The Carter Center Brazil Election Expert Mission 2022

Final Report
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Executive Summary

At the invitation of the Superior Electoral Tribunal¹ (known by its Portuguese acronym, TSE), The Carter Center deployed a two-month-long expert mission to assess several key aspects of the electoral process for Brazil’s 2022 presidential election.

In June 2022, the Center evaluated the potential for an election observation mission in Brazil in the context of a very polarized political atmosphere. Given short timelines and resource constraints, The Carter Center decided that while it could not send a full electoral observation mission, it would conduct a limited mission of electoral experts. The mission would focus on key issues, including the legal framework for election administration, the function and transparency of the voting technology systems, disinformation about the use of those systems, and the legal framework governing the use of voting technology. Given its limited scope, the electoral expert mission was not in position to assess the election as a whole, nor did it provide an overall assessment of the voting or counting processes.

Beginning early September 2022, the electoral expert mission conducted four visits to Brazil, covering the pre-electoral period, the presidential election on Oct. 2, and the runoff election on Oct. 30;² for a total field presence of 40 days. Electoral officials, the political parties, the security forces, and civil society welcomed the Carter Center’s expert mission.

The electoral expert mission was led by Nicolás F. Bravo and included Ingo Boltz, Carla Luis, and Pedro de Alzaga, with overall guidance provided by Carter Center staff members Jennie K. Lincoln (special advisor for Latin America and the Caribbean) and David Carroll (Democracy Program director). Ian Batista, a host-country Brazilian citizen, provided critical support to The Carter Center throughout the mission. In addition, Michael Schoeltens (Carter Center) and Lukas Vengels contributed to the mission during the first round, and María Paz Osella supported the mission during the runoff.³

Members of the team conducted a wide range of firsthand interviews with electoral authorities and technical staff, political parties, civil society organizations, oversight institutions (entidades fiscalizadoras), the media, fact-checking agencies, diplomatic representatives, and other national and international observation missions and analyzed a large volume of documents and reports.

The team based its work mainly in the city of Brasília (Federal District) but also conducted interviews and technical observations in the cities of Curitiba, Rio de Janeiro, São Paulo and Goiânia. The team also held virtual meetings before and throughout the electoral period.

During both first-round and runoff elections, the expert mission visited a small number of polling places.

¹ On March 4, 2022, the former TSE president, Minister Luiz Edison Fachin, extended an invitation to The Carter Center to conduct an electoral observation mission. An agreement on procedures was signed on Sept. 15 between TSE President Alexandre de Moraes and Carter Center CEO Paige Alexander.
² The following states also had gubernatorial runoffs on this date: Alagoas, Amazonas, Bahia, Espírito Santo, Mato Grosso do Sul, Pará, Pernambuco, Rio Grande do Sul, Rondônia, Santa Catarina, São Paulo e Sergipe.
³ Dan Richardson andSoya Ellison provided indispensable logistical and communication support from the Carter Center’s headquarters in Atlanta.
stations to observe the conduct of the “integrity test” of the voting machines, including some machines pilot testing the use of biometrics to identify voters in a small percentage of polling stations. The Carter Center expert team also observed the standard integrity test (without biometrics), which takes place in Regional Electoral Court (known by its Portuguese acronym TRE) buildings or warehouses during election day and has been conducted in Brazil since 2002. Additionally, the team visited a small number of polling stations in a few neighboring localities to become familiar with the broader context in which the integrity tests were being implemented.

This report summarizes the expert mission’s main activities and findings and includes a series of recommendations for improving future elections, including regarding the electronic voting system. The Center’s mission was conducted in accordance with the Declaration of Principles for International Observation, as signed by intergovernmental and international nongovernmental organizations at the United Nations in 2005.

The main findings of the Center’s mission include:

- **Context:** The spread of fake news and partisan narratives attacking the electoral authorities created great pressure on the electoral system in the 2022 election. Many actors, including elected officials and the armed forces, alleged that the system had flaws, which generated distrust. Key stakeholders with whom The Carter Center met agreed that there used to be high levels of overall trust in the electoral process based on several decades of electronic voting without significant problems. But in recent years, attacks on the electronic voting system have led growing sections of the public to question it. However, almost all political actors and a considerable portion of the population perceived the electoral technology as safe and trustworthy.

- **Legal framework and institutional design:** The electoral administration’s institutional design concentrates on the TSE administrative and judicial responsibilities, while TREs are responsible for implementation at the state level. While both bodies are perceived as highly capable, the institutional design creates a concentration of different functional responsibilities in the same body. In times of turbulence, such as the 2022 presidential election, these features contribute to the targeting of TSE by partisan critiques and disinformation narratives.

- **Increased transparency and participation:** Considering the context of rising distrust, the TSE moved toward greater participation and inclusion of stakeholder interests in the electoral process by adopting regulations not explicitly included in the legal framework. For example, the TSE created the Electoral Transparency Commission, which increased the number of oversight entities (entidades fiscalizadoras). It also piloted the use of biometrics in the integrity test suggested by the armed forces and the federal police.

- **The armed forces:** While the involvement of the military may have helped to counter heightened public doubts about the voting machines, the military assumed a prominent role in several key aspects of the election, which undermined the independence of the election authorities and was inconsistent with core international standards related to electoral management body independence and autonomy. The role of the military was potentially an intimidating force in the overall electoral environment, undermining political competition and the ability of voters to choose their preferred candidates without undue outside influence.

- **Voting technology:** Brazil’s use of a pure direct recording electronic machine design places the onus of results integrity on the voting software. The TSE provided an extensive set of audit procedures to address this. Responding to suggestions of auditors in previous electoral processes, the courts have successively increased the scope of these audits and reduced restrictions for auditors. The current iteration, which incorporates different university security expert teams that examine the complete system using their own tools in their own environments and without time limits, is the most extensive to date. The continuity of this cooperation with universities points to promising new options for increasing
security, transparency, and trust in the electronic voting system.

- **Use of public resources.** Analysts and interlocutors that The Carter Center met criticized the incumbent candidate’s abuse of public resources during the campaign period. The use of public media, presidential official appearances, the redesign of cash-transfer public policies, and a revision in the allocation of funds among legislators are examples of such abuses.

- **Disinformation narratives.** The electoral cycle was marked by a sophisticated disinformation network. In the first round, the dominant narrative revolved around flaws in the voting system. In the second round, the focus shifted to questioning the impartiality of the TSE and included a range of accusations against candidates. While both candidates were attacked, the Center’s analysis of the leading fact-checking organizations indicates that most attacks targeted the campaign of challenger Luiz Inácio Lula da Silva.

- **Counter-disinformation.** Overwhelmed by an avalanche of disinformation, the TSE investigated the production, distribution, and propaganda networks of fake news, as well as their financing mechanisms. Because of an alleged lack of cooperation from some social media platforms, the TSE decided in the campaign’s final stretch to expand its ability to remove content and to do it expeditiously. This decision raised concerns about interference with fundamental rights to freedom of expression. The challenge of disinformation goes beyond Brazil and must be addressed by societies across the globe. The proper legal and regulatory structure to balance freedom of expression and state intervention against false content and hate speech is yet to be found. Any decision about content removal should not make the intermediaries liable for any third-party content relating to those services unless they specifically intervene in that content or refuse to obey an order within a specified timeframe.

- **Election observation.** Electoral observation is a relatively new development in Brazil, but a welcome one that helps increase transparency and the public’s understanding of electoral processes. In 2022 the TSE invited eight international organizations to observe the election. The Carter Center notes that the larger election observation missions deployed by both Brazilian citizen observers and international observers reported that the 2022 electoral process was well-organized and conducted with timeliness and transparency, including in rapid publication of final results in both rounds. Looking forward, it is key to the continuous efforts of ensuring transparency and trust in the Brazilian electoral process that authorities continue to allow and encourage the presence of election observation for future elections.

### Political and Electoral Context

The 2022 presidential elections in Brazil were held in an unprecedented climate, with growing signs of distrust of the electoral administration by a large share of voters, often fueled by disinformation from public officials, the military, and members of the executive, including the incumbent, President Jair Bolsonaro. The election took place as public distrust in the electronic voting system was at its peak.

Ironically, the surge in public distrust in the electronic voting system during the 2022 elections followed more than 20 years of widespread trust and without any public reports of electoral fraud or malpractice. During the Center’s mission, key stakeholders with whom The Carter Center met agreed that there were high levels of overall trust in the electoral process. Almost all perceived the electoral technology as safe and trustworthy, including most of the population. This perception of trust was based on several decades of electronic voting without significant problems.

The emergence of distrust in the electronic voting system dates from the period between 2014 and 2018 and is most likely linked to two main events: the post-election audit requested by Aécio Neves (PSDB) after losing the 2014 presidential election by a narrow margin, and the election of Jair Bolsonaro in 2018 (in a runoff) after he alleged...
there was fraud in the first round. In both elections, no evidence of significant fraud was documented or presented. In the intervening years distrust intensified, as Bolsonaro continued to publicly attack the integrity of the electronic voting system (See Social Media section).

The TSE acknowledged the size of the challenge at stake in the 2022 elections and responded to it through a variety of networks at both the national and international levels. Domestically, the TSE brought together different organizations and sectors of society in a new Electoral Transparency Commission. In addition, the TSE also increased pre-electoral audit exercises of the electronic voting system. At the international level, the TSE invited a large number of international organizations and others to observe the electoral process.

Despite the context of distrust, political parties unfortunately did not make much use of their legally authorized powers to supervise the electronic voting system, in part because they have generally trusted the system.

A related key challenge in the 2022 election concerned the widespread misinformation, false content, hate speech, and related political violence, online and offline, which eroded the space for public debate, particularly for vulnerable groups, and raised concerns about the integrity of the electronic voting system, as mentioned before. The Bolsonaro campaign weaponized false content to undermine the TSE’s reputation and cast doubt on potentially unfavorable election results, paving the way to further challenges.

The TSE responded to the widespread false content through multiple innovative actions and programs and engagement with public institutions, civil society organizations, key electoral stakeholders, and both domestic citizen and international election observers. Many analysts saw the TSE’s actions as unprecedented, and most found them to be broadly appropriate, although not uniformly so, given the extremely challenging context.

The TSE’s decision to invite a large number of international organizations to observe the elections was thus part of a broader set of responses to the electoral challenges. Brazil has a very short history of inviting electoral observation missions. The first international mission was the Organization of American States electoral observation mission deployed for the presidential election of 2018. The first domestic citizen observation mission was for the municipal elections of 2020, when the NGO Transparência Eleitoral Brasil deployed observers. In 2022, the TSE invited nine international missions and accredited eight domestic citizen observation groups.

On May 31, the TSE organized an information hybrid session on the 2022 elections for embassies accredited in Brazil. The Carter Center’s representatives attended the session, as did other international organizations, including the Organization of American States (OAS), the Inter-American Union of Electoral Organizations (UNIORE), the International Institute of Democracy and Electoral Assistance (IDEA), the International Foundation for Electoral Systems (IFES), the Network of Jurisdictional and Electoral Administration Bodies of the Portuguese Speaking Countries Community (ROJAE-CPLP), the Permanent Confederation of

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4 While the idea of false content spread mostly through social media is widely known as “fake news,” including in the public sphere in Brazil, we will use the term “false content,” as it covers a wider set of circumstances where it is produced. As for misinformation, this concept refers to the intention of the sender, who wants to confuse the recipients.

5 Listed below.

6 Associação Juízes para a Democracia (AJD); Associação Nacional das Defensoras e Defensores Públicos (Anadep); Faculdade de Direito de Vitória (FDV); Movimento de Combate à Corrupção Eleitoral (MCCE); Ordem dos Advogados do Brasil (OAB); Transparência Eleitoral Brasil; Tribunal de Contas da União (TCU); and Universidade do Estado do Rio de Janeiro (Uerj). After the TSE invited international observers, in early May 2022 the Ministry of Foreign Affairs disinvited the European Union. President Bolsonaro defended this action by citing the fact that Brazil was not a member state. More on this topic: https://noticias.uol.com.br/categorias/jamil-chade/2022/05/03/europa-e-desconvidada-e-nao-ira-monitorar-eleicao-no-brasil.htm
Political Parties of Latin America (COPPAL), the Global Network of Electoral Justice (RMJE), and Mercosur Parliament (ParlaSur), among others.

The 2022 Presidential Election Candidates

The 2022 presidential election pitted the two most important political movements in Brazil’s recent democratic history, “petism” (i.e., “PT-ism”) and “bolsonarism.” Petism can be described as the positive sentiment that a portion of Brazilian voters have toward the PT (Workers Party), which ruled from 2003 to 2016 in two Lula da Silva governments, until Dilma Rousseff’s impeachment on her second term in 2016. Lula da Silva left office with a record 87% approval rating,7 and while this opened the door for Rousseff’s election in 2014, Lula is largely responsible for the rise of Petism.

