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Key Takeaways for Enhancing Security Governance in the Amazon

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Introduction

The Amazon faces a variety of security challenges, ranging from historical issues such as high homicide rates, theft, drug trafficking, and violence against women, to new threats to the region's rich biodiversity, such as deforestation, illegal logging, illegal mining, and land grabbing.¹ Considering the complexity of these problems and the diversity of actors involved in seeking solutions, an effective governance agenda becomes urgent. This study seeks to address a gap in the discussion regarding initiatives that can improve coordination among entities responsible for identifying, preventing, and combating environmental crimes in the Amazon region.

This publication aims to gather input and discuss practical experiences to contribute to the improvement of security governance in the Amazon region. To this end, specific governance challenges related to security issues in the region have been identified, as well as the key attributes that can enhance the performance of national and subnational institutions in combating crime and illegal activities. Subsequently, we analyze different governance cases that stand out in one or more of these key attributes, bringing relevant practices and lessons learned to strengthen security governance in the Amazon.

The concept of governance adopted is based on the Federal Public Ministry and is understood as “the set of practices, structures, and processes implemented in an organization, aimed at establishing and strengthening the foundations for effective functioning and decision-making” (...) including a clear definition of responsibilities, the creation of accountability mechanisms, transparency in operations, and the establishment of ethical guidelines.”²

Considering the characteristics of the Amazon region, the challenges for effective governance consolidate into the following points:

1. Limited dialogue among actors responsible for security issues and overlapping responsibilities.
2. Fragmentation of initiatives.
3. Mobility difficulties due to the extent and characteristics of the territory.
4. Institutional gaps.
5. Difficulty in curbing localized illegal actions.
6. Incompatibility between territorial dynamics and the current political-administrative division.
7. Fragmented land use planning, subject to different regulations.
8. Inadequacy of one-size-fits-all solutions.

To address the aforementioned challenges, we identified several key attributes necessary for a governance model that offers more effective and efficient responses than the one existing today. The selection of these challenges and the combination of challenges and attributes were carried out in two stages. First, we started with a diagnosis based on previous work that highlighted governance deficits and structural failures in the system ahead of combating organized environmental crime in the Amazon.³ We identified a complex ecosystem where environmental and non-environmental crimes intertwine, promoting deforestation and negatively impacting the lives of Amazonian populations. This scenario also hinders the coordination of intelligence strategies, deterrence capacity, and accountability of actors involved in illegal activities.

Given this context, the region is subject to the alliances and conflicts that are inherent to organized crime dynamics and their intersections with environmental crimes, so we analyzed alternatives for enhancing state (or institutional) capacities.⁴ The identified attributes are designed to address these challenges by mitigating them and overcoming them whenever possible. These attributes are:

- I. Structured coordination of multiple actors (to address challenges 1, 2, and 7)
- II. Maintenance of monitoring substructures for actions (challenges 3, 4, 5)
- III. Adaptability to implement actions that reach dispersed and remote areas (challenges 3, 4)
- IV. Adaptation of initiatives to local particularities (challenges 6 and 8)

After this introduction, which outlines the challenges and attributes that guided the study, the remainder of the publication is organized into three sections. The second section details the methodology for selecting cases, while the third delves into the analysis. In the fourth section, recommendations for improving security governance in the Amazon are presented, which can be implemented at various levels – local (in municipalities), subnational (in states), and regional – to address cross-border challenges related to illicit activities and insecurity.





Methodology

This study is based on the analysis of Brazilian and international cases that exhibit one or more of the mentioned attributes essential for an effective governance model for security in the Amazon. The criteria for case selection included: a) an institutional arrangement that articulates central and subnational governments; b) robustness and continuity over time; c) a positive reputation according to evaluations from accessed sources; and d) participation from governmental and non-governmental entities across different sectors and spheres.

To ensure representativeness in case selection, both Brazilian and foreign initiatives were included, so that at least one case focused on the Amazon region and experiences across different sectoral public policies, such as health and education. This diversity was intended to reflect the context in which this study's recommendations will be applied. Cases with readily available data and reliable sources, including official documents and academic literature, were prioritized. Those deemed ineffective in addressing the Amazon's specific challenges – such as the complexities of territorial dynamics or the coordination among multiple actors – were excluded based on the consulted sources. This careful filtering allowed a focus on cases excelling in key attributes for tackling these challenges.

For each case presented in this publication, both **technical-administrative capacities** were analyzed, such as having competent and well-structured bureaucracies capable of efficiently coordinating actions, and **political-relational capacities**, which include the ability to engage multiple stakeholders, build minimum consensus, and form coalitions that support plans rooted in legitimacy, learning, and innovation, as proposed by Pires & Gomide (2016).⁵

Additionally, the cases were evaluated across vertical governance dimensions (related to territorial organization and regulatory acts) and horizontal dimensions (interaction with various state and non-state actors). The relational structures of the cases were analyzed based on two frameworks: hierarchical (characterized by imposition) and network-based (characterized by interdependence and reciprocity).⁶ Below is a summary of the selected cases and their respective attributes:

Key Attributes	
European Union (EU)	 Structured coordination of multiples actors
Emergency Mobile Assistance Service (SAMU)	 Maintenance of action-monitoring substructures
National High-School Exam (Enem)	 Adaptability in implementing actions that reach scattered and remote areas
Amazon Cooperation Treaty Organization (OTCA)	 Adaptation of initiatives to local specificities

Analysis of Governance Models in Selected Cases

The governance models of the selected cases were analyzed to understand the internal and external structures that enable the development of the four core attributes highlighted in this study. Key aspects of these governance models were identified – such as decision-making chains, interaction processes, outcome evaluation methods, and funding structures, among others. These elements illustrate the type of governance employed and the factors contributing to its effectiveness and efficiency in achieving the proposed objectives, summarized in specific tables for each case. The presentation of each case follows a common structure: beginning with a brief description and the objectives of the selected initiatives, followed by the framework that guided data collection.

European Union (EU)

Key attribute: **Structured coordination of multiples actors**

The European Union was established to promote stability, peaceful relations, and economic prosperity among European countries, aiming to create a single market, uphold democratic values and human rights, strengthen regional cooperation, and enhance Europe's global influence.⁷ The formalization of the EU took place with the signing of the Maastricht Treaty, which came into effect in 1993, laying the foundation for a future common currency, a shared foreign and security policy, and increased cooperation on legal and internal affairs among member countries.

Subsequently, the single market was created, ensuring the free movement of citizens, goods, services, and capital, alongside the implementation of hundreds of laws in areas like tax policy, business regulations, and professional qualifications, in line with open border policies. Since then, the European Union has expanded and diversified its scope of action, currently encompassing 27 countries, and supporting projects within and among its member states, as well as in cooperation with blocs and countries outside the EU. To ensure the application of EU directives in member countries and their subnational units, it was essential to create and strengthen local structures capable of continuously overseeing and implementing these policies.

The European Union stands out for its ability to **coordinate multiple actors**, having developed a framework to align the demands of its member countries, supranational institutions, civil society, and international partners. EU governance is characterized by a robust institutional structure that facilitates the participation of several stakeholders in decision-making processes. This structure was designed to harmonize the different demands and orientations of key actors. The European Parliament and the Council often hold distinct views on economic and social policies, while the European Commission must ensure that legislative proposals are feasible and in line with the EU's long-term goals. Coordination among these actors and alignment of their demands occur through both formal and informal mechanisms, with the European Commission frequently acting as a mediator and proposing compromises that meet the needs of all parties. The EU relies on a structured system of meetings among representatives from the Parliament, the Council, and the Commission to resolve disagreements and expedite legislative agreements.

In addition to these processes, the EU conducts public consultations and engages in dialogue with civil society actors and international partners, enabling a broad range of interests and concerns to be incorporated into its policies. For instance, the cohesion policy is one of the tools through which the EU ensures that various regions and sectors have their needs addressed by funding projects that foster balanced and sustainable development across all member states. These structures and processes allow the EU to manage the complexity of its operations, and the diversity of actors involved, ensuring that policies are implemented in a coordinated manner and that multiple demands are considered and harmonized.

European Union (EU)



Year of implementation:

1993

Temporary or permanent?

Permanent

Composition:⁸

The European Commission is composed of a commissioner representing each member state. The European Parliament consists of members directly elected by the public. The Council of Ministers is made up of ministers from each national government, depending on the subject being discussed. The Council of the European Union is formed by representatives from national governments. The European Council brings together the heads of state of the member countries, along with the President of the European Council and the President of the European Commission. The Court of Justice of the EU has a judge from each member state. The European Central Bank (ECB) is made up of the heads of the national central banks of the 20 countries in the eurozone, as well as the President of the ECB.⁹ Finally, the European Court of Auditors is composed of a representative from each member state, appointed by the Council of the EU.

Horizontal or hierarchical process?¹⁰

The EU legislative process is generally hierarchical, but also involves collaborations.¹¹ In addition to the ordinary legislative process, there are special procedures where the European Parliament or the Council play predominant roles, depending on the type of legislation or agreement being discussed. These procedures include those of consent and consultation, where the Parliament may have the final say or be consulted without having veto power. These approaches ensure that EU laws are developed and approved collaboratively, taking into account a wide range of opinions and interests from citizens, national governments, and the EU itself.

Who leads and how?¹²

The European Commission¹³ is responsible for proposing laws and is composed of a representative from each member country, as well as a President appointed by the European Council and elected by the European Parliament. It also manages the EU budget and represents the EU in international negotiations, acting as the guardian of the treaties and monitoring the compliance of laws by member countries.

European Union (EU)



Internal functioning:

All actions of the EU are based on treaties that were voluntarily and democratically agreed upon by the member countries. These treaties establish the EU's objectives, the operating rules of its institutions, and the relationship between the EU and the member countries. The EU budget is defined annually and specifies how resources will be allocated across various policies and programs. Economic management is supervised by the European Court of Auditors, ensuring transparency and efficiency.

External interaction (relational capacity):

Relevant external relations are established through initiatives such as the European Economic and Social Committee (EESC) and the Community Led Local Development (CLLD) initiative,¹⁴ which promote community participation in the development of their areas through partnerships between local public and private entities, focusing on territorial priorities. Additionally, the Conference on the Future of Europe involves citizens and civil society organizations in discussions about the future directions of the EU and in the formulation of policies addressing issues such as climate change, health, economy, and democratic values.¹⁵ An example is the EU Clean Energy Package, which includes the Energy Communities, legal entities that allow citizens, small businesses, and local authorities to produce, manage, and consume their own energy, encouraging citizens to drive the energy transition.¹⁶

Funding modality: by project, external budget, contributions from member countries, etc.¹⁷

EU funding¹⁸ comes from three main sources: (i) contributions from member countries based on their Gross Domestic Product (GDP); (ii) EU revenues from tariffs on imports from non-EU countries; (iii) smaller revenues, such as fines imposed on companies for violations of EU competition laws. The management of funds occurs in three main ways: (i) shared management, where the European Commission and national authorities of member states co-manage the funds, which is the most common form for most EU funding, such as cohesion and agricultural funds; (ii) direct management, where the European Commission administers the funds directly, from launching calls for proposals to signing grant agreements and monitoring projects (such as research programs, including Horizon Europe);¹⁹ (iii) indirect management, where national or international partner organizations manage the funds, a model most often used for humanitarian aid and international development.

European Union (EU)



Field execution capacity:

The EU relies heavily on intergovernmental channels to promote good governance in its three key areas: Development, Enlargement, and Neighborhood. The European Instrument for Democracy and Human Rights (EIDHR), along with the White Papers (documents proposing action), provides a transnational channel that enhances the effectiveness of the EU's reform agenda. This transnational channel is particularly important: a) in the EU's development policy, where there is a scarcity of reliable state partners; b) in the EU's enlargement or accession policy, where societies are highly fragmented and divided; and c) in the EU's neighborhood policy, where civil society needs to be empowered to help implement reforms aimed at strengthening the effectiveness of public institutions.

Execution and results metrics:

The execution and results of European Union projects are measured through a comprehensive system²⁰ that includes: (i) the Global Europe Results Framework, a monitoring system for tracking progress in international cooperation and development in countries where projects are implemented, using data from international sources and aggregated annual reports;²¹ (ii) quantitative and qualitative indicators,²² along with methodological sheets to guide data collection; (iii) reports and publications, such as those from the EU's statistical agency, Eurostat,²³ on the EU's progress toward the Sustainable Development Goals (SDGs); and (iv) external evaluations and audits conducted by independent bodies to ensure transparency and neutrality.

European Union (EU)



Main lessons learned:

1. **Consider subsidiarity:**²⁴ Social spheres closer to the citizen should be supported, not replaced, by more distant ones. EU intervention should only occur when actions cannot be effectively undertaken at the local, national, or regional levels.
2. **Consider proportionality:**²⁵ EU actions should be limited to what is necessary to achieve treaty objectives, respecting the sovereignty of member states and aiming for efficient integration.
3. **Encourage transparency in decision-making:** It is essential to include public consultations and promote the involvement of diverse stakeholders in decision-making processes, exemplified by the European Citizens' Initiative (ECI), which allows European citizens to propose new legislation.²⁶
4. **Maintain flexibility to accommodate specificities:** Flexibility in certain measures is important to encompass the diversity of member states, as demonstrated by exceptions to the single currency granted for countries like Denmark, Poland, and the UK, as well as exemptions from the Schengen Treaty²⁷ on the free movement of people, and labor and social policy standards granted to the UK, among others.
5. **Allow differentiated cooperation among EU member states:**²⁸ Enabling groups of member states to advance in certain areas without requiring the participation of all is important to facilitate variable-speed integration.
6. **Reduce internal disparities:** Projects to promote cohesion and regional development are fundamental to reducing disparities between the more and less developed regions of the EU, aiming for more balanced integration.
7. **Encourage solidarity during crises:** Solidarity among member states, demonstrated through support and concessions in critical situations, such as the 2008 budgetary crisis and the Covid-19 pandemic, enabled a joint EU response and contributed to the bloc's resilience.²⁹
8. **Promote and reinforce fundamental common values among members:** The EU continuously emphasizes the need for all member countries to respect the principles of the rule of law, including judicial independence and fundamental rights. To monitor and promote these values, the EU has established mechanisms such as the European Union Agency for Fundamental Rights and the Annual Rule of Law Report.
9. **Coordinate finances:** Organizations such as the Single Supervisory Mechanism and the Single Resolution Mechanism (SRM) strengthen fiscal monitoring and the response to financial crises.

Mobile Emergency Care Service (SAMU)

Key attribute: **Maintenance of action-monitoring substructures**

The Mobile Emergency Care Service (SAMU) in Brazil was the first service established under the National Emergency Care Plan by the Federal Government in 2003. This policy was formulated to improve healthcare through early intervention and emergency assistance at homes, workplaces, and public spaces, with the aim of reducing mortality and minimizing complications. SAMU operates within a tripartite government structure—federal, state, and municipal—characterizing it as an inter-federative effort, where these three levels are involved in policy formulation, implementation, and the entire public policy cycle. The response team includes ambulance drivers, nursing technicians, nurses, and physicians, all trained in various emergency fields.

The Mobile Emergency Care Service (SAMU) SAMU is notable for its **ability to integrate multiple health services, public safety agencies, and local communities** into a cohesive system, providing care for critical situations with reasonable speed and efficiency. SAMU's phone or app-based emergency line – 192 – connects health and public safety in urgent situations such as accidents and violent incidents. Integrated into the Emergency Care Network, SAMU deploys specialized teams that arrive at the scene to provide medical care, stabilize the patient, and, if necessary, transport them to an appropriate hospital.

In cases of severe accidents or violent incidents, such as fights or assaults, SAMU notifies relevant public safety forces to ensure a secure environment for both the professionals providing care and the victims. Coordination with public safety is also evident in emergency regulation, where SAMU's Central Emergency Regulation coordinates the dispatch of ambulances and healthcare professionals according to case severity and the security needs required by the situation.

With centralized emergency calls, continuous professional training, and advanced technology for ambulance monitoring and dispatch, SAMU has achieved remarkable coordination among key actors and initiatives, considering the complexity of its service. This structured organization and collaboration across various sectors are fundamental pillars of SAMU, enabling effective emergency response even in challenging areas.

Mobile Emergency Care Service (SAMU)

**Year of implementation:**

2003

Temporary or permanent?

Permanent

Composition:

SAMU comprises a medical regulation center that includes regulatory doctors, call operators, and radio operators. It also has response teams made up of ambulance drivers, nursing technicians, and doctors, as well as communication centers and partnerships with hospitals, the Fire Department, and the Military Police.

Decision-making chain:

The Ministry of Health establishes guidelines and technical standards and allocates financial and material resources for states and municipalities to implement the service. State governments are responsible for coordinating and supervising the service within their regions, ensuring that established protocols are followed and adapted to meet local needs. Municipal health departments organize emergency mobile services, deploying trained professionals and integrating SAMU with the local hospital network. Additionally, collaboration with the police, fire department, and civil defense is essential for rapid and effective response in emergencies. Communication and coordination among these entities are managed primarily through Emergency Regulation Centers, which receive emergency calls through the number 192, assess the severity of the situation, and deploy necessary resources, including public safety teams. When support from the police, fire department, or civil defense is needed, the SAMU team makes the request through direct communication channels using integrated radios and shared computerized systems, enabling quick and precise response. The decision-making chain is swift, involving constant information exchange between field teams and regulation centers, allowing actions to be collaboratively and promptly decided.

Horizontal or hierarchical process?

The process is hierarchical, with the highest authority at the federal level, which can guide a state or directly a municipality, depending on municipal and state legislation and the operational specificities of each locality.

Mobile Emergency Care Service (SAMU)



Who leads and how?

The Ministry of Health is responsible for regulating, coordinating, and providing technical guidelines and material resources.

Internal functioning (technical-administrative capacities):

SAMU often establishes partnerships with hospitals, emergency care units (UPAs), the Fire Department, and other health and public safety institutions to ensure integrated and efficient management of medical emergencies, from pre-hospital care to hospital transfer and treatment. The governance model details may vary according to state and municipal legislation, as well as the operational characteristics of each locality. Some partnerships are formalized through cooperation protocols that define responsibilities and workflows, including meetings with partner entities to set quality assessment metrics, monitor actions, and discuss potential adaptations for improvements.

External interaction (relational capacity):

There is external engagement through educational campaigns³⁰ in schools, companies, and community events to inform the public on the importance of the service, how to contact SAMU correctly, and which emergency situations justify calling. Programs such as the “Citizen SAMU” project provide healthcare support in hard-to-reach areas or those with higher rates of medical incidents, and also work with community associations during natural disasters, requiring a coordinated initial response to reduce risks. SAMU participates in municipal and state health councils and forums, where community needs are discussed, and ways to improve services are sought. Additionally, first aid training³¹ is offered to community members, equipping them to act in emergency situations until the SAMU team arrives.

Mobile Emergency Care Service (SAMU)


Funding modality: by project, external budget, through contribution of parts, etc.

At the federal level, the Ministry of Health is primarily responsible for coordinating and regulating SAMU, setting technical guidelines and standards nationwide, as well as allocating financial and material resources to states and municipalities. Operating expenses are divided among the federal government (50%), states (at least 25%), and municipalities (up to 25%). The federal portion is transferred by the National Health Fund (FNS) to the Health Funds of the states or municipalities that manage SAMU 192. Municipalities in the Legal Amazon region receive an additional 30% over the base amount due to the geographic and socioeconomic challenges of the area.³²

Field execution capacity:

SAMU 192 regulates emergency services through the 192 hotline, performs mobile care, and transfers patients to hospitals. At the subnational level, each state has an Urgency Regulation Center (CRU), responsible for SAMU operations, coordinating mobile service units, regulating emergency calls, and overseeing resource distribution within the state. At the municipal level, city governments are responsible for operating and managing mobile service units within their areas, which includes hiring professionals, maintaining ambulances, and ensuring service quality for the local population. Decentralized bases enable the CRU to quickly deploy a Mobile Unit to attend a call based on location, which is particularly important in the Amazonian context, where efficient response times and rational resource management are crucial for municipalities with large territorial areas and/or low population density.³³

Execution and results metrics:

Results are measured through audits and inspections conducted by the National Department of Auditing of the Unified Health System (DenaSUS) and a computerized regulation system that monitors SAMU's real-time performance across various regions, collecting data for evaluation and subsequent improvement recommendations. Satisfaction surveys and user feedback are also used to assess service quality. Key performance indicators include response time from the receipt of the emergency call to ambulance arrival at the scene; number of cases handled; volume of calls attended and categorized by type of incident; and the prehospital resolution rate (percentage of cases resolved at the scene without hospital referral).³⁴

Mobile Emergency Care Service (SAMU)



Main lessons earned:

- 1. Strengthening integration with other healthcare services:** Efficient coordination with hospitals and health centers is crucial to ensure continuity of care and secure, swift patient transfers.
- 2. Maintaining regulatory centers that assist in case triage and call management:** These centers are essential for directing resources effectively and quickly.
- 3. Investing in ongoing professional training:** Regular training for paramedics, nurses, and doctors in life support, trauma care, and other emergency response techniques is essential.
- 4. Conducting simulations and practical exercises:** These activities prepare teams for effective and coordinated responses in real situations.
- 5. Monitoring infrastructure adequacy:** Ensuring quality equipment distribution and regular technical maintenance is critical.
- 6. Utilizing communication technology:** Modern, efficient communication systems enable faster response times and better team integration.
- 7. Using and maintaining integrated information systems:** Integrated data management systems³⁵ facilitate data analysis and evidence-based decision-making.
- 8. Fostering community participation and awareness:** Public education campaigns on when and how to use SAMU help reduce non-emergency calls, ensuring resources are available for those truly in need. Community involvement in emergency responses often enhances service efficiency.

National High-School Exam (Enem)

Key attribute: **Adaptability in implementing actions that reach scattered and remote areas**

The National High School Exam (Enem) is a higher education admission test administered by the National Institute for Educational Studies and Research Anísio Teixeira (Inep), an agency under Brazil's Ministry of Education (MEC). Established in 1998 during President Fernando Henrique Cardoso's administration, Enem initially aimed to assess the quality of high school education nationwide. Starting in 2004, with the enactment of the University for All Program (ProUni) law by President Luiz Inácio Lula da Silva, Enem results began to be used as part of the selection process for entry into Brazilian public universities. In January 2010, MEC launched the Unified Selection System (Sisu), enabling candidates to apply to public higher education institutions based on their Enem scores.

Enem's **adaptability to widespread and remote applications** is notable for its capacity to conduct exams across a vast network of test centers in 1,753 municipalities.³⁶ This logistical effort, which includes hard-to-reach areas, ensures that candidates nationwide have access to the exam. This process demands careful planning to securely transport the exams and coordinate thousands of proctors, ensuring the integrity and security of the test at all locations. For example, in 2023, tests were printed, stored, and transported for 3.9 million registered participants across Brazil, including in municipalities far from major cities with transportation and infrastructure challenges.³⁷ The 2023 edition included over 9,000 test sites, 10,086 coordinators, approximately 132,000 classrooms, 1,763 municipal coordinators, and 13,000 local assistants.³⁸

National High-School Exam (Enem)



Year of implementation:

1998

Temporary or permanent?

Initially intended as a temporary measure, the exam evolved into a permanent initiative.

Composition:

It involves multiple institutions, including the Ministry of Education (MEC), the Anísio Teixeira National Institute for Educational Studies and Research (Inep), state and municipal education departments, public and private high schools, and higher education institutions.

Horizontal or hierarchical process?

The process is predominantly horizontal. The MEC is responsible for setting guidelines, while Inep, as a MEC-affiliated body, coordinates operations. Inep's departments, commissions, and consortia work in an integrated manner.

Who leads and how?

The general coordination of the Enem involves two main entities: the Ministry of Education, which is responsible for the content and guidelines (including scheduling, evaluation criteria, and exam structure) as well as the supervision and execution of the exam (ensuring process integrity); and the Anísio Teixeira National Institute for Educational Studies and Research (Inep), which is tasked with planning, organizing, administering, and assessing the exam. Inep prepares the exam, hires companies for planning, oversees scoring, and releases results to participants and higher education institutions.

Internal functioning:

The Enem National Technical Commission, comprising education specialists, university representatives, and civil society members, advises Inep on defining the exam's technical and pedagogical standards, contributing to its continuous improvement and updates.

National High-School Exam (Enem)

**External interaction (relational capacity)?**

Inep also conducts surveys with Enem registrants to understand their perceptions of exam preparation, expectations for higher education access, and logistical challenges, such as travel to exam locations. This feedback is used to enhance future editions. Additionally, the National Certification Network (RNC) opens applications for public servants and public-school teachers to volunteer as certifiers, ensuring correct exam administration and process integrity. To promote transparency and build trust, Inep publishes the Participant Guide, detailing the exam format, scoring criteria, and examples of top-scoring essays, fostering credibility with candidates.

Funding model: by project, external budget, contribution from part, etc.³⁹

Enem funding comes from MEC's own budget, managed by Inep. Non-exempt registration fees partially offset costs for printing, distribution planning, security, and proctor payments.

Field execution capacity:

In general, field execution is successful, with isolated incidents in some editions, notably regarding leaked exam photos taken by proctors, who were identified and penalized. Such incidents⁴⁰ prompted enhanced security measures,⁴¹ involving state and municipal education departments, public and private universities, high schools, and contracted coordination and educational assessment companies for distribution, administration, and scoring.

Execution and results metrics:⁴²

After Enem's exam, detailed data are collected, including registration numbers, attendance and absence rates, and records of disqualifications. Scores for each knowledge area and the essay are calculated, taking into account the distribution of maximum, minimum, and average proficiency levels. These aggregated data serve statistical purposes and guide future improvements. Inep publishes comprehensive reports that analyze exam distribution and administration, participant performance, and offer statistical summaries and microdata. These reports help identify trends and improvement areas, serving as tools for transparency and accountability.

National High-School Exam (Enem)

**Main learned lessons:**

- 1. Invest in qualified planning and coordination:** Large-scale operations require ongoing refinement of distribution processes.
- 2. Strengthen exam security:** Incidents of test leaks highlight the need for stringent security protocols to prevent fraud and maintain the exam's credibility.
- 3. Promote social inclusion:** Efforts to support vulnerable groups led Enem to adopt fee waivers for low-income candidates, test administration in remote municipalities, and quota policies for public school students and minorities.
- 4. Expand accessibility:** Ensuring accessibility for all, including candidates with disabilities, remains a priority. This includes providing Braille exams, sign language interpreters, and wheelchair-accessible rooms.
- 5. Incorporate innovative technologies:** The implementation of Digital Enem revealed the need for suitable technological infrastructure and candidate preparation, as well as the potential for enhanced online platforms and apps for student preparation.

Amazon Cooperation Treaty Organization (ACTO)

Key attribute: **Adaptation of initiatives to local specificities**

The Amazon Cooperation Treaty Organization (ACTO) is an intergovernmental entity in the socio-environmental area, formalized as an organization in 1995 from the Amazon Cooperation Treaty (ACT) of 1978. It is composed of eight Amazonian countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela. ACTO⁴³ operates in political-diplomatic, strategic, and technical dimensions, promoting synergies among governments, multilateral organizations, cooperation agencies, organized civil society, social movements, the scientific community, and productive sectors.⁴⁴

With the objective of fostering international cooperation in sustainability, ACTO organizes regional and thematic forums, establishes partnerships for sustainable development projects, and develops environmental information and educational training systems. It stands out for the **customization of its initiatives, adapting to local particularities** as a central pillar in project planning.⁴⁵

Projects are carried out in various areas, according to the specificities identified through public consultations and partnerships with organizations with extensive regional experience. A notable example of strong customization is the project of deforestation control stations that provides data on forest cover,⁴⁶ facilitating targeted inspections against indications of illegal deforestation in international forums.⁴⁷ Another example is the cross-border health projects, which include consultations with indigenous and local associations to support health policies at the borders, in partnership with the Pan American Health Organization (PAHO) and the Inter-American Development Bank (IDB).⁴⁸

ACTO has significant governance potential to lead a coordinated and effective action against environmental crimes in the Amazon by proposing unified regulations and control mechanisms among the countries in the region. This effort aims to prevent legal discrepancies from facilitating the legalization of illegally extracted resources, or concealing the illicit origin of goods obtained from environmental crimes into ostensibly “legitimate” assets. The harmonization of trade standards, combined with the introduction of advanced tracking, inspection, and monitoring technologies, can significantly reduce opportunities for money laundering and asset crimes. Public security and combating environmental crimes were incorporated into ACTO’s mandate in November 2023, after the Presidential Summit in August of that year highlighted the importance of the issue. In this context, ACTO can have a significant impact by promoting information sharing, developing joint policies, and aligning strategies for border inspection operations.

To respect the specificities of each context, ACTO adopts a decentralized and inclusive approach to develop and implement initiatives. This includes consultations with communities, open workshops, and partnerships with local and international organizations with extensive experience in the topic and region.⁴⁹ Noteworthy projects include electronic monitoring for the trade of endangered species and combating illegal timber trade, built based on the particularities of the implementation countries,⁵⁰ in addition to the project for environmentally responsible forest management and biodiversity conservation.⁵¹

Amazon Cooperation Treaty Organization (ACTO)



Year:

1995

Temporary or permanent?

ACTO is permanent; it was designed to be a fixed and continuous cooperation initiative, without a specific end date.

Composition:

The Amazon Cooperation Council is composed of the Ministries of Foreign Affairs of the member countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela), the Special Commissions, and the Advisory Committees, with representatives from the member countries.

Horizontal or hierarchical process?⁵²

The structure is horizontal among the governments of the member countries. The Meeting of Ministers of Foreign Affairs (RMFA) constitutes the highest decision-making body, responsible for defining basic guidelines, evaluating initiatives, and making decisions to achieve the organization's objectives. ACTO has a Permanent Secretariat in Brasília, which coordinates the implementation of policies and projects approved by the member countries. The Amazon Cooperation Council (CCA), composed of diplomatic representatives of the eight countries, oversees the execution of initiatives, while the Permanent National Commission (PNC) ensures the implementation of the Treaty's provisions in each member country. In summary, regulatory responsibility lies with the RMFA; directive responsibility with the ACC; executive responsibility with the Permanent Secretariat; operational responsibility with the Special Commissions; and operational support with the CNPs.

Amazon Cooperation Treaty Organization (ACTO)



The Amazon Cooperation Council (CCA) has the function of ensuring the fulfillment of the objectives of the Treaty and the decisions made at the meetings of the Ministers of Foreign Affairs. The CCA is composed of high-level diplomatic representatives from the member countries of the Treaty. The Coordination Commission of the Amazon Cooperation Council (CCOOR), which is an advisory and auxiliary body of the CCA, is formed by representatives of the member countries accredited to ACTO. The Permanent National Commissions (PNCs) execute the decisions of the Organization's bodies in each member country, working under the guidance of the Ministries of Foreign Affairs and coordinating the institutions responsible for development and cooperation in the Amazon in their respective territories.

Who leads and how?

The decision-making bodies are: (i) The Meeting of Ministers of Foreign Affairs (supreme body); (ii) The Amazon Cooperation Council, composed of high-level diplomatic representatives from the signatory countries, is responsible for ensuring the fulfillment of the Treaty's objectives, supervising ministerial decisions, proposing Ministers' meetings, evaluating initiatives and projects, and promoting effective cooperation and coordination among the countries involved in the Amazon region; (iii) The Coordination Commission of the Amazon Cooperation Council is composed of the Heads of Mission from the signatory countries, appointed by the host country of ACTO, which guides planning, programming, and execution of the budget activities; (iv) The Permanent National Commissions coordinate the institutions responsible for development and cooperation; (v) The Special Amazon Commissions are focused on studying and proposing solutions to the region's problems, as well as formulating specific strategies.

Amazon Cooperation Treaty Organization (ACTO)



Internal functioning:

Within the general structure of ACTO, work is guided by periodic meetings of the Coordination Commission of the Amazon Cooperation Council (CCOOR), as well as meetings of the Amazon Cooperation Council (CCA) and the Meetings of Ministers of Foreign Affairs, which are convened as needed by the member countries. ACTO also holds meetings and promotes exchanges of experiences and information with focal points established by the governments in the different areas where the organization operates. The Meeting of Ministers of Foreign Affairs takes place every two years, with the possibility of convening extraordinary meetings with the support of at least four member countries. The CCA, in turn, meets annually and can convene extraordinary meetings with the support of the majority of member countries.⁵³

In ACTO's projects, implementing entities meet to define priorities, objectives, and methods of implementation and evaluation, harmonizing the initiatives. In this context, ACTO also identifies funding sources and mobilizes international resources to support future projects, promoting South-South cooperation and avoiding duplication of efforts among the countries.

External interaction (relational capacity)?⁵⁴

In addition to its relations with the governments of the member countries, ACTO collaborates closely with multilateral organizations, development agencies, and scientific communities. Among ACTO's most relevant projects⁵⁵ are those that include consultations with communities, such as the participatory process to identify and diagnose cross-border issues. The Strategic Action Program (SAP) for integrated management of water resources in the Amazon Basin, for example, involves community associations in the implementation of regional monitoring protocols, strengthening the technical capacities of the member countries. Another noteworthy project is the Amazon Project, which has established networks for monitoring surface waters and water quality, integrating the participation of local communities in the collection and monitoring of essential data for water resource management. ACTO also promotes workshops in member countries to discuss and plan strategic actions aimed at natural resource management, involving experts and civil society.

Amazon Cooperation Treaty Organization (ACTO)


**Funding model:
by project,
external budget,
contributions
from member
countries, etc.⁵⁶**

Funding is composed of contributions from member countries and specific project resources in partnership with local and international organizations. Among the main sources of funding are the Amazon Fund (BNDES), the Green Climate Fund (GCF), and the Governors' Climate and Forests Fund. The Coordination Commission of the Amazon Cooperation Council (CCOR) is responsible for guiding the organization's budget planning, programming, and execution activities.

**Field execution
capacity:**

The actions with the greatest field presence include projects on biodiversity monitoring, water resource management, combating climate change, and indigenous health, which involve the participation of different member countries according to the needs in each context. The effectiveness of these actions depends on continuous coordination among member countries and a political environment that favors multilateral cooperation. To address local specificities, ACTO adopts a decentralized and inclusive approach in the development and implementation of its initiatives, conducting community consultations, open workshops, and partnerships with local and international organizations with extensive operational experience.

**Execution
and results
metrics:⁵⁷**

The assessment of ACTO's overall impact includes analyzing results in various areas of operation, such as increased regional cooperation initiatives, deforestation map analysis in the Amazon, and strengthening the alignment of member countries in relation to environmental preservation in the region. In the context of evaluating results, technical meetings are held to review the regional strategic agenda and promote knowledge exchange among member countries.

Regarding the evaluation of ACTO's projects, the results are measured through a systematic process, which includes continuous monitoring, performance indicators, field visits, periodic reports, and consultations with impacted communities. Additionally, external audits and peer reviews are conducted to ensure transparency and accountability in the process. The results are published in academic publications and thematic reports, promoting knowledge sharing.



Main learned lessons:

1. **Adapting plans to the pace imposed by the region's particularities:** Actions often need to be reformulated, and plans adjusted to address the region's challenges, such as the lack of basic infrastructure, difficulty of access, and limitations in available services in much of the Amazon region. These flexibilities include:
 - a. Adjustments in implementation methodologies; adapting data collection using technologies more appropriate to local conditions, such as remote sensors and satellite monitoring.
 - b. Formation of local monitoring networks with NGOs and local associations that have extensive knowledge of the territory, to verify if the actions are appropriate to local demands.
 - c. Creation of new partnerships with indigenous communities and traditional populations.
 - d. Adjustments in schedules, allowing more time for expected actions.
 - e. Adaptation of action plans to accommodate the lack of access to electricity and stable communication in remote areas.
 - f. Use of renewable energy sources and low-cost communication solutions.⁵⁸
2. **Updating the commitments of member countries:** It is essential to maintain the commitment of member countries and the engagement of necessary stakeholders, even in a complex context with diverse interests within and among countries. Only with the active participation of member countries, international organizations, and civil society has it been possible to implement effective and sustainable long-term solutions in the region.
3. **Securing and stabilizing long-term budgets:** Ensuring adequate and sustainable funding, despite constant political changes in member countries' governments, is crucial to maintaining effective and long-lasting operations, especially in a scenario of limited resources and competing priorities.



Recommendations for Improving Security Governance in the Amazon

Key elements from the cases analyzed can help address the challenges of security governance in the Amazon, such as the fragmentation of initiatives, limited dialogue among relevant actors, and incompatibility with standardized solutions. An effective governance model in this context of uncertainty and insecurity needs to encompass everything from coordinating actions and assigning competencies, to the collaborative planning of joint and decentralized actions. Building effective security in the Amazon requires an approach that goes beyond simple police allocation, incorporating broader diagnoses of the problems and the articulation of various fronts and actors around a common or shared instance. In this regard, based on the governance elements of the cases examined, the following are some recommendations for the security context in the Amazon.

Governance structure resources:



Ensuring allocated budget and personnel with allocation autonomy

Regarding governance structure resources, it is recommended to create bodies with their own budget and personnel, along with the authority to allocate resources autonomously. This is essential for enhancing security governance in the Amazon, as it provides greater stability, predictability, and autonomy in implementing robust actions. Examples of this approach include:

-  **Enem Governance:** Own budget, with resources guaranteed by the Ministry of Education, along with clear responsibilities assigned to the involved entities.
-  **SAMU Governance:** Guaranteed resource transfer, with significant autonomy at various levels, including decentralized bases, which can directly allocate resources for equipment maintenance and necessary hires.

Enhancing resources with various additional funds



In addition to securing a central, stable, and sustainable budget, it is important to have additional sources of funding. These resources allow for greater customization of actions by allocating funds for specific needs. In the Amazonian context, with financial predictability and well-defined, faster allocation processes, it would be possible to plan more robust actions, maintain successful initiatives, