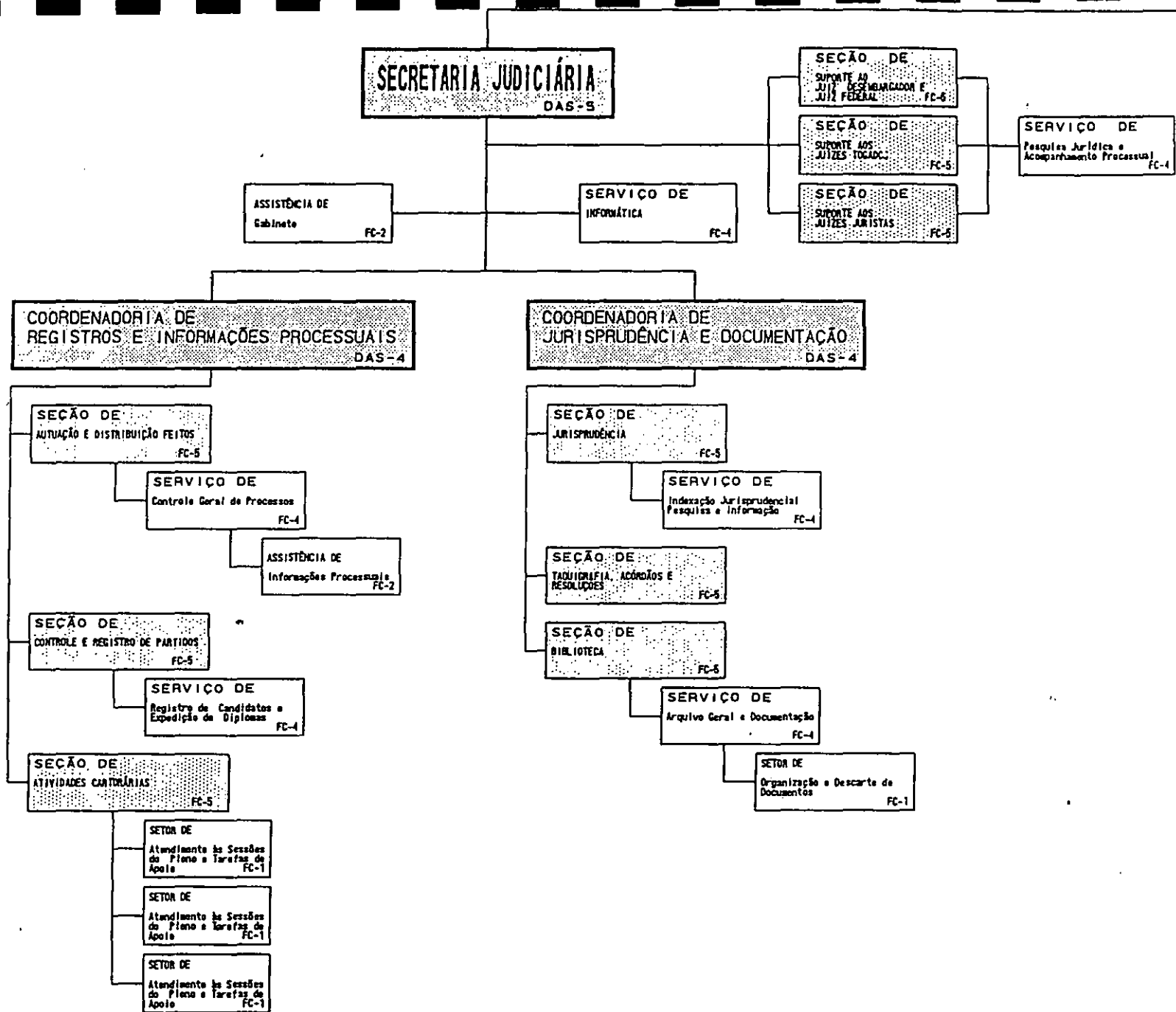
APPENDIX M

Organization Chart of TRE/SC

ANEXO

TRIBUNAL REGIONAL ELEITORAL
DE SANTA CATARINA





SECRETARIA DE ADMINISTRAÇÃO
DAS-5

ASSISTÊNCIA DE
Cabinete

FC-2

SERVIÇO DE
INFORMÁTICA

FC-4

COORDENADORIA DE
MATERIAL E PATRIMÔNIO
DAS-4

SEÇÃO DE
LICITAÇÕES E
CONTRATOS

FC-5

SERVIÇO DE
Compras

FC-4

SEÇÃO DE
PATRIMÔNIO E ALMOXARIFADO

FC-5

SERVIÇO DE
Controle Patrimonial

FC-4

SERVIÇO DE
Controle de Estoque

FC-4

SETOR DE
Armazenamento e
Distribuição

FC-1

COORDENADORIA DE
COMUNICAÇÕES
DAS-4

SEÇÃO DE
CONTROLE GERAL DE
DOCUMENTOS

FC-5

SERVIÇO DE
Protocolo e Distribuição de
Documentos

FC-4

SEÇÃO DE
TELECOMUNICAÇÕES

FC-5

SUPERVISÃO DE
Fax e Telex

FC-3

SEÇÃO DE
PROJETOS ESPECIAIS E
IMPRESSÃO

FC-5

SEÇÃO DE
EDITORAÇÃO E TRABALHOS
GRÁFICOS

FC-5

SERVIÇO DE
Confecção de Formulários

FC-4

COORDENADORIA DE
SERVIÇOS GERAIS
DAS-4

SEÇÃO DE
ADMINISTRAÇÃO GERAL

FC-5

SETOR DE
Xerox

FC-1

SETOR DE
Encadernação

FC-1

SETOR DE
Reposição de Materiais

FC-1

SERVIÇO DE
Manutenção de Equipamentos e
Móveis

FC-4

SETOR DE
Reparos

FC-1

SERVIÇO DE
Segurança e Transporte

FC-4

SUPERVISÃO DE
Manutenção de
Veículos

FC-3

SETOR DE
Segurança

FC-1

SERVIÇO DE
Expedição e Distribuição
de Correspondências

FC-4

COORDENADORIA
ORÇAMENTÁRIA E FINANCEIRA
DAS-4

SEÇÃO DE
PROGRAMAÇÃO ORÇAMENTÁRIA E
FINANCEIRA

FC-5

SEÇÃO DE
EXECUÇÃO ORÇAMENTÁRIA
E FINANCEIRA

FC-5

SERVIÇO DE
Controle e Registro de
Processos

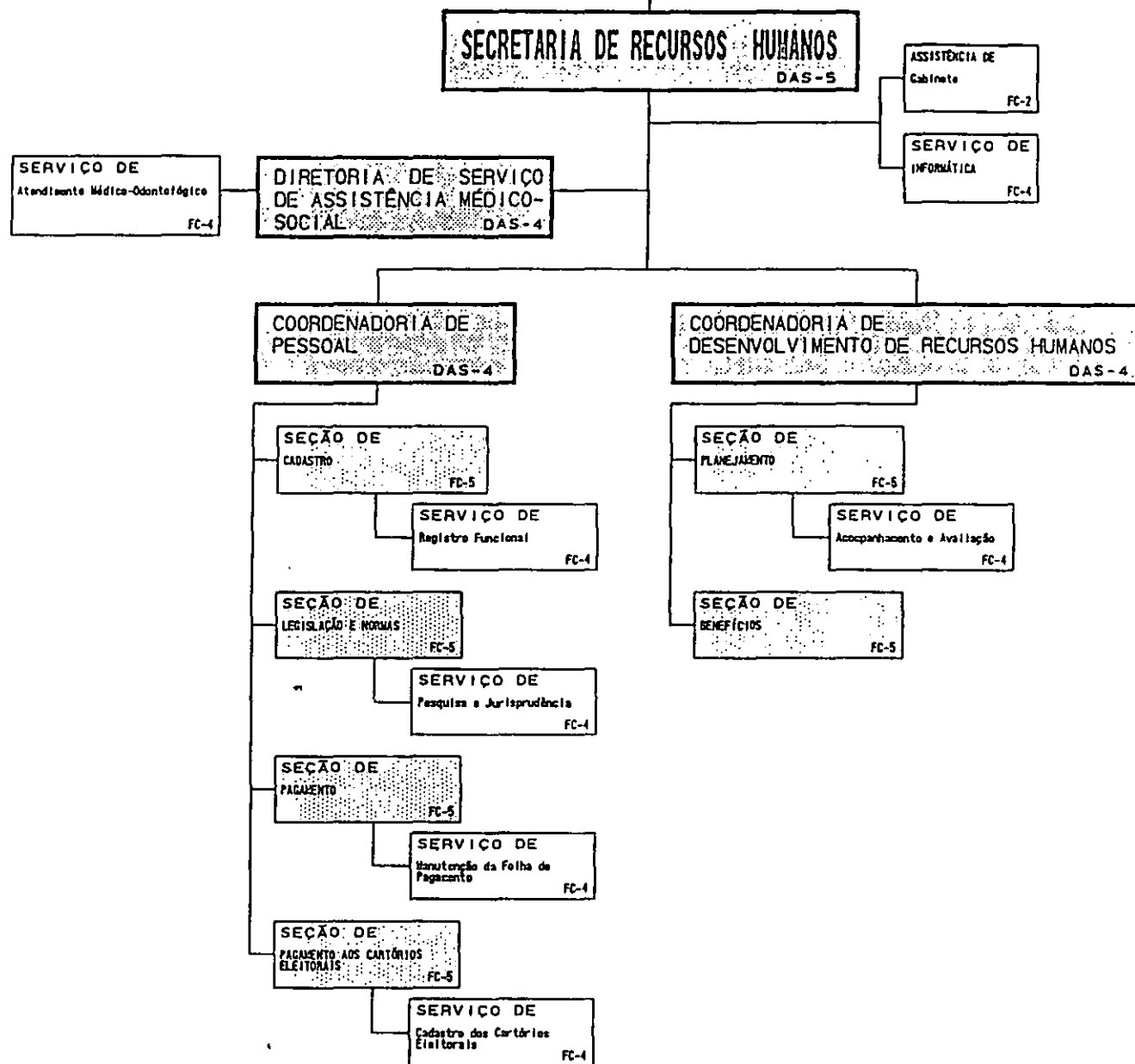
FC-4

SEÇÃO DE
CONTABILIDADE

FC-5

SUPERVISÃO DE
Pagamento

FC-3



SECRETARIA DE INFORMÁTICA
DAS-5

ASSISTÊNCIA DE
Cabinete

FC-2

COORDENADORIA DE
PRODUÇÃO E SUPORTE
DAS-4

SEÇÃO DE
ANÁLISE E DESENVOLVIMENTO

FC-5

SERVIÇO DE
Projetos

FC-4

SERVIÇO DE
Programação

FC-4

SEÇÃO DE
SUPORTE E PRODUÇÃO

FC-5

SERVIÇO DE
Produção e Recuperação
de Documentos

FC-4

SERVIÇO DE
Suporte a Equipamentos de
Informática

FC-4

SERVIÇO DE
Suporte a Teleprocessamento
e Rede Local

FC-4

SEÇÃO DE
ATENDIMENTO AO PÚBLICO

FC-5

SEÇÃO DE
SUPORTE AO CADASTRO

FC-5

SEÇÃO DE
SUPORTE AO ELEITOR

FC-5

COORDENADORIA DE
ELEIÇÕES
DAS-4

SEÇÃO DE
PLANEJAMENTO E COORDENAÇÃO DE ELEIÇÕES

FC-5

SERVIÇO DE
Orientação às Zonas Eleitorais

FC-4

SERVIÇO DE
Práticas Cartorárias

FC-4

SUPERVISÃO DE
Reciclagem de Pessoal

FC-3

SUPERVISÃO DE
Documentação

FC-3

SEÇÃO DE
ESTATÍSTICA

FC-5

SUPERVISÃO DE
Informações Eleitorais

FC-3

APPENDIX N

System Options Screen (TRE/RS, 1989)

The *Opções do Sistema* (System Options) screen included the following options (as of late 1989):

6. Registration
7. Replacement card
8. blank
9. Transfer to another state
10. blank
11. Cancellation
12. Voter history
13. Normalization of electoral situation
14. Transfer within state
15. Party affiliation
16. Party de-affiliation
17. Alteration of voter data
18. Transfer from another state
19. FASE processing (see appendix B)
20. Emit
21. Transfer control
22. Reactivate canceled registration
23. Did not vote in _____
24. Did not vote in 1988
25. Party affiliation

*** OPCOES DO SISTEMA ***

TRE

Nome

Inscricao

Func.

- | | |
|---------------------------------|--------------------------------------|
| 01 - Inscricao | 11 - Desfiliacao Partidaria |
| 02 - Segunda Via | 12 - Alteracao de Dados do Eleitor |
| 03 - | 13 - Transf. Eleitor de Outro Estado |
| 04 - Transf. para outro Estado | 14 - Inclusao de Historicos/FASE |
| 05 - | 15 - Emissoes |
| 06 - Cancelamento | 16 - Controle de Transferencias |
| 07 - Historico | 17 - Publicacao de Cancelado |
| 08 - Regularizacao Eleitoral | 18 - Nao Votou em ???? |
| 09 - Transf/Remanejio no Estado | 19 - Nao Votou em 1988 |
| 10 - Filiacao Partidaria | 20 - Filiacao Partidaria |

Entre com a Opcao Desejada



Brazil 1994
Election Technology Assessment
February 28, 1995

APPENDIX O

Interviews

São Paulo

- Dr. Fernando Augusto Fontes Rodrigues, Director-General, Tribunal Regional Eleitoral de São Paulo (TRE/SP)
- Joaquim Marcos Paris de Godoy, Director of Computer Operations, TRE/SP
- Mariana Ferrer Ferreira, Coordinator, UNDP/Brazil Elections Assistance Project

Florianópolis

- Dr. Rogério Pereira, Director-General, Tribunal Regional Eleitoral de Santa Catarina (TRE/SC)
- Célio Santos de Assunção, Director of Computer Operations, TRE/SC
- Dr. Francisco Xavier Medeiros Vieira, President, TRE/SC

Brasília

- Dr. Torquato Jardim, Member, Tribunal Superior Eleitoral (TSE)
- Dr. José Paulo Sepúlveda Pertence, President, TSE
- Dr. Carlos Mário da Silva Velloso, President-Elect, TSE

APPENDIX P

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

Electoral Legislation:

- Justiça Eleitoral. "Eleições 1994," Brasília: Imprensa Nacional, 1993.

Election Materials:

- Justiça Eleitoral. "Boletim de Urna," Brasília, 1994.

Users Manuals/Training Materials:

- Justiça Eleitoral. "Instruções para Mesários TRE/SP." São Paulo: Imprensa Oficial do Estado, 1994.
- Justiça Eleitoral. "Manual de Apuração Eleições 94." São Paulo: Imprensa Oficial do Estado, S.A., 1994.
- Justiça Eleitoral. "Manual Eleições 94." São Paulo: Imprensa Oficial do Estado, S.A., 1994.
- Justiça Eleitoral. "Manual da Mesa Receptora Eleições 94." São Paulo: Imprensa Oficial do Estado, S.A., 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Cadastro de Eleitores, Manual de Procedimentos," Florianópolis, March 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Capacitação em MS-DOS 6.0," Florianópolis, October 1993.
- Training/information videotapes from October 1994 election.
- Tribunal Regional Eleitoral de Santa Catarina. "V Encontro de Juízes Eleitorais." Florianópolis, September 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "III Encontro de Chefes de Cartório Eleitoral." Florianópolis, July 1994.

Brazil 1994
Election Technology Assessment
February 28, 1995

- Tribunal Regional Eleitoral de Santa Catarina. "Guia Prático do Preposto," Florianópolis, September 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Manual Básico Microcomputador e Impressora," Florianópolis, April 1992.
- Tribunal Regional Eleitoral de Santa Catarina. "Manual de Microcomputador DECpc LPx + e Impressora LG_570 +," Florianópolis, September 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Manual de Procedimentos nos Cartórios Eleitorais," Florianópolis, July 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Manual do Usuário, Jurisprudência Eleitoral," Florianópolis, October 1993.
- Tribunal Regional Eleitoral de Santa Catarina. "Manual do Usuário, Subsistema de Segurança e Instalação do ED e CED," Brasília, September 1994.
- Tribunal Regional Eleitoral de Santa Catarina. "Modelo de Teclado do Microcomputador da Cabine Eleitoral." (Poster) Plebiscite held on September 19, 1993, Municipality of Turvo, District of Ermo, 1993.
- Tribunal Regional Eleitoral de Santa Catarina. "Não Basta Pintar a Cara," (Brochure), 1994.
- Tribunal Regional Eleitoral de São Paulo. Civic education posters for October 1994 elections.
- Tribunal Regional Eleitoral de São Paulo, Poder Judiciário. "Roteiro e Calendário das Providências Preparatórias das Eleições de 1994." (Electoral Preparations Calendar).

Project Reports:

- Tribunal Regional Eleitoral de Santa Catarina. "Projeto de Cédula Eleitoral e Apuração Automatizada." Florianópolis, May 1992.
- Tribunal Regional Eleitoral de Santa Catarina. "Projeto Técnico Para Plebiscito Eletrônico." Plebiscite held on September 19, 1993, Municipality of Turvo, District of Ermo, 1993.
- Tribunal Regional Eleitoral de Santa Catarina. "Relatório das Atividades Sobre a Eleição Simulada Realizada no Distrito de Ribeirão da Ilha." Florianópolis, August 1994.

Brazil 1994
Election Technology Assessment
February 28, 1995

- Tribunal Regional Eleitoral de Santa Catarina. "Relatório Final da Campanha, 'Cidadania, Um Direito," Florianópolis, April-May, 1994.
- Tribunal Superior Eleitoral, Gerência Técnica do SINJE. "Projeto Sistema de Informática da Justiça Eleitoral." Secretaria de Informática, 1994.
- United Nations Development Programme. "1994 Country Programme."

News items/Miscellaneous:

- Campos, Vanderlei. "Rede define o poder," Byte Brasil, September, 1994.
- Dicarlo, Lisa. "PCs give Brazil timely election results," PC Week, October 17, 1994.
- Resende, Juliana. "ONU se surpreende com eleição tranqüila," O Estado de São Paulo, October 7, 1994.
- Tribunal Regional Eleitoral de Santa Catarina. Resenha Eleitoral. Volume 1, Number 1, July-December 1994.



INTERNATIONAL FOUNDATION FOR ELECTION SYSTEMS

1101 15TH STREET, NW • THIRD FLOOR • WASHINGTON, DC 20005

TEL (202) 828 8507 FAX (202) 452 0804