On the other hand, there has also been a rise of “anti-petism,” i.e., negative public opinion toward the PT, mostly following the economic downturn during Rousseff’s administration and the corruption scandals involving government personnel, especially the so-called “Lava-Jato” (Car Wash) operation.8 Anti-petism grew considerably during Rousseff’s impeachment trial, which took place in a context marked by deteriorating macroeconomic conditions, increasing popular protests, and dwindling political support. The national legislature’s lower house (Câmara dos Deputados) opened the impeachment process in 2016 and charged her with administrative malfeasance. Both legislative houses eventually voted to impeach, which several sectors of society, ranging from the business sector to the middle class, widely accepted. The anti-petism movement reflected Brazilians’ high levels of discontent with the political class, but especially the PT, which had ruled for the last 13 years.

After Rousseff and PT were removed from the scene in 2016, Vice President Michel Temer (Brazilian Democratic Movement—MDB) took office and ruled until 2018. As president, Temer was seen as part of the Brazilian political establishment, because he was Rousseff’s vice president for two terms and also had served as a deputy in the legislature for 15 years before that. His MDB party was in the cabinet of every sitting president since Brazil’s re-democratization in 1988. Temer was in office for two years during a difficult economic environment in which he approved unpopular economic reforms, including new labor legislation. He left office with approval ratings of only 5%, the worst of any president in recent history.9

After Temer, Jair Bolsonaro was elected president in 2018 as an outsider, shocking what had seemed to be a stable political party system. Bolsonaro emerged in an anti-establishment wave of generalized discontent with the political class, after six electoral cycles of power dominated first by center-right party rule (Brazilian Social Democracy Party, PSDB, from 1995 to 2002) and then by center-left rule (Workers Party, PT, from 2003 to 2016).

The context surrounding the 2018 election was marked by worsening living conditions and uninterrupted corruption scandals. Given popular distrust of the political establishment, Bolsonaro capitalized on the anti-PT sentiment and leveraged it in support of his “Bolsonarist” movement. Although casting himself as an outsider, Bolsonaro was a member of the legislature from 1991 to 2018, with his career marked by several changes of party affiliations, controversial statements about women and minorities, and nostalgia for the military dictatorship.10

Bolsonaro won the 2018 election in the second round running for the Liberal Social Party (PSL). His opponent was the PT candidate, former São Paulo governor, Fernando Haddad.

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7 Popularidade de Lula bate recorde e chega a 87%, diz Ibope [Lula’s popularity breaks record and reaches 87%, says Ibope]. https://g1.globo.com/politica/noticia/2010/12/popularidade-de-lula-bate-recorde-e-chega-a-87-diz-ibope.html.
8 Operation Car Wash (Lava-Jato), was a landmark anti-corruption probe in Brazil that began in March 2014 as the investigation of a small car wash in Brasília over money laundering. The proceedings uncovered a massive corruption scheme in the Brazilian federal government, particularly in state-owned enterprises, and led to the indictment of dozens of high-level businessmen and politicians.
Paulo Mayor Fernando Haddad, who ran trying to associate himself with Lula, who was originally the PT candidate but was jailed six months before the election as part of the Lava-Jato operation. In addition to the election of Bolsonaro as president, Bolsonaro-aligned governors were elected throughout the country, further demonstrating the strength of the movement.

In what proved to be a foreshadowing of 2022, the 2018 election was marked by misinformation on social networks, most notably Whatsapp. Bolsonaro campaign staff, including one of his sons, were accused of operating a scheme to spread false content and hateful messages. The messages portrayed other candidates as communists, supporters of anti-Christian values, and linked to global anti-traditional-family cultural movements.

Throughout his term as president, Bolsonaro continued to raise doubts about the Brazilian electronic voting systems, claiming that he should have won the 2018 election in the first round. However, he never cited any actual evidence of fraud, and the authorities never opened a formal investigation. Over his four-year term, and with growing frequency during the 2022 electoral campaign, he publicly declared he would only accept the results if the elections were clean and fair. In June 2023, Bolsonaro was found guilty on charges of abuse of political power and misuse of public media due to a publicly televised meeting held in July 2022 with ambassadors in which he attacked the credibility of the voting system. With this charge he is barred from seeking public office for eight years.

Heading into the 2022 election campaign, Bolsonaro faced many challenges. Weighing against him were his handling of the pandemic, his authoritarian style, and most importantly, the declining economic conditions in Brazil, marked by high inflation (10% in 2021), unemployment (11% in 2021) and poverty (10.8% in 2021). Bolsonaro’s term was marked by institutional conflicts, as the president publicly threatened the Supreme Court, state governors, and opposition supporters. He increased the number of military in the executive branch by 70%, including the vice president, Gen.

Throughout his term as president, Bolsonaro continued to raise doubts about the Brazilian electronic voting systems, claiming that he should have won the 2018 election in the first round.

Brazil Election Expert Mission 2022

11 PF diz ao STF que milícia digital usa estrutura do gabinete do ódio [Federal Police tells the Supreme Court that digital organized crime groups use the Hate Cabinet structure] https://g1.globo.com/politica/noticia/2022/02/10/pf-diz-a-stf-que-milicia-digital-usa-estrutura-do-gabinete-do-odio.shtml
12 Bolsonaro volta a insinuar que houve fraude na eleição de 2018 [Bolsonaro once again suggests there was fraud in the 2018 election] https://valor.globo.com/politica/noticia/2022/07/14/bolsonaro-volta-a-insinuar-que-houve-fraude-na-eleico-de-2018.shtml
14 Bolsonaro inelegível: Por 5 votos a 2, TSE deixa ex-presidente fora de eleições. [Bolsonaro ineligible: By 5 votes to 2, TSE rules the former president out of elections] https://noticias.uol.com.br/politica/noticias/2023/06/30/bolsonaro-inelegivel-tse-julgamento.html
15 Inflação medida pelo IPCA fecha 2021 com alta de 10,06% [Inflation measured by IPCA ends 2021 at 10.06% high] https://agenciabrasil.ebc.com.br/economia/noticia/2022-01/ibge-inflacao-medida-pelo-ipca-fecha-2021-com-alta-de-1006
19 Bolsonaro ameaça governadores e diz que ICMS terá que baixar por ser lei federal. [Bolsonaro threatens governors and says ICMS tax will have to be reduced because it is a federal law] https://epocanegocios.globo.com/estados/noticia/2022/07/epoca-negocios-bolsonaro-ameaca-governadores-e-diz-que-icms-tera-que-baixar-por-ser-lei-federal.html
20 “Vamos matarlap a petralhada,” diz Bolsonaro em campanha no Acre. [“Let’s gun down the ‘petralhada,” says Bolsonaro during a campaign in Acre. Note: petralhada is a term used to make reference to PT supporters] https://exame.com/brasil/vamos-fuzilar-a-petralhada-diz-bolsonaro-em-campanha-noacre/
Hamilton Mourão. At several points he also suggested the possibility a self-coup (“autogolpe”) to maintain power.

While Bolsonaro ran for reelection, Lula da Silva, released from prison in 2019, had his convictions overturned in 2021 and was able to run for office again. Lula da Silva focused his 2022 campaign messaging on recalling the better economic times the country enjoyed during his presidency (2003-2010). He also reminded voters that Brazil had played a prominent international role during his government in multilateral groups such as the BRICS and UNASUR, in addition to advocating for a permanent seat in the U.N. Security Council. By the time Lula left office, Brazil was the world’s sixth-largest economy.

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21 Presença de militares em cargos civis dispara sob Bolsonaro, revela estudo [The presence of military personnel in civilian positions surges under Bolsonaro, a study reveals] https://veja.abril.com.br/politica/presenca-de-militares-em-cargos-civis-dispara-sob-bolsonaro-revela-estudo/

22 As reported by the Piauí Magazine, on May 22, 2020, Bolsonaro was informed of a routine procedure related to a criminal complaint presented by three parties, which involved the potential seizure of his and his son Carlos Bolsonaro’s cellphones. This possibility enraged Bolsonaro, leading to a tense meeting with his generals, after which he declared his intent to intervene, implying a significant action or response https://piaui.folha.uol.com.br/materia/vou-intervir/

23 Quais condenações contra Lula foram anuladas por decisão do STF [Which convictions against Lula were annulled by the Supreme Court’s decision] https://www.bbc.com/portuguese/brasil-56328403

24 Brasil supera Grã-Bretanha e se torna 6ª maior economia, diz entidade [Brazil surpasses Great Britain and becomes the 6th largest economy, says entity] https://www.bbc.com/portuguese/noticias/2011/12/111226_grabretanhabrasil_ss
Electoral Legal Framework and Election Administration

**Electoral Legal Framework**

International standards indicate that elections should be administered by impartial and independent election management bodies. Further, electoral management bodies should establish transparent, equitable, and efficient internal policies across a wide range of responsibilities, e.g., staff recruitment, appointment, and decision-making. In addition, international obligations relevant to electoral dispute resolution indicate that a competent and unbiased tribunal should be in charge of resolving electoral conflicts to ensure citizens’ rights to a fair and public hearing.

The core elements of Brazil’s electoral system are established in the Federal Constitution, together with the electoral code (Law No. 4.737, June 1956) and the elections law (Law No. 9.504, September 1997—Lei das Eleições), among other legal instruments. The electoral administration in Brazil is composed of the Supreme Electoral Tribunal (Tribunal Superior Eleitoral, TSE) at the national level and Regional Electoral Tribunals (Tribunal Regional Eleitoral, TREs) in each state. The TSE has administrative authority and the power to issue regulatory rules (Portarias and Resoluções) on specific issues. These can be supplemented by the regional TREs to implement the TSE provisions.

There are several nebulous areas where TSE rules and authority do not provide clear guidance on how TREs should operate. This is justified on the basis of contextual discretion, allowing the TREs room to act depending on the context, challenges, and resources available. For example, there are no clear rules regarding the chain of custody of the memory cards that record election results on the voting machines, which are removed from the machines at the end of the voting period, nor for the transportation of the voting machines from the TREs’ warehouses and the voting places. Even though Brazil is a very large and diverse country, the absence of standard protocols for management and operation on specific issues is not in accordance with international standards.

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**Even though Brazil is a very large and diverse country, the absence of standard protocols for management and operation on specific issues is not in accordance with international standards.**

The composition of the TSE is outlined in Article 119 of the Federal Constitution (1988), which calls for a minimum of seven members. Five TSE members are from the judicial branch and...
are elected by secret vote among their peers, three are selected from the Supreme Federal Tribunal, and two are selected from the Superior Tribunal of Justice. Two other members are appointed by the president from two lists created by the Plenary of the Supreme Court, each composed of three “lawyers with remarkable legal knowledge and moral suitability.” TSE members have a mandate of two years and can be extended for a second mandate of two additional years through the same selection process.

Electoral Administration
Institutional Design
The structure of Brazil’s electoral systems creates a strong central national authority (the TSE) which concentrates a wide range of competencies regarding elections, including administrative, jurisdictional, normative, and consultative, with regional dispersion of responsibilities for implementation of the electoral process.

While the Center’s expert mission found that the overwhelming majority of stakeholders interviewed stressed that key decisions taken by the TSE were viewed as materially sound, the institutional structure of the TSE nonetheless represents an area of vulnerability in the system. This would certainly be the case if key TSE positions were to be filled by persons not committed to core international standards and principles for democratic elections. In short, the 2022 elections illustrated the serious risks that flow from the existing institutional design, despite the strong commitment of the existing TSE leaders to democratic principles.

The mission discussed these questions with a variety of legal analysts and experts, and only a few viewed the TSE’s institutional structure as a problem. Several noted that while the TSE concentrates diverse roles regarding the elections, its actions and decisions have been seen as fair, impartial, and reliable. In this sense, international standards for professional and independent electoral judicial bodies are adequately met by the Brazilian electoral justice system. Some experts indicated, however, that it might be useful to reduce the number of levels of appeal that exist in the Brazilian judicial system, especially in the specialized judicial competencies.

Separate from the larger institutional issues, several interlocutors commented on the prominent role played by the TSE president. Some noted that the fact that the TSE president must be a Supreme Court (STF) judge had the effect of bringing the TSE into the broader picture surrounding the personal attacks made on the Supreme Court, which occurred throughout Bolsonaro’s term, as the president and his supporters repeatedly attacked TSE presidents, and hence implicitly the TSE as an institution.

The TSE had three presidents during 2022, with each taking a different approach to dealing with political stakeholders, especially the armed forces. The TSE’s relationship with the military changed greatly from Luis Roberto Barroso’s administration to Edson Fachin’s and then to Alexandre de
Moraes'. Barroso invited the armed forces to join the Electoral Transparency Commission, while Fachin dismissed it, calling elections a subject of “dis-armed forces.” Then, when Moraes assumed the role of TSE president, he agreed to accept one of the military’s key proposals regarding the pilot test of biometrics in the integrity test (see below).  

Oversight Entities and the Electoral Transparency Commission

According to international electoral standards, electoral management bodies must ensure transparency in their decision making, access to information, and broad participation of civil society entities to prevent and combat corruption, consequently increasing public trust in their activities. According to the elections law (Lei das Eleições), the administration of elections in Brazil involves the participation of other legal entities, identified as oversight entities (entidades fiscalizadoras), including political parties; the Brazilian Bar Association; and the public prosecutor. The electoral public prosecutor has representatives at both the regional and central level, and the Brazilian Bar Association (Ordem dos Advogados do Brasil—OAB), has a representative in each of the 640 electoral jurisdictions (cartórios eleitorais).

As mentioned earlier, the most pressing issue ahead of the election was rising distrust regarding the electronic voting system. In response and to further increase transparency, the TSE instituted several important and innovative steps for the 2022 elections, including: the approval of electoral observation activities, the transparency plan (Plano de Ação para Ampliação da Transparência do Processo Eleitoral); and the creation of the Electoral Transparency Commission (Comissão de Transparência Eleitoral) (via the Portaria TSE nº 578, of Sept. 8, 2021 (Institui a Comissão de Transparência das Eleições (CTE) e o Observatório da Transparência das Eleições (OTE)). Additional innovative measures the TSE implemented in 2022 included the creation of a political financing database, a chatbot on questions related to electoral justice (Tia Dúvidas da Justiça Eleitoral), and a complaints application (Aplicativo Pardal), among others.

The Electoral Transparency Commission served as a consultative commission with several entities represented to discuss the electronic voting system and provide inputs and checks to increase confidence in the system. In effect, the creation of the Transparency Commission expanded the list of oversight entities (entidades fiscalizadoras) beyond those included in the electoral law (i.e., political parties, Brazilian Bar Association, and public prosecutor) to also include the federal police, universities, NGOs and the armed forces. Most stakeholders with whom the Carter Center expert mission met viewed the Transparency Commission in positive terms, with some seeing it

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30 Fachin reage a Bolsonaro e diz que eleição é assunto de civis e de forças desarmadas [Fachin responds to Bolsonaro and says that elections are a matter for civilians and unarmed forces] https://www1.folha.uol.com.br/poder/2022/05/fachin-reage-a-bolsonaro-e-diz-que-eleicao-e-assunto-de-civis-e-de-forcas-desarmadas.shtml
31 “Vamos verificar se vale a pena”, diz Moraes sobre projeto piloto de biometria. [Let’s check if it’s worth it,” says Moraes about the biometrics pilot project.] https://www.cnnbrasil.com.br/politica/vamos-verificar-se-vale-a-pena-diz-moraes-sobre-projeto-piloto-de-biometria/
32 U.N., UNCAC, art. 13(1)(a); OAS, IADC, art. 2
33 The broad participation of several entities has the potential to reduce institutional bias, while helping to ensure the appropriate application of electoral laws. There also are Electoral Judiciary Schools at both the central and regional level, and the Bar Association provides specialized electoral training to their members. Specialized electoral law is a common and popular field in Brazil.
34 Plano de Ação elaborado pela Comissão de Transparência deixará as eleições ainda mais seguras [Action Plan developed by the Transparency Commission will make the elections even more secure] https://www.tse.jus.br/comunicacao/noticias/2022/Abril/plano-de-acao-elaborado-pelacomissao-de-transparencia-deixara-as-eleicoes-ainda-mais-seguras
36 Comissão de Transparência das Eleições (CTE) fortaleceu canal de diálogo do TSE com a sociedade [The Electoral Transparency Commission (CTE) strengthened the dialogue channel of the Superior Electoral Court (TSE) with society] https://www.tse.jus.br/comunicacao/noticias/2022/julho/comissao-de-transparencia-das-eleicoes-cte-fortaleceu-canal-de-dia-logo-do-tse-com-a-sociedade
as providing a way to negotiate across the polarized divide between the TSE and military, by bringing the armed forces into an oversight role on the electoral process. Several stakeholders specifically highlighted the openness generated by these measures. Others cited the desirability of having the military involved in such electoral roles, noting that the military holds prestige for much of the public.

Given the political tensions throughout the pre-electoral period, the expanded role for the armed forces put it in position to pressure the TSE to the electoral advantage of the executive.

That said, the inclusion of the military in the Transparency Commission raised important questions and concerns in the context of Brazil’s legal framework, even if justified by the exceptional circumstances around the 2022 elections. First, by including the armed forces, the Transparency Commission may have contributed to a relative weakening of the role played by political parties, the OAB and the public prosecutor (MP), even though the political parties have generally not filled their role to the full potential allowed by law as a supervision entity. Second, and more importantly, given the political tensions throughout the pre-electoral period, the expanded role for the armed forces put it in position to pressure the TSE to the electoral advantage of the executive. Lastly, the legal basis for including the military is not clear. Several TSE regulations do not indicate a specific and clear legal basis underlying them, either constitutional, ordinary law, or other. The inclusion of the armed forces in this commission is an example. Related points are discussed in the section below on the role of the armed forces.

Regarding the work of the Electoral Transparency Commission, by June 2022 the TSE reported that 44 suggestions were made by different actors at six meetings of the commission. Of these, 32 were fully or partially accepted (73%), 11 were to be studied in advance of the following electoral cycle (25%), and one was rejected (2.2%). The TSE provided the reasons for not accepting the various suggestions.

The military proposed 15 of the 44 suggestions, and three of these 15 were also made by other actors (two by the federal police criminal expert and one by a University of São Paulo professor). The rest of the proposals were made by civil society organizations, academics, and the federal police. Ten of these were totally or partially accepted, four were considered “to be studied in the next electoral cycle,” and one was rejected.37 These numbers reveal the significant involvement of the military in the Transparency Commission, which did not always operate in a constructive spirit, according to other members of the commission that The Carter Center met.

Given the challenging context of the 2022 election, most notably the rising distrust regarding the voting system and the spread of disinformation narratives, the TSE adopted an approach of increasing transparency and participation of diverse entities in the decision-making process to counterbalance the challenges. This is a commendable approach in line with international best practices.

The Role of the Military in the Electoral Process

As noted, the armed forces (Forças Armadas) are one of the oversight entities (entidades fiscalizadoras) foreseen in TSE Resolution No. 23.673 of December 2021, which authorized the creation of the Commission for the Audit of the Electronic Voting Machine (Comissão de Auditoria da Votação Eletrônica—CAVE) and other entities. However, there does not appear to be any higher-level legal provision for the direct involvement of the armed forces in the elections, which seems to run counter to other provisions in the Brazilian legal framework.

37 At the date of the release of the mentioned TSE report, the pilot test with biometrics on the integrity test was not yet approved, and this proposal, also proposed by the Federal Police Criminal Expert, had the status of “to be studied in the next electoral cycle.” If this accepted suggestion is counted, the number of totally or partially accepted proposals by the military goes to 11 out of 15. https://www.tse.jus.br/comunicacao/noticias/2022/junho/mais-de-70-das-propostas-da-cte-foram-acolhidas-para-as-eleicoes-2022
Article 142 of the Federal Constitution prohibits the military, while active in service, from being affiliated with political parties. Article 154 of the electoral code forbids the presence of armed forces in voting places except when the president of the polling station requests the armed forces. Resolution No. 21.843 (22 June 2004) regulates the use of federal forces by the electoral justice. Federal forces can be used when specifically requested by the Superior Electoral Tribunal and are placed under the instructions of the relevant judiciary authority. In general, these provisions appear intended to separate the electoral process from active intervention by the armed forces.

Despite these legal provisions, the armed forces played a very active role in the 2022 electoral process, particularly regarding the electronic voting system, as already mentioned in their role in the Transparency Commission. This contributed to the strained relationship between the TSE and the military, with the latter pushing for increasing involvement, greater than at any time in the democratic era. For example, in early August, the military submitted an urgent request to the TSE demanding access to the source code for the voting machines (even though the source code had been available since October 2021 to several entities, including the military). The military also proposed a national check of the printed ballot box reports (boletim de urnas—BUs) of 600 machines against the results released on the TSE website, to verify the accuracy of the transmission and tally of the votes. In response, the Union Court of Accounts (Tribunal de Contas da União—TCU), another oversight entity, proposed to conduct such a test, but to do so with a much larger sample of 4,000 machines.

The position of the armed forces was reinforced by the minister of defense, a member of the executive with an interest in the upcoming election which could understandably be viewed as affecting the neutrality of the armed forces. The minister of defense made a public presentation in the Senate on July 14 (Apresentação do Ministro na audiência pública no Senado em 14 de julho 2022) proposing “to make independent audits effective, especially the ones from political parties,” which could be viewed as at odds with a neutral role as foreseen by the legal framework.

Despite these legal provisions, the armed forces played a very active role in the 2022 electoral process, particularly regarding the electronic voting system.

The Carter Center expert mission asked several Brazilian legal experts about the legal basis for the active role of the armed forces, and most referred only to the invitation by the TSE. No other legal instrument or constitutional provision was cited. Several stakeholders considered the active role of the armed forces to be unprecedented and not foreseen in the Brazilian electoral legal framework. For its part, the TSE referred to it publicly as a “bilateral cooperative relationship with the Ministry of Defense,” but did not cite a legal basis.

Overall, while the involvement of the military may have helped to counter heightened public doubts about the voting machines, the military’s prominent role in several key aspects of the election represents a clear limitation on the independence of the election authorities and is a stark deviation from core international standards related to elector management body independence and autonomy.

In addition, it also introduces what could be seen as an intimidating force into the overall electoral process.

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38 On Aug. 1, 2022, the military submitted a “very urgent” request to the TSE to demand access to the source code of the voting machines, even though the source code had already been made available by the TSE since October 2021 to several entities, including the military.
40 Original text: “Tornar efetiva a auditoria independente, especialmente as dos partidos políticos.”
41 Para além dos encontros coletivos destacados acima, o TSE mantém relação bilateral cooperativa com o Ministério da Defesa, objetivando, com isso, diálogo e colaboração técnica”. Source: https://www.tse.jus.br/comunicacao/noticias/2022/julho/comissao-de-transparencia-das-eleicoes-cte-forteclcanal-de-dialogo-do-tse-com-a-sociedade.
environment, thus potentially undermining political competition and the ability of voters to choose their preferred candidates without undue outside influence. Looking forward, it will be important for Brazil to balance these competing demands in ways that do not reduce the independence of the TSE, while also taking steps to ensure public confidence.

In September of 2023, the TSE updated Resolution No. 23.673/2021 and unanimously voted the armed forces out of the Commission for the Audit of the Electronic Voting Machine, ahead of the tests and procedures of the voting system regarding the 2024 municipal elections.42

### Integrity Test and Pilot with Biometrics

The integrity test is one of the audits proposed by TSE to ensure transparency and integrity of the electronic voting system. It has been held on election day, at TRE facilities throughout the country, since 2002. It consists of randomly selecting voting machines by a draw on the eve of voting day and then conducting a recorded voting simulation in these machines during voting hours, using TRE personnel. At the end of the voting, the poll tapes counting the voting totals from the ballot box (boletim de urna, BU) printed by each machine must match the votes inserted.

The 2022 integrity test was regulated by the TSE resolution (Resolution No. 23.673 of Dec. 14, 2021), regarding the surveillance and audit proceedings for the electronic voting system [Dispõe sobre os procedimentos de fiscalização e auditoria do sistema eletrônico de votação]. As noted above, where TSE resolutions go beyond existing electoral matters, they lack a clear legal source to allow such regulation. The preamble to Resolution 23.673 refers only to “The Superior Electoral Tribunal, in the use of its legal and regimental powers” without specifying surveillance and audit proceedings.43

In late September 2022, just three weeks before the Oct. 2 election, the armed forces made a proposal to the Electoral Transparency Commission regarding the use of real voter biometrics to identify voters as part of the standard integrity test of the electronic voting system. TSE President Alexandre de Moraes agreed to the proposal and indicated that the TSE would implement it on a pilot basis at the 10% of all voting machines predicted to go through the regular integrity test. Approval for the use of biometrics was provided through TSE Resolution No. 23.710/2022 of Sept. 12,44 and it also was regulated by the Portaria TSE No. 921 of Sept. 19.45 It was implemented and regulated by the TREs, as was the original integrity test.

The agreement to pilot biometric information was widely covered in the media, which presented it as a concession by the TSE to the military.46 It is worth noting that although the armed forces were the driving force behind the proposal for the use of biometrics in the integrity test, they were not the only ones supporting it. The federal police had also formally proposed it in the Transparency Commission.47 In addition, university professors that the Center’s expert mission interviewed also viewed the test as having technical value and supported it.

During the first and second election rounds on Oct. 2 and Oct. 30, 641 voting machines went through the standard integrity test, while 58 machines went through the pilot integrity test with biometrics, in 19 states and the Federal District.48 Anecdotal reports indicate that military representatives were widely present around the pilot integrity test.
tests as members of the oversight entities (entidades fiscalizadoras).

The TSE reported that there were no differences between the results on the poll tapes recording the vote totals (the “BU” or boletim de urna) and the votes cast on paper. However, the number of people who participated in the test was consistently low throughout the country. This was likely because voters had to agree to take part in the test and share their biometric information. There was no legal regulation detailing how the test should take place, nor specifying any turnout requirement or a minimum sample size. See the section below, under “Electoral Technology,” on integrity tests with biometric pilot for additional analysis of the integrity tests and the pilot biometric tests.

**Legal Information Regarding the Voting System**

International standards hold that electoral management bodies should provide broad access to relevant electoral information in a transparent manner.\(^ {49} \)

This also applies to electronic voting systems, including both their overall functioning and any relevant auditing processes.\(^ {50} \)

The TSE website provides a great deal of information regarding the functioning of the “electronic ballot box” (urna eletrônica) and its security.\(^ {51} \)

However, the website does not provide much information about the legal basis for audit mechanisms. More systematic legal information is available at the regional electoral tribunals.\(^ {52} \)\(^ {53} \)

The Carter Center mission recommends that legal information regarding the audit mechanisms for the electronic voting system should be publicly available and easily accessible, like other areas of the electoral process. Electoral stakeholders and the public in general should have access to primary sources of information, including the relevant legal instruments, to allow interested stakeholders to analyze key information.

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\(^{49}\) U.N., ICCPR, art. 19(2); OAS, ACHR, art. 13(1)

\(^{50}\) CoE (Committee of Ministers) Recommendation (2017)5 on standards for e-voting, VI, art. 32.

\(^{51}\) TSE website: https://www.justicaeleitoral.jus.br/urna-eletronica/

\(^{52}\) See for instance the Regional Electoral Tribunal of Rondônia: https://www.tre-ro.jus.br/eleicoes/eleicoes-2022/auditoria-da-votacao-eletronica.

\(^{53}\) Training materials produced by TSE were also available in TR websites: https://www.tre-ro.jus.br/eleicoes/eleicoes-2022/auditoria-da-votacao-eletronica/arquivos/anexo-tse-materiais-de-apoio/@download/file/TSE_Material_de_Apoio.pdf

\(^{54}\) U.N., ICCPR, art. 19(2); AU, Convention on Corruption, art. 9; OAS, ACHR, art. 13(1); CoE, ECHR, art. 10(1); CIS, Convention on Human Rights, art. 11(1)

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**Limited Presence of Political Parties Throughout the Electoral Process**

International standards and best practices stipulate that political actors, as part of the general public, should be provided access to relevant electoral information.\(^ {54} \)

The Brazilian electoral system foresees an important role to be played by political parties, including in their role as oversight entities of the electoral process. According to the elections law, political parties can engage in various ways to assess the electronic voting system. However, the legal provisions are somewhat vague, lacking detail on how parties can access key parts of the system. Article 66, for example, does not specify how much time political parties have to inspect the source code. The elections law does indicate, however, that political parties are invited to every public ceremony, test, or audit of the electronic voting system during the electoral cycle.

As part of its assessment, the Carter Center expert mission attended several ceremonies and other key events in the electoral process. Overall, the Center’s mission found that despite the Brazilian system’s formal recognition of their role, political parties were largely absent and appeared to play only a very limited role in the electoral cycle. For example, only one political party participated in the source code inspection, and just two signed the sealing of the source code.
The Carter Center mission asked a range of political parties and actors what accounts for their taking such a limited role. In general, most attributed the parties’ absence to their traditionally high levels of trust in the system. As such, parties indicated that they did not feel the need to be present and instead prioritized their campaign activities. When asked why they did not take a more active role in the 2022 election, given the obvious level of public distrust, party representatives indicated that they did not want to be perceived as distrustful of the electoral system.

This is unfortunate given that Brazil’s electoral law provides political parties the right to be present at all stages of the process and to challenge key decisions, thereby helping to reinforce trust in the system as warranted. In the current context, where the electronic voting and tabulation system is under great pressure given increased levels of public concern about the integrity of the electoral system, a more active involvement and presence by political parties and contestants could have played an important role.

Complaints, Appeals, and the Role of the General Public Prosecutor

The right to an effective remedy for the violation of individual rights or freedoms is foundational in public international law sources.55

To better understand the relevant legal process regarding complaints, the Carter Center expert mission met with several stakeholders with specialized knowledge on electoral law and litigation practices, including electoral lawyers, political parties, the Bar Association, public prosecutors, civil society organizations, and electoral observation groups, among others.

Brazilian law foresees several mechanisms for complaints and appeals within the electoral period. The appeals and complaints mechanisms regarding vote counting are foreseen in the elections law (Lei das Eleições). The appeals and complaints mechanism focuses on the potential for electoral irregularities at the polling station level, which in Brazil includes the electronic voting machine. However, there are few legal provisions regarding complaint mechanisms for overarching issues, apart from a “general provision” that arguably could be relevant.

In addition, there are several legal provisions that relate to actions that can be pursued after election day, including by political parties, to challenge alleged misconduct or electoral malfeasance. Two key examples are judicial electoral investigations (Ação de Investigação Judicial Eleitoral—AIJE) and legal actions to impeach an elected mandate (Ação de Impeachment do Mandato Eletivo—AIME). The latter can be used to address the abuse of power, particularly by an incumbent officeholder.

55 U.N., ICCPR, art. 2; AU, AfCHPR, Art. 7; OAS, ACHR, Art. 25; CoE, ECHR, Art. 13
Although the general public prosecutor has the power to pursue various legal actions, several stakeholders indicated to the Center’s expert mission that the general public prosecutor was largely inactive both on election issues and in cases involving the misuse of public resources. The general public prosecutor, who was appointed by President Bolsonaro, was seen as being close to the president and unwilling to challenge his actions. Public spending and the approval of new social support measures and programs during the electoral period were areas where the general public prosecutor might have taken action. In the past, elected officials have lost their mandate for similar conduct, even when the charges were less serious. The general public prosecutor’s lack of action undermined the right to an effective remedy for the violation of individual rights during this electoral process.

**Increase in Public Spending and the Use of Public Resources During the Campaign**

Best international practice and state commitment sources of international public law stipulate that public resources should not be abused in support of a candidate or party.\(^{56}\) National law should be clear in limiting public employees’ involvement in electoral campaigns,\(^ {57}\) should specify procedures and penalties for acts of corruption,\(^ {58}\) and if public financial support for campaigning is available, should indicate an objective and fair formula for the distribution of funds.\(^ {59}\)

Brazilian law limits public spending prior to elections, including limitations on pay raises or other payments for civil servants, new programs, and other such actions. These aim to prevent the abuse of measures that could favor an incumbent candidate, or someone connected with incumbents.

The Carter Center mission met with several stakeholders who were knowledgeable about issues involving public spending and found that the 2022 Brazilian electoral process was marked by the widespread use of public resources for partisan purposes. One obvious example was the use of national symbols, including the flag, as the campaign symbols of President Bolsonaro.

**Public spending and the approval of new social support measures and programs during the electoral period were areas where the general public prosecutor might have taken action.**

In addition, several interlocutors pointed out various other mechanisms used by the Brazilian government and public institutions to circumvent the electoral legislation provisions that limit public spending during the electoral period. A key example is the so-called “secret budget,” a new method for allocating public resources in the legislative lower house (Câmara dos Deputados) that was adopted in 2021. This method distributes funds to deputies with less transparency and specificity about the destination of the funds, and this was allegedly used by the government and its support base of legislators to approve funds for municipalities in return for the support of local entities for national candidates.\(^ {60}\) Another example was the 2022 decree declaring a state of emergency, due to the increase in fuel prices, which allowed the government to bypass public spending limits during the electoral period. A third example was “Auxílio Brasil,”\(^ {61}\) the program launched in 2022 during the final stages of the campaign, to provide public funds to low-income households, substituting the decade-long cash transfer program “Bolsa Família.” This was done via debit cards that were given to the poor and most vulnerable. The logo and graphic design of the “Auxílio Brasil” cards were identical to the design and symbols of Bolsonaro’s campaign, which as noted

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\(^{56}\) CoE (Venice Commission), Code of Good Practice in the Field of Political Parties, para. 41

\(^{57}\) OSCE (ODIHR), Election Observation Handbook (Ed. 6), p. 60

\(^{58}\) U.N., UNCAC, Art. 18; AU, Convention on Corruption, Art. 7

\(^{59}\) CoE, (Committee of Ministers), Recommendation (2003)4, Art. 1; CoE (Congress of Local and Regional Authorities), Resolution 105 (2000), para. 13

\(^{60}\) Read more at: https://www.theguardian.com/world/2022/oct/27/bolsonaros-campaign-relies-on-secret-budget-payoffs-to-win-brazils-election

\(^{61}\) Available at: https://www.gov.br/cidadania/pt-br/auxilio-brasil
above, used the national colors and flag. The cards were distributed to at least 6 million people. The use of the cards linked to the Bolsonaro campaign was widely reported in the media.

Although clearly raising questions regarding the misuse of public resources, legislation authorizing such steps was approved by the major political parties. Brazilian interlocutors explained to the Carter Center mission that this was due to the high political cost of refusing to support measures that distribute economic support to the most vulnerable. And, as noted above, the general public prosecutor did not challenge these measures, nor was there any legal action against them, even though the legal framework seems to prohibit such measures.

A particularly remarkable case of misuse of public resources concerns the regulation approved by the National Institute of Social Insurance (Instituto Nacional do Seguro Social — INSS) regarding “proof of life” (prova de vida) for elderly pensioners and retired people who receive social benefits. In 2022, for the first time, the “proof of life” could be done via the casting of votes (in addition to other ways). The Bolsonaro campaign published a video focusing on this new mechanism for qualifying to receive social support, using expressions such as “Now this is the law,” and “Your vote is enough to guarantee the social benefits of INSS” and “For the good of Brazil, vote 22!” Such messages were interpreted by many stakeholders as making a direct association between voting for 22 (the ballot number for Bolsonaro) and receiving social benefits.

The campaign of candidate Simone Tebet requested that the TSE issue an order to withdraw the video from social media. The PT also requested its removal. The TSE eventually ordered the removal of the video, but not until after the first round of the election. The TSE decided that the video could be misleading, as the text and video could cause voters to believe that their “proof of life” would require that they vote for number 22. Indeed, data regarding voter turnout for the first round of the 2022 election showed that while abstention increased for most age groups, it decreased for the group aged 50-98.

In sum, there were multiple instances where the use of public resources during the 2022 presidential electoral campaign was inconsistent with international standards. Although incumbent advantages that rely on easy access to public machinery are practiced widely in democracies across the globe, the instances during the Brazil 2022 election would appear to constitute an abuse of public resources beyond what should normally occur in an electoral process.

Universal Access to the Vote: The Debate on Public Transport

International standards for democratic elections indicate that elections should be based on and promote universal suffrage, for the broadest possible pool of voters. To that end, the right to move freely through the territory is fundamental, including so
that voters can have access to the polls. Depending on the local context, this can entail being able to access transit without any obstacles or coercions of any kind, including physical and emotional violence. A related right is the right to personal security, with security forces potentially playing an important role by ensuring that citizens can enjoy this right.

In Brazil, there are still significant obstacles that prevent universal access to the right to vote, especially for the most economically vulnerable. The debate on whether public transport should be free on election day demonstrates some of the challenges that impede access to polling stations for the poorest and most vulnerable. This issue became a central one in the election, when on Oct. 29, the day before the second round, the commander of the federal road police (Policía Rodoviária Federal—PRF) announced that the force would be deployed on election day in large numbers (500,000 personnel) to check vehicle licenses and other transit irregularities. Noting the potential impact this could have on suppressing access to the polls, the president of the TSE issued an order restricting the police from these actions that could interfere with the election, pointing out that the federal road police are not an oversight entity for the elections.

Nonetheless, on election day there were multiple federal road police operations stopping buses taking voters to the polls. According to media reports, the federal road police actions were taking place primarily in regions viewed as likely to support Lula da Silva, particularly in the northeast of Brazil. In response to these developments, the president of the TSE ordered the director of the PRF to stop the roadblocks immediately or face a fine and imprisonment. However, the TSE decision was not issued until about 3:30 p.m., only an hour and a half before the closing of the polls at 5 p.m. Several stakeholders called for an extension of voting hours, but the TSE president declined to order one and explained his actions in a press conference.

The degree to which the PRF roadblocks impacted the election results is not clear. The PRF action seems to have been targeted geographically at areas that were likely to favor Lula, and the PRF director was publicly a Bolsonaro supporter. The potential impact of the roadblocks was particularly important given that the vote margins between the leading candidates were very close. The PRF roadblocks also illustrate the close ties between the security forces and Bolsonaro and how he used this to influence the electoral process.

The PRF action seems to have been targeted geographically at areas that were likely to favor Lula, and the PRF director was publicly a Bolsonaro supporter.

In order to be consistent with international standards regarding universal suffrage and freedom of movement, the Carter Center mission recommends that, looking forward, issues regarding access to the polls and universal suffrage should be addressed by Brazilian stakeholders. Potential steps could include providing free public transportation to polling stations on election day, or ensuring adequate numbers and locations of polling stations, especially in vulnerable communities that lack resources. In short, it is critical to ensure respect for the obligation to protect the right to vote, based on universal suffrage.
Mandatory Voting and Early Voting

International treaties state that elections must be held by universal suffrage. Interpretive sources indicate that any limits placed on universal suffrage in the context of voter registration must be based on objective and reasonable criteria. These include residency, citizenship, criminal conviction, and a minimum age requirement. Where voter registration is conducted to determine eligibility, universal suffrage requires that broad participation be promoted. Further, participation of eligible voters in the registration process should not be inhibited, and unnecessary technical barriers, including overly short timeframes, to participation by otherwise qualified eligible voters should be removed. In addition, there should be no fee charged for registering as a voter. State practice sources indicate that the state may facilitate voting through a variety of methods, including absentee and early voting.

In a country like Brazil where there can be substantial obstacles that prevent access to the vote and other public services (remote areas, fragile communities, and others), being removed from the voter registry may pose significant difficulties for vulnerable groups.

Voting is mandatory in Brazil. Voters who do not vote for three elections in a row are removed from the voter registry, requiring them to register again. The electoral code includes a series of penalties in case a voter does not vote and fails to provide a justification. While removing a voter from the voter roll seems to run counter to ensuring the universal right to vote, it is also a commonly used practice of “list maintenance” in election administration, to ensure that various groups of nonvoters (deceased, moved away, etc.) are removed from voter lists. Nonetheless, in a country like Brazil where there can be substantial obstacles that prevent access to the vote and other public services (remote areas, fragile communities, and others), being removed from the voter registry may pose significant difficulties for vulnerable groups.

Brazil does not have legal provisions that allow for early voting. The lack of early voting, as well as the lack of free public transport networks, can hinder voting and accessibility. Voters who are not in their usual voting place on election day can request their polling place to be changed to another location, but do not have the option of early voting. In a country where voting is mandatory, to have extra days where voters can exercise their right could lead to higher levels of participation, as it would help overcome various impediments to the right to vote.

Brazil should consider implementing steps to end the removal of voters from the voter roll after three sequential abstentions, as the penalties existing in the electoral code are a sufficient penalty. Brazil also should consider whether options for early voting might be used or at least piloted.

Elections and Inclusion

International and regional treaties indicate that women should enjoy equal civil and political rights as men, and that marginalized groups that have faced barriers or suffered discrimination should enjoy temporary special measures aimed at promoting equality of civil and political rights. The Carter Center’s expert mission noted that the TSE created a special advisory unit for inclusion and diversity to help address multiple forms of discrimination, including that based on ethnic and racial origin, e.g., indigenous peoples, people of African descent, and the quilombolas population. In addition, the unit focused on women, LGBTQI+, and persons with disabilities. It should be noted, however, that similar units are not yet present in all TREs. The TSE also is using new technologies to foster inclusion. As one example, the TSE allows transgender candidates to change their gender in the voter registration database.

While these steps by the TSE are to be commended, there are challenges that still must be

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74 U.N., ICCPR, Art. 3; AU, ACHPR, Art. 2(1)(a); AU, African Youth Charter, Art. 23(1)b; AU, Protocol to the ACHPR on the Rights of Women, Art. 8; CoE, ECHR, Art. 23; EU, Charter of Fundamental Rights, Art. 23; CIS, Convention on Human Rights, Art. 20(1)

75 U.N., ICERD, Art. 1
addressed. For example, it is difficult for people who are unhoused to access the vote. The political rights of indigenous communities and people of African descent also deserve greater attention. For example, voter registration forms and data do not capture information regarding ethnicity and language. In addition, while the TSE started updating the entire voter roll with voter biometrics in 2008, by the time of the 2022 election this process was still at around 80% of the electorate. Furthermore, there was no mapping for developing biometrics for specific indigenous peoples’ communities, which inhibits the development of a comprehensive plan of action, including civic education campaigns or campaign materials in native languages.

The Carter Center expert mission noted cross-cutting gender imbalance issues, including the underrepresentation of women in several areas related to the electoral process, in elected positions, candidatures, among the TSE and TRE staff, and leading positions with whom the mission met. This leads to the conclusion that Brazil falls short on fulfilling international standards of gender balance and participation of minorities. This imbalance is also evident in the composition of the TSE, which was composed of seven members, only one of whom is a woman. The gender imbalance is a broader issue, including in various electoral panels and public campaign events, where most participants were white middle-aged men. The mission noted the presence of women primarily in midlevel TSE and TRE positions. The mission also noted the lack of persons of color in such events and meetings.

**This leads to the conclusion that Brazil falls short on fulfilling international standards of gender balance and participation of minorities.**

The Carter Center recommends that regional tribunals share information about best practices in working with indigenous peoples, people of African descent, quilombolas, ribeirinhos, and vulnerable groups in general. In addition, the Center recommends that the TSE consider developing normative provisions to guide TREs’ actions aimed at increasing the participation and inclusion of historically excluded groups.
Election Technology

The TSE created a comprehensive electronic voting system for Brazil, and its deployment has eliminated concerns about paper ballot fraud that had been prevalent in the past. Electronic voting has also helped include disadvantaged groups such as illiterate people and people with disabilities in the voting process. As a result of these successes, the TSE has enjoyed prestige and trust in Brazilian society.

As a result of the TSE’s design choice centered on a DRE-based system, the integrity of election results depends entirely on the integrity of the system’s software since there is no software-independent paper record to fall back on should that integrity be called into doubt.

The TSE maintains complete ownership of its system and administers it using a highly professional personnel infrastructure. It has chosen a pure direct recording electronic (DRE) machine design, without a voter-verified paper audit trail (also referred to as VVPAT). While in the last two decades election bodies throughout the world have gradually moved away from pure DRE systems, the TSE has successfully withstood several parliamentary initiatives that aimed to introduce paper support into the system.

The Brazilian Electronic Voting System

Brazil’s TSE is a pioneer in using information technology in the electoral process. Computerized central tallying was introduced as early as 1994. Two years later, in 1996, electronic voting using a DRE machine was launched for 30% of the electorate. The system was quickly expanded during the following elections to cover the entire population. Since the year 2000, all Brazilians voting domestically have used the machines. In 2006 a process was started to migrate votes cast from abroad to the DRE machines. Today, virtually all votes in Brazilian elections are cast using the electronic voting system.

Automation efforts also include voter identification. In 2008 a process to transition to biometrics was started with a pilot for 40,000 voters. The program has been expanded continuously since then. In the 2022 elections, 75% of voters were identified at their polling station using their fingerprints.

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76 Direct Recording Electronic
77 The only exception being polling stations abroad with fewer than 100 voters; these still use paper ballots.
Several versions of the voting machine are in concurrent use, but all share the same two-module design. A small terminal operated by a poll worker is used to identify the voter and is connected through a cable to the main voting machine, which is mounted behind a privacy screen in the polling booth. After verifying voter identity on the small terminal, the poll worker enables voting on the voting machine. There the voter is presented with the races being contested, in order, and asked to key in the numerical code of their chosen candidate for each race. After entering the number, a picture of the candidate and their description is shown. If correct, the voter then confirms the vote and moves on to the next race. If not, they can correct their input. After the last choice is confirmed, “End” is displayed, and the process has finished.

**Reasons for Introducing Electronic Voting**

The TSE claims that the key reasons for adopting the electronic voting system in Brazil were to put in place safeguards to prevent fraud, which had become a widespread concern and problem in the old paper-based system in place until the mid-1990s. While fraud had been prevalent for many years, a particularly significant case that was discovered in Rio de Janeiro during the 1994 presidential elections triggered the transition away from paper ballots. The new voting machines eliminated paper from the casting and tallying process, and with it many of the “conventional” fraud schemes. Following the adoption of electronic voting, fraud incidents dropped significantly. It also facilitated participation.

As there are no party lists in Brazil, races for federal and state deputies can have hundreds, or even thousands, of candidates, which made printing all their names on a ballot impossible. In the old paper system, only candidates for president, governor, and senator were printed on ballots and selected by marking a box. To vote for one of the candidates for deputy, voters had to write in their candidate’s name, using a pen. Counting these ballots often took weeks to complete, making the tabulation process politically tense and vulnerable to manipulation during tallying. Furthermore, the requirement to write in many of the candidates disadvantaged illiterate voters and led to shame-abstention, via casting of blank votes, or wrongly completed and hence invalid ballots.

The voter enters the number of their candidate, the machine displays a photo and information, and the voter confirms (or corrects) the choice. No literacy is required to vote, and the machines also provide access for blind and deaf voters. The introduction of the machines has significantly helped to increase inclusion of disadvantaged voter groups.

Brazil’s adoption of electronic voting machines changed all that. Now, political parties and candidates are assigned a unique number, which is extensively publicized during campaigns. This allows for a particularly user-friendly electronic voting machine design, since only a numeric keyboard is needed. The voter enters the number of their candidate, the machine displays a photo and information, and the voter confirms (or corrects) the choice. No literacy is required to vote, and the machines also provide access for blind and deaf voters. The introduction of the machines has significantly helped to increase inclusion of disadvantaged voter groups.

In short, the system’s success in reducing fraud and boosting inclusion has led to its widespread appreciation and a high level of trust in the competence of the TSE.

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80 Through both document verification and biometrics (digital fingerprint of index finger or thumb)

81 Council of Europe Handbook for Observers, section 2.5

Full System Ownership by TSE

In the absence of international treaties that clearly state the acceptable bounds and requirements for the regulation and design of an electronic voting system, the international electoral community relies on a set of international best practices built over years of technical and managerial expertise on the matter, which provide substantial guidance for the use of such systems. One of its primary suggestions is that the electoral management body should be in full control of the systems’ functioning, performance, and integrity through the electoral cycle.\(^{83}\)

In Brazil, the TSE started its electronic voting system with the help of vendors, but in 2006 decided to take full ownership of the system and move all software development in-house. A transition to open-source software components (Linux) was initiated and completed by 2008. The voting machine hardware is manufactured by contractors according to designs stipulated by the TSE. Controlling both hardware and software has allowed the TSE to move with great flexibility and independence and to define all aspects of audits and inspections provided to stakeholders without vendor interference.

System Design Choices and the Struggle Over a Paper Trail

International best practices regarding the auditing of electronic voting systems indicate that the voter should be able to verify that their vote was cast and counted as intended, and that this verification should be independent from the e-voting system itself.\(^{86}\) They also state that any observer should be able to watch the count of votes.\(^{87}\) Most election observers and practitioners agree therefore that DREs should provide a second medium to store the vote, such as a voter-verified paper audit trail (VVPAT) to meet these goals.\(^{88}\)

Since one of the main aims for introducing voting machines in Brazil was to eliminate paper ballot fraud, it is understandable that the TSE has shown little enthusiasm for reintroducing paper into its processes. Despite that resistance, and despite the widespread trust of society in the TSE, initiatives to include paper to support the DREs have been introduced in Brazil on multiple occasions since the machines were launched.

Indeed, in 2002 the Congress passed a law requiring the TSE to use a VVPAT\(^{89}\) system and begin testing it that same year in the 2002

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83 Council of Europe. Recommendation CM/Rec(2017)5 of the Committee of Ministers to member States on standards for e-voting. (V) par. 29.
84 Council of Europe. Recommendation CM/Rec(2017)5 of the Committee of Ministers to member States on standards for e-voting. (VII) par. 40, 41.
85 Council of Europe. Recommendation CM/Rec(2017)5 of the Committee of Ministers to member States on standards for e-voting.
86 Council of Europe. Recommendation CM/Rec(2017)5 of the Committee of Ministers to member States on standards for e-voting. (III) par. 17.
87 Council of Europe. Recommendation CM/Rec (2017)5 of the Committee of Ministers to member States on standards for e-voting. (V) par. 30.
89 Voter Verified Paper Audit Trail, requiring that the voter be able to visually inspect the paper to see if it represents their choice, before releasing it into a ballot box.
presidential elections—a very short lead time for implementation. The printers were pronounced a failure by the TSE, which claimed that they “added nothing in terms of security or transparency” yet caused numerous problems. Some of the key problems included: mechanical failures leading to machine replacement and contingency voting on paper ballots; voters needing assistance because of printer jams and thus violating vote secrecy; and exacerbating the problem of insufficient storage space in polling stations. It also cited evidence from Rio de Janeiro state that 60 percent of voters did not actually look at the paper before confirming their selections and letting it drop into the ballot box, making the VVPAT “unnecessary.”

The TSE lobbied to remove the VVPAT provision, and in 2003 it succeeded, with the Congress passing a new law overturning the paper requirement and replacing it with a Digital Record of Votes (DRV) produced by the voting machine. However, since a digital record created by the machine itself is not software independent, it cannot replace a VVPAT for the purpose of audits as defined in international best practice. Nonetheless, the opposition of the TSE to paper has prevailed until today. A further attempt by the Congress in 2009 to legislate voting machine design changes and to introduce a VVPAT by 2014 was challenged in the Supreme Court by the TSE and eventually overturned as unconstitutional.

As recently as 2019, another paper proposal was launched, but it was rejected in Congress in 2021.

Focus on System Audits

International best practices emphasize the necessity of a complete set of transparent and observable tests and trials of the voting system before the elections, put forward along a series of procedures of regular updates and corrections of the software used in e-elections aiming at the transparency and integrity of the system. In the TSE case, with a VVPAT unavailable, and hence a machine-independent recount of votes not an option, the integrity of the vote depends entirely on the integrity of the voting machine itself. This increases the importance and the necessity of tests to ensure the proper functioning of the system. If the machine records the voter’s choice incorrectly—be it through error/malfunction or through manipulation—the original voter intent cannot be recovered. Only a repetition of the elections for polling places with the affected machines, possibly on paper, can adequately address the situation.

Consequently, it is crucial to protect the system from both critical software errors and malicious manipulation. Either must be detected—and corrected—before the software is used on election day. This places a lot of weight on the quality of the software development process within the TSE, which must produce a system that functions flawlessly. The TSE is aided in this by regular audits of its internal software development processes by the Tribunal de Contas da União (TCU). The results of these audits, with suggestions for improvements made by the TCU, are public information.

In addition, the TSE must be able to protect the system’s integrity from malicious attacks and effectively prove its security to non-TSE stakeholders. The tribunal has deployed an extensive set of tests and audit procedures attempting to address this need and has over the years improved them in response to stakeholder criticism and suggestions. The current audit scheme invests in the participation of different institutions and organizations, increasing the number of stakeholders allowed

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90 There was little time to train poll workers adequately, leading to confusion as to the proper procedure.
92 Eliminating the cable connection between the voter ID terminal and the voting machine because of vote secrecy concerns.
93 Source: https://www.camara.leg.br/noticias/792343-camara-rejeta-proposta-que-tornava-obrigatorio-o-voto-impresso/
95 Council of Europe, Recommendation CM/Rec (2017)5 of the Committee of Ministers to member States on standards for e-voting, (VIII) paras. 43.
96 Tribunal de Contas da União.
to take part in the process and aiming at the transparency of the software development process. Transparency in the decision-making process with regard to technology is one of the overarching principles of international obligations of electronic voting systems.  

The main components of the TSE’s audit scheme are:

- Source code review
- TPS public security test
- Source code sealing ceremony
- Integrity testing/parallel vote exercise on election day
- Poll tape audit during and after election day

Finally, it is worth noting that since there is no paper backup, there are no provisions for either risk-limiting audits or partial recounts of paper after election day. In addition, there are not clear procedures in the event that integrity testing or poll tape audits discover discrepancies that cannot be explained by operator error. In interviews with the Carter Center expert mission, TSE and TRE staff expressed complete confidence in the voting machines and the system as a whole, with any machine malfunction seen as very unlikely. In this sense, the TSE views audits mainly as confidence-building measures.

Source Code Review

Transparency of the system’s functioning and operation is recognized as international best practice. Among other steps, this includes making all relevant documentation available to observers and stakeholders. In systems that use e-voting, key transparency mechanisms include making the source code available for independent audits and ensuring...
the auditability of the system by key political stakeholders and observers in general.\(^9\)

In Brazil, the TSE puts source code inspection and testing at the core of the auditability scheme of its voting system and machines, including through a series of procedures ranging from source code inspection by stakeholders and experts, to public penetration tests and election-day testing of a random sample of machines.

The source code review for non-TSE actors was first instated after the 2000 elections. Since its inception, and in response to criticism that access was too limited for meaningful review, the time available for reviewers to look at the code has steadily increased.

Currently, reviewers have 12 months before the elections to review code and have the option to consult TSE programmers in order to understand the code and its structure. Reviewers are nominated by the “oversight entities”—mainly political parties, the Brazilian Bar Association, the public prosecutor, the police, and the armed forces, as well as public universities.\(^1\) However, access by the oversight entities is restricted as individual reviewers must be approved by the TSE, and those approved can only examine the source code in a special secured room in the TSE building. Software tools available to the reviewers are limited to static analysis packages and must be approved by the TSE beforehand; source code may not be compiled and executed. Only handwritten notes are allowed, and all reviewers must sign nondisclosure agreements limiting their ability to share their findings outside the TSE. Recognizing that these audit rules limit effective review, the TSE in 2022 entered into special cooperation agreements with three universities, allowing them to examine the source code on their own premises, on their own terms, and using the tools they chose (more details below).

Auditors are requested to report any findings to the TSE before the source code sealing ceremony, and the TSE is obliged to respond to any reported findings within 10 days. The TSE has sole discretion as to modifying the system in response to reported findings.

The current audit scheme invests in the participation of different institutions and organizations, increasing the number of stakeholders allowed to take part in the process and aiming at the transparency of the software development process.

As noted above, the 2021–2022 edition of the source code review was marked by significant political tension over the inclusion of the military as a participant. Political parties commenced their source code analysis late in the process and usually limited auditor deployment to just a few days. Not all parties participated. While representatives of political parties told the Carter Center expert mission that their low level of participation reflected their implicit trust in the system, it is also possible that this may be due in part to their lack of qualified auditors.

It is important to note that for the 2022 elections the TSE reached out to public universities, inviting them to “take home” the source code to investigate it on their own premises, using tools of their choice, without restrictions. Three universities—Campinas University (UNICAMP), the Federal University of Pernambuco (UFPE), and São Paulo University (USP)—participated in this program. This methodology and level of access permitted a much higher level of transparency than the review on site at the TSE. UNICAMP and UFPE only looked at software, and worked pro bono, while USP entered into a special, remunerated agreement with the TSE under which it also set up a hardware laboratory.

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\(^9\) Council of Europe, Guidelines on Transparency of e-enabled elections, 2011, art. 12.

\(^1\) The full list of entities is composed of: political parties, federations and coalitions, Brazilian Bar Association, Public Prosecutor’s Office, National Congress, Federal Supreme Court, Office of the Federal Controller General, Federal Police, Brazilian Computer Society, Federal Board of Engineering and Agronomy, National Council of Justice, National Council of the Public Prosecutor’s Office, Federal Accounting Court, Armed Forces, National Industry Confederation, other members of the Industry System and corporate entities belonging to S2 System, Brazilian private entities, nonprofit entities well known for their supervision and transparency advocacy in the government management and accredited by TSE, and university information technology departments accredited by TSE.
with voting machines on university premises, allowing it to look at both software and hardware.

All three university teams applauded the level of access that the TSE granted them and stated that they had not found significant problems.

The Carter Center reached out to all the university teams to obtain feedback on the process and the results of their investigation. All three university teams applauded the level of access that the TSE granted them and stated that they had not found significant problems. One qualification made by the university teams was that while the TSE did not limit their level of access, they were limited by their own resources in terms of staff time, so they focused on examining the parts of the source code that they deemed most important. Complete verification of the entire source code, and guarantees of the absence of malicious code, were beyond the scope of their efforts.

It is noteworthy that beyond its auditing effort, USP is funded by the TSE to participate in the Future Elections Project, a TSE initiative to gather input on the future road map for its development of the voting system. For example, the team is looking at ways to incorporate cryptographic systems that would provide end-to-end verifiability. In the absence of a software-independent paper record, such systems could provide additional verifiability that could be helpful in rebuilding trust after the contentious 2022 election. Another objective for the research collaboration is the publication of the entire source code on the internet, available for all to examine. The Carter Center applauds this initiative.

Overall, the Carter Center expert mission was not aware of any problems discovered in the source code and reported by auditors before the sealing ceremony. In addition, the Center commends the TSE’s efforts in 2022 to incorporate the new modality of audits to allow unrestricted access for public universities. However, reviewing large packages of source code using the proposed methodology still presents a significant challenge. To ensure that the universities can mobilize large enough teams over longer time periods to conduct the audits as effectively as possible, The Carter Center recommends that consideration be given to establishing specific, independently administered state grants to provide funding for the audits.

TPS – Public Security Test/Penetration Testing

Another part of the TSE audit scheme for the source code is the Public Security Test that was first instated in 2009. In a multiday exercise, TSE-approved researchers review the system and its software, then propose “attack plans” to an evaluation committee composed of both TSE staff and external stakeholders. In these plans, the researchers describe how they intend to try to subvert the security measures in place. The committee approves or denies these plans and provides access to machines to carry out any approved plans.

The outcomes of the attacks are evaluated by the TSE, which may or may not modify its system in response. If a modification is implemented to harden the system against an attack, it is presented to the researchers for a second round of testing, called confirmation testing, to verify the effectiveness of the fix.

As with the source code review, nondisclosure agreements limit the degree to which participants can share their findings outside the TSE. The scope of the TPS exercise has gradually broadened over the years. More system components have been included in the exercise, such as the tallying and biometric voter identification systems that were initially excluded, and a broader set of tools has been permitted for testing.

A significant number of vulnerabilities have been found during the various iterations of the TPS, giving the TSE the opportunity to harden the voting system.

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101 This has become possible only recently, because the TSE has responded to critics who requested that cryptographic keys be completely removed from all source code. With the keys now removed, sharing has become much easier.
102 The system under audit has about 17 million lines of code.
system against attackers. A total of 26 researchers participated in the 2021 iteration of the TPS, presenting 29 attack plans. Five of these uncovered security-relevant issues, although none of them were rated as critical. Fixes for these were presented at the confirmation testing round.

The Carter Center commends the TSE for organizing the TPS exercise, responding to stakeholder suggestions and criticism, and continually broadening access for researcher teams.

**Source Code Sealing**

A month before the elections, the Carter Center expert mission received an official invitation from the TSE to participate in the source code “sealing ceremony,” that was held on Sept. 2. At this event the final version of the election system software is “frozen.” From that moment onward, it cannot be changed. In the week prior to the ceremony, auditors who had previously inspected the source code were given the opportunity to have a look at the final version of the code.103

In the public source code sealing ceremony, the final version is compiled and cryptographic hashes generated for both source code and binaries. These hashes are later published and can be used to verify that no modification has taken place after the ceremony. Specifically, hashes can be verified by stakeholders during the “voting machine insemination procedure,” another public process in which the voting machines are configured for election day and the sealed version of the software installed. It takes place at the regional electoral courts (TREs) between source code sealing and election day.

While observing this process and in conversations with TRE staff, the Carter Center expert mission came away with the impression that parties and other stakeholders rarely made use of the opportunity to verify the hashes during insemination. And, when verification did take place, stakeholders used hardware and software provided by the TSE itself, instead of using their own verification tools. This may be due to limited technical capacity within the parties, as well as to the fact that the TSE requires parties to submit for approval any non-TSE software they wish to use to verify hashes long before election day.

**‘Integrity Test’ – Parallel Voting Exercise on Election Day**

As noted above, the TSE began implementing parallel “integrity tests” on samples of voting machines as a separate exercise to complement source code audits. If any erroneous or malignant code were to have slipped through the preceding audit procedures and made it onto the voting machines, the integrity test procedure is meant to find and expose it. International best practices suggest that e-elections should provide voters with checks that their vote was counted as intended and hence should incentivize research and pilot projects that enable these different, and possibly complementary, checks.104

In the past, the TSE conducted the integrity test by randomly selecting a number of machines, three to five per state depending on the number of voting districts in the state, during a public ceremony at TREs on the day before the elections, when machines had already been deployed to their respective polling places. Different TREs employ different methods for randomizing the machines to be selected. The political parties and some public entities also have the right to pick certain polling stations to be audited. The sample size had previously been two machines per state, but after the statistical methodology behind that number was challenged, the number was raised: first to 100 (“3 to 5 per state, depending on how many voting districts it has”), and then for the 2022 integrity test, the number was raised again based on a revised statistical methodology, to 641 machines.

The machines selected for testing are retrieved on the Saturday before the elections and replaced with contingency machines in the polling stations, which are the ones that are used for people to actually cast their vote electronically. The selected machines

103 Since the code is under constant development during the one-year review window, what they reviewed then may have changed by the time it is finally used.

104 Council of Europe, Guidelines on Transparency of e-enabled elections, 2011, Art. 16.
are taken to the TREs, where votes are entered in a public ceremony held on election day during regular voting hours. The tests are filmed and observed by non-TRE actors and a TRE-contracted audit company. If the known tally matches the tally produced by the machines, the machines are considered to have passed the test.

**Integrity Tests with Biometric Pilot**

In response to criticism that the procedure was vulnerable to “defeat device mechanisms,” in 2022 a subsample of the machines were not brought back to the TREs, but instead were parallel tested on site at the polling places where they were meant to be used. This allowed real voter biometrics to be used during parallel voting. (The remainder of the machines were tested as usual, at the TREs without voter biometrics.) Voters were invited to “volunteer their fingerprint” to operate the tested machines, and they could accept or refuse. This “pilot biometric project” was implemented in 19 state capitals and in Brasilia Federal District. A total of 58 machines...
(8.74% of the 641 sampled) were tested under this methodology.\footnote{Moraes: A integridade das urnas teve “100% de aprovação” [Moraes: Integrity test had “100% approval”] https://noticias.uol.com.br/ultimas-noticias/agencia-estado/2022/10/06/moraes-projeto-piloto-do-teste-de-integridade-das-urnas-teve-100-de-aprovacao.htm}

As noted above, members of the Carter Center expert mission visited a small number of locations to observe the integrity testing. This included seeing both the traditional integrity tests at the TREs as well as the “pilot biometric test” modality using real voter biometrics at polling locations, during both the first and second rounds of voting.

The traditional testing the mission experts witnessed went smoothly, as the operators clearly had extensive experience with the procedure. Measures were taken to ensure that test conditions matched real voting conditions as closely as possible.

Simulated participation at each tested machine took into account expected rates of voter turnout and abstention, as well as voting speed and cadence. For example, testing teams that were testing too fast were told by supervisors to slow down to approximate a regular speed of voting.

Carter Center expert mission members noted several instances in which the known tally did not match the one displayed by the machine. In these cases, human error by an operator was invariably assumed, and the supervisors turned to audio and video recordings of the testing process of that machine to identify the error. In all cases witnessed by the Center’s expert team, the human data entry error was duly found and the machine cleared. In one case, it took longer to find the human error, and Carter Center team members asked the auditor what the procedure was for a case in which no human error could be found, implying that the machine was to blame for the non-match. He responded that “that never happens”; when pressed, he was not aware of any specific protocol to follow other than isolating the machine and submitting it to the TRE, and perhaps the TSE, for an unspecified investigation.

The Carter Center recommends that specific procedures for failures during the integrity test (i.e., the machine is blamed for the non-match) should be emphasized during the training of testing center staff. Integrity testing should not simply confirm the expected absence of problems, but rather be an open-ended evaluation of system performance.

Voters observe the integrity test with biometrics. Similar to the standard integrity test, simulated votes are recorded and counted in parallel on an independent computer. By the end of the day, votes at the machine and the computer must match. In this pilot version, voters from the randomly selected voting machine’s session are invited to use their biometrics to allow the simulated vote, performed by TRE staff. On the standard integrity test, the TRE staff must skip the biometric activation of the machine. The idea of this pilot version is to emulate more closely real voting conditions in which machines operate. The pilot test took place at voting centers, and voters could watch the process.
The Center also observed “pilot” testing with real voter biometrics. Participation was very low in the first round, as many voters invited to participate were intimidated by the attention (often press and several officials were present) or otherwise unwilling to volunteer their biometrics. In the second round, participation was higher but still significantly below what would be normal for any given machine under regular use. This raises the question of defeat-device heuristics again, in that a machine thus prepared could detect the high abstention to detect being tested.

The Carter Center recommends that consideration be given to evaluating whether requiring mandatory participation in the biometric testing methodology might be feasible. After all, citizens may be required to provide other services on election day (e.g., poll workers), and voting itself is mandatory. Including integrity test participation as mandatory would solve the abstention issue and increase the utility of the test.

Poll Tape Audit During and After Election Day

According to international best practices, observers should be able to observe the count of votes. The electoral management body is responsible for the counting processes that take place at each level. Inside the ballot box the votes are encrypted, and the information on votes and voters at each machine should be kept sealed until the end of voting and the beginning of the counting process. During the transmission of results, the electoral authority must also handle the cryptographic data securely.

In Brazil, the voting machines produce a poll tape with totals per candidate, which is printed out at the end of voting (a “BU” — boletim de urna). Copies are given to poll workers and party observers and publicly posted at the polling station. Since the 2016 elections, the poll tape printouts also contain a QR code with the results, which makes them machine readable. The data in the QR code is cryptographically signed. A smartphone app is provided by the TSE to read the QR code and verify the signature, but anybody can build software to do the same.

Once polling stations close on election day, the digital version of the poll tape (along with the digital vote record and a log file) is encrypted, signed, and transmitted via virtual private network to the central tally system at the TSE. The TSE publishes the digital poll tape files on its website to allow comparison to printed poll tapes. Since 2022,
publishing on the website happens in real time on election night.

Any interested party can compare the printed poll tapes with the digital versions published online. This can be done for individual polling stations or used for verifying larger samples for nationwide parallel tally exercises. The armed forces organized such an exercise in 2022, auditing a sample of 385 poll tapes. The TCU also performed a similar audit, using a larger sample size of 4,161 poll tapes. Neither the armed forces nor the TCU discovered discrepancies during their audits of the poll tapes.

**Post-election Audit Procedures**

In marked contrast to the extensive set of pre-election and election day procedures described above, the TSE has established very little in terms of post-election audit procedures. As noted above, since there is no paper trail, neither risk-limiting audits nor partial audits of paper in cases of close results are possible. Similarly, there does not seem to be a specific rule set for examining voting machines after the election should the results be questioned.

As described above, this seems to reflect the TSE’s confidence in the system and the view that audit procedures serve primarily to demonstrate that the system functions as expected. As a result, there are no provisions for the event that the system does not function as expected. The only occasion known to The Carter Center in which an extensive, post-election forensic audit was attempted was the audit requested in 2014 by the losing PSDB party. Reviewing the details of this audit is beyond the scope of this report, but the challenges described in the final report\(^{111}\) of the audit, prepared by a team of reputable IT security researchers from São Paulo University, are illustrative. Without clear, predefined rules of what can and cannot be done during such an audit, the process descended into a tug-of-war between the auditors and the TSE, at the end of which the auditors declared that they could not make meaningful statements regarding the system’s integrity, ultimately rendering the exercise a failure.

Any interested party can compare the printed poll tapes with the digital versions published online. This can be done for individual polling stations or used for verifying larger samples for nationwide parallel tally exercises.

The Carter Center recommends that the TSE develop and publish, in consultation with key stakeholders, a specific set of rules and regulations for post-election audits of the system, including access to the voting machines and the software.

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Legal Framework Regarding False Content and Disinformation in Brazil

According to international standards for democratic elections, the protection of human rights should be ensured equally. At the highest level, democratic election standards hold that the electorate has the right to receive accurate information to make an informed decision and citizens are allowed to freely express their views and opinions, including showing support to any candidate. At the same time, freedom of expression may be restricted when opinions or views clash with other established rights, and advocacy of hate speech can be prohibited by law. In addition, contenders should not be exposed to defamation. Therefore, freedom of speech online and the protection of human rights are two parallel goals, and restriction to any aspect of these should be based on the law, proportionate, and in accordance with democratic standards.

Elections depend on information that surrounds the vote, including online information. Recognizing this reality, key elections standards are increasingly being applied to the internet and online media, as internet freedom is protected and the online environment is supposed to protect and align with human rights.

Although still evolving, international best practices and interpretive sources provide some guidance regarding approaches that electoral management bodies and others can take to counter the production and spread of false information and to monitor the content of social media during election periods. Where action is taken, media monitoring or regulatory authorities must be transparent, independent, and neutral, and remedies to any source of defamation or false content should always be available.
However, electoral authorities are no longer the only actors accountable for the integrity of electoral information. Social media platforms now hold great power over what discussions are put forward in their domains, and hence, electoral contests can be significantly influenced by their action or inaction. For this reason, international best practices indicate that the platforms should be transparent in their policies and practices on content management, and should provide access to their content management, distribution, and automated processing policies, all of which should be guided by core international human rights principles. In short, as with any other business enterprise, tech platforms’ policies and practices should embrace human rights commitments, including by making available to users accessible and effective complaint mechanisms.

In Brazil, disinformation and false content are regulated by the election law (Lei das Eleições) of 1997, but the article that regulates political campaigning on the internet was added by Law No. 13.488/2017. The law gives the TSE power to regulate false content and disinformation based on state-of-the-art technological tools available in each electoral cycle. It includes detailed provisions that seem to embrace a wide range of online political activities.

Brazil is the most connected country in Latin America and one of the most connected countries in the world, with more than 165 million people with internet access (73% of the total population). The leading digital platforms have a solid adoption among citizens, who mainly use messaging services. (WhatsApp and Telegram are used by more than 80% of internet users.) Facebook, Instagram, and Twitter are also widely used by Brazilian internet users. In recent years, the Chinese short-form video platforms TikTok and Kwai gained a solid market position, with 75 million and 45 million monthly users, respectively.

Since 2018, Brazil’s elections have faced waves of disinformation favorable to the then-candidate and later president, Jair Bolsonaro. In recent years, the TSE responded strongly to the spread of false content and disinformation through multiple and varied forms, including taking several steps to strengthen its role as a regulator. In addition, the TSE trained its staff to recognize and act on electoral disinformation and established procedures to evaluate the progress of these reforms. In taking these actions, the TSE has used existing legal provisions and applied them to the current reality.

In recent years, the TSE responded strongly to the spread of false content and disinformation through multiple and varied forms, including taking several steps to strengthen its role as a regulator.

In addition, the Senate and the TSE created commissions and programs at both the state and regional level to combat disinformation (Combate à Desinformação). These bodies investigate the networks of production, distribution, and propaganda of disinformation content and their financing mechanisms. The TSE also reached agreements with digital social media platforms to ensure the quick withdrawal of content. TSE removal-of-content orders can come in two ways: a judicial track, which entails an immediate removal, and an administrative

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122 U.N. (OHCHR), Guiding Principles on Business and Human Rights, para. II.A.11-13; CoE (Committee of Ministers), Recommendation (2012)3, para. 7, Recommendation (2016)1, para. 5.1, Recommendation (2018)2, para. 2.2.3; EU (European Commission), Recommendation on Measures to Effectively Tackle Illegal Content Online, para. 16

123 U.N. (OHCHR), Guiding Principles on Business and Human Rights, para. II.A.11-13; CoE (Committee of Ministers), Recommendation (2012)3, para. 7, Recommendation (2016)1, para. 5.1, Recommendation (2018)2, para. 2.2.3; EU (European Commission), Recommendation on Measures to Effectively Tackle Illegal Content Online, para. 16

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126 Law No. 9.504, of 30 September 1997, Articles 57-A to 57-J


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track, which is slower and can only proceed if the content violates the platform’s internal policies.

In addition, the TSE engaged with specialized civil society groups, including fact-checking agencies, and with the public at large. One example of such cooperation was the creation of channels for public reporting of false and harmful content.128

For the 2022 election, overwhelmed by an avalanche of misinformation and what the TSE viewed as a lack of cooperation from some social media platforms, the TSE decided in the campaign’s final stretch to further increase its autonomy in determining what content should be removed and to require shorter removal deadlines, through Resolution No. 23.714/2022.129 Companies that failed to comply with content removal orders within two hours (and just one hour on election day) faced fines of 150,000 Brazilian reais for each hour of noncompliance and up to 24 hours of suspension of service. Previously, the TSE had already ordered the suspension of the messaging service Telegram in March 2022 for not complying with court-ordered content removal.

In August 2022, the TSE expelled a military member of the Electoral Transparency Commission without prior investigation, alleging that he spread disinformation through his social networks. Also, the TSE ordered the search and arrest of five businessmen who were Bolsonaro supporters after a Brazilian newspaper reported that one of them said in a private WhatsApp group conversation that he favored staging a coup if Lula won.

Overall, The Carter Center finds that, given the heightened challenges of mis- and disinformation around Brazil’s elections, the Brazilian approach to disinformation and false content is expansive and pioneering. At the same time, The Carter Center shares the concerns of several interlocutors that the TSE’s power and actions in this space, even if motivated purely by the need to address threats posed by the increase in disinformation, could risk going too far and erode freedom of expression and possibly serve as a first step toward censorship.

The Carter Center expert mission recommends that the TSE continue its approach to fight disinformation and fake news through multiple strategies and with strong engagement of varied actors, including civil society and the public at large. However, given that the context surrounding these issues is rapidly changing, and the issues are growing in both importance and complexity, it is important to recognize that legislation can rarely keep up with new developments regarding mis/disinformation. The proper legal and regulatory structure to balance freedom of expression and state interference on false content and hate speech is yet to be found. The Brazil case provides important lessons that can inform ongoing and future debates.

Social Media Landscape in Brazil

As noted, Brazil has suffered a relentless assault of disinformation emerging from digital platforms since the 2018 elections. Some messages spread through social media cast doubt on the electoral authority or the electoral machinery, damaged the reputation of candidates without evidence, and confused voters.

As part of its electoral expert mission, The Carter Center analyzed disinformation previously verified by the three leading Brazilian fact-checking organizations (Aos Fatos, Boatos and Agência Lupa) during the 2022 presidential campaign from Sept. 2 through Nov. 1. During this period, disinformation

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128 For instance: https://www.tse.jus.br/eleicoes/eleicoes-2022/sistema-de-alerta
129 See TSE resolution: https://www.tse.jus.br/legislacao/compilada/res/2022/resolucao-no-23-714-de-20-de-outubro-de-2022

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content targeted electronic voting machines and attacks on them, which were also the main targets in 2018.

The Carter Center analyzed more than 395 debunked messages to determine who or what was targeted, and whether the messages harmed or favored the candidates or the TSE. The main disinformation narratives were studied and classified to understand their intentions and objectives.

**Key Players in Social Media in the 2022 Election**

The two candidates who made it to the second round of the presidential election had a solid presence on social networks. Jair Messias Bolsonaro, the Partido Liberal candidate, gathered 15 million followers on Facebook, 10.3 million on Twitter, and 4.9 million on Instagram. Luiz Inácio Lula da Silva, the PT candidate, was followed by 11.4 million users on Instagram, 6.4 million on Twitter, and 5.4 million on Facebook.

During the campaign, Lula aroused more interest and interactions on Twitter, the most political social network: from Sept. 2 to Nov. 1, almost 8.5 million tweets mentioned Lula, nearly twice as many as those mentioning his opponent. However, Bolsonaro generated much more activity on Facebook, accounting for 65% of all interactions during the first and second rounds of the presidential election. The other two protagonists in this scenario are the TSE and its president, Alexandre de Moraes. Despite having a smaller presence on social networks, they were the target of intense disinformation activity throughout the campaign (see Figure 1).

**Disinformation Narratives About the Candidates**

Although disinformation targeted all the actors in this campaign, it had two main victims: Lula and the TSE. Lula was the target of half of the disinformation messages, which were aimed at harming his reputation (50.68%). Religious imagery of both candidates was prevalent throughout the campaign. In the second round of the election, disinformation posted depicted Lula as a “satanist” and Bolsonaro as a “cannibal” and “pedophile.”

After Lula, the TSE was the primary target, with one out of three disinformation messages (34.15%) aimed at discrediting the process and the president.
of the TSE, who was accused of partisanship and censoring Bolsonaro’s campaign to favor Lula (see Figure 2).

Disinformation aimed at favoring one candidate was almost entirely focused on Bolsonaro, with 90% of the messages seeking to place him in a position of advantage, either through favorable polls or showing him as a victim of those in power (see Figure 3).

**Disinformation Narratives During the Electoral Process**

The main disinformation narratives differed significantly across the two rounds of the presidential election. In general, disinformation messages tried to derail the process by focusing on the following themes:

- Distrust of the TSE and electoral machinery, with messages denouncing the malfunctioning of the electronic ballot boxes or their transport by unauthorized personnel who could have manipulated their operation (24.39% of all the disinformation messages).
- Partisanship of the electoral authority portrayed as unfairly censuring Bolsonaro’s campaign and explicitly supporting his opponent (23.58%).
- Photos of voting records to justify an alleged victory stolen from Bolsonaro or to claim that there were more voters than those assigned to the polling stations (17.07%).
- The intervention of the armed forces in the process, either as a denouncer of fraud or as an instigator of an ongoing coup d’etat (13.01%).
- Polls manipulated to favor the perception of victory of a candidate (10.57%).
- Messages to denounce vote buying or to dissuade voters from voting (6.50%).
- Other messages, such as foreign interference in the process, were barely mentioned in the election (4.88%) (see Figure 4).
During the first round of the presidential elections, the main disinformation narratives aimed at discrediting the TSE and the electoral machinery included:

- More than 40% of these messages portrayed ballot boxes as incapable of recording votes or susceptible to being hacked through the internet.
- The partisanship of the TSE and electoral authorities and fake polls accounted for 40% of the disinformation messages intended to derail the electoral process.
- The TSE proposed that the army audit the electoral process during the voting day, which led to the first messages about fraud involving the military (see Figure 5).

In the second round, there was a notable change in the narratives:

- Disinformation messages about the TSE and the electoral machinery, which had been the most prevalent during the first round, moved to fourth place in the ranking, with just 8.06%.
- After the Oct. 2 vote, messages denouncing fraud involving voting records and discrepancies between the number of voters reached the first position in the ranking at 33.87%.
- The attacks on the TSE held second place at 22.58%, and were more specifically directed at its president, Alexandre de Moraes.
- Messages highlighting the role of the army as denouncers of electoral fraud and as eventual actors in a coup d’état increased to 17.74% (see Figure 6).

**Other Key Aspects of Disinformation During Campaign**

Despite significant advances in audio and video technology, the most widely used method to spread disinformation in Brazil was out-of-context content. This involved posting a simple false statement on social media, accompanied by a photo or
video taken out of context. More than half the samples analyzed by The Carter Center had these characteristics.

Although nine independent pollsters had anticipated that Lula would win the election in one round, he failed to win in the first round, finishing only 5 percentage points ahead of Bolsonaro. This miscalculation by pollsters fueled social media narratives that suggested collusion between the pollsters and Lula’s campaign. It also reinforced Bolsonaro’s image as a victim of those in power who wanted to remove him from government.

The Carter Center expert team analyzed candidate activity on Facebook to discern who appeared to be responsible for the production and amplification of disinformation narratives. Such accounts usually disseminated false information to people who participate in groups and pages related to parties and candidates. The Center’s expert team found in the orbit of Bolsonaro’s profile some publications with disinformation content, such as Jornal da Cidade Online, Conexão Política, Pleno News, Revista Oeste and Jovem Pan. Unlike elections in other countries, where anonymous publications disseminate most of the disinformation, in Brazil many actors who spread disinformation do so openly, sometimes operating from the economically consolidated digital newspapers that do not hide the identity of their editors and writers.

Brazil’s TSE seems to have focused on acting against disinformation out of concern that disinformation can do enormous damage to the electoral process. However, not all other actors share this concern.

Brazilian civil society observers highlighted the novelty of domestic citizen electoral observation in Brazil, and emphasized that these efforts mobilized civil society, including a very knowledgeable audience among Brazilian youth.
Electoral observation is relatively new in Brazil and was regulated for the first time in 2021, with the TSE launching a public call for electoral observers in 2022. The Carter Center’s electoral expert mission noted the presence of several other election observation missions, both international and domestic. The observer missions were unanimous in highlighting the high degree of access to information granted by the TSE and other key electoral stakeholders. In particular, Brazilian civil society observers highlighted the novelty of domestic citizen electoral observation in Brazil, and emphasized that these efforts mobilized civil society, including a very knowledgeable audience among Brazilian youth.

Electoral observation is widely recognized internationally as playing an important role in strengthening democracy. It can become even more important in a context such as Brazil, where there is widespread false content regarding the electronic voting system and credible election observation can reinforce the participation of civil society in the electoral process.

The Carter Center recommends that Brazilian authorities continue to allow and encourage the presence of election observation efforts for future elections. Looking forward, The Carter Center recommends that Brazilian authorities reconsider the criteria for electoral observation missions to ensure an enabling environment that encourages election observation. For example, the current requirement that organizations be established for more than one year may be too burdensome and could hinder the participation of newly emerging civil society organizations focused on elections. The requirement for observers to be 18 years old, especially when in Brazil the voting age is 16 years old, could also be revisited to allow electoral observer requirements to follow the same criteria as those to be a voter.

The current requirement that organizations be established for more than one year may be too burdensome and could hinder the participation of newly emerging civil society organizations focused on elections.

The Carter Center mission noted that the TSE has a dedicated section on its website where national citizen observer organizations are mentioned (there is not one for international observers), and it includes the names of each accredited observer. The
Carter Center recommends that the TSE reconsider including the names of individual observers to ensure the protection of data privacy of individual observers. For example, the TSE could require that election observation organizations submit the lists of individual observers to the TSE without making the information public on its website.

The Carter Center mission also found that the TSE’s timeframe for accrediting domestic observers was too short, as several other stakeholders also noted. The deadline for accreditation was several months before the beginning of the electoral period, and many organizations were not even aware of the possibility to seek accreditation. It was also not possible to replace electoral observers within the same organization, which meant some electoral observation missions could not replace observers who were unable to take part in the second round. International observers do not seem to have been subject to these requirements, nor to the extensive requirements that domestic observers had to comply with.
Recommendations

The Carter Center’s electoral expert team assessed key aspects of the 2022 Brazilian electoral process, namely the function and transparency of the voting technology systems, the disinformation environment in social media, the legal framework governing the use of voting technology, official efforts to combat disinformation, and the participation and inclusion of vulnerable groups. The analysis builds upon the national legal framework and the principles and commitments on democratic elections enshrined in international standards and best practices. Based on this assessment, The Carter Center makes the following recommendations for the consideration of the authorities and citizens of Brazil, with the aim of improving certain aspects of future electoral processes. Some of the recommendations seek to ensure that Brazilian election procedures are more aligned with international standards and commitments to democratic elections, while others aim to strengthen efficient implementation.

Autonomy of the Electoral Administration Body (TSE) and Transparency of the Process

• **Role of the military:** Brazil and the electoral authorities should take steps to ensure that demands to include military forces in electoral management can be implemented in a way that does not reduce TSE independence while also taking steps to ensure public confidence in the process.

• **Participation of political parties:** Steps should be taken to provide more detailed provisions regarding the right of political parties to meaningfully follow all stages of the development of the electronic voting system. Political parties should engage in all the opportunities presented by the electoral justice relating to voting technology, contributing to robust legitimacy, and improving the voting system.

Voter Participation and Inclusion

• **Access to polls and universal suffrage:** Issues regarding access to the polls and universal suffrage should be addressed by Brazilian stakeholders. Potential steps could include providing free public transportation on election day to polling stations, or by ensuring adequate numbers and locations of polling stations, especially in vulnerable communities that lack resources. In short, it is critical to ensure respect for the obligation to protect the right to vote, based on universal suffrage.

• **Removal of voters from the voter roll:** Brazil should consider implementing steps to end the removal of voters from the voter roll after three sequential abstentions, as the penalties existing in the electoral code are a sufficient penalty. Brazil also should consider whether options for early voting might be used or at least piloted.

• **Best practices on indigenous peoples:** The regional tribunals should share information about best practices in working with indigenous
peoples. It would be commendable for the TSE to establish a national norm for TREs to foster the inclusion and participation of historically excluded groups, such as indigenous people, people of African descent, quilombolas and ribeirinhos.

Electronic Voting System Audit Scheme

- **Information on voting system audits:** Legal information regarding the audit mechanisms for the electronic voting system should be publicly available and easily accessible, similar to other areas of the electoral process. Electoral stakeholders and the public in general should have access to primary sources of information, including the relevant legal instruments, to allow interested stakeholders to analyze key information.

- **Rules and regulations for post-election audits:** The Carter Center recommends that the TSE develop and publish, in consultation with key stakeholders, a specific set of rules and regulations for post-election audits of the system, including access to the voting machines and the software, after they have been used during the elections.

- **Partnership with universities:** While the TSE is to be commended for its partnership with Brazilian universities regarding improvements in its electronic voting system, particularly options considering end-to-end verifiability of the vote and the publication of the entire source code on the internet, available for all to examine, The Carter Center recommends maintaining and possibly increasing investments in these directions to allow more safety, transparency, and trust in the electronic voting system.

- **State grants for universities:** To ensure that the universities can mobilize large enough teams over longer periods to conduct the audits as effectively as possible, The Carter Center recommends that consideration be given to establishing specific, independently administered state grants to provide funding for the audits.

- **Procedures for eventual failures during the integrity test:** The Carter Center recommends that specific procedures for failures during the integrity test (i.e., the machine is to be blamed for the non-match) should be emphasized during the training of testing center staff. If such procedures do not exist, they must be developed. Integrity testing should not simply confirm the expected absence of problems but rather be an open-ended evaluation of system performance.

- **Mandatory participation of voters in the integrity test with biometrics:** The Carter Center recommends that consideration be given to evaluating whether requiring mandatory participation in the biometric testing methodology might be feasible. After all, citizens may be required to provide other services on election day (e.g., poll workers), and voting itself is mandatory. Including integrity test participation as mandatory would solve the abstention issue and increase the utility of the test.

Addressing Disinformation

- **Proper regulatory structure to balance freedom of expression and state interference while fighting disinformation:** The Carter Center recommends that the TSE continue its approach to fight disinformation and fake news through multiple strategies and with strong engagement of varied actors, including civil society and the public at large. However, given that the context surrounding these issues is rapidly changing, and the issues are growing in both importance and complexity, it is important to recognize that legislation can rarely keep up with new developments regarding mis/disinformation. The proper legal and regulatory structure to balance freedom of expression and state interference on false content and hate speech is yet to be found. Any decision about content removal should not make the intermediaries liable for any third-party content relating to those services unless they specifically intervene in that content or refuse to obey an order within a specified timeframe. The Carter
Center recommends initiating this debate with all stakeholders well in advance of the next elections.

**Electoral Observation**

- **Relaxation of requirements for observers:** The Carter Center recommends that Brazilian authorities continue to allow and encourage the presence of election observation efforts for future elections. Looking forward, The Carter Center recommends that Brazilian authorities reconsider the criteria for electoral observation missions to ensure that they provide an enabling environment that encourages election observation. For example, the current requirement that organizations be established for more than one year may be too burdensome and could hinder the participation of newly emerging civil society organizations focused on elections. The requirement for observers to be 18 years old, especially when in Brazil the voting age is 16, also could be revisited to allow electoral observer requirements to follow the same criteria as those to be a voter.

- **Privacy protection of domestic observers:** The Carter Center mission noted that the TSE has a dedicated section on its website where national citizen observer organizations are mentioned (there is not one for international observers), and it includes the names of each accredited observer. The Carter Center recommends that the TSE reconsider these steps, to ensure the protection of data privacy of individual observers. For example, the TSE could require that election observation organizations submit the lists of individual observers to the TSE, but without making this information public on the TSE website.
### Key Electoral Terms and Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BU</td>
<td>Boletim de urna, tape produced from voting machines showing candidate totals</td>
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<tr>
<td>CGU</td>
<td>Controladoria Geral da União Entidades fiscalizadoras (oversight entities)</td>
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<tr>
<td>OAB</td>
<td>Ordem dos Advogados do Brasil</td>
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<td>PL</td>
<td>Partido Liberal</td>
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<td>PRF</td>
<td>Policia Rodoviária Federal</td>
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<td>PT</td>
<td>Partido dos Trabalhadores</td>
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<tr>
<td>RDV</td>
<td>Registro Digital do Voto</td>
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<tr>
<td>TCU</td>
<td>Tribunal de Contas da União</td>
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<td>TRE</td>
<td>Tribunal Regional Eleitoral</td>
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<td>TSE</td>
<td>Tribunal Superior Eleitoral</td>
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<tr>
<td>VVPAT</td>
<td>Voter-verified paper audit trail</td>
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Urna eletrônica (voting machine)
The Carter Center was founded in 1982 by former U.S. President Jimmy Carter and his wife, Rosalynn, in partnership with Emory University, to advance peace and health worldwide. A not-for-profit, nongovernmental organization, the Center has helped to improve life for people in more than 80 countries by resolving conflicts; advancing democracy, human rights, and economic opportunity; preventing diseases; and improving mental health care. Please visit www.cartercenter.org to learn more about The Carter Center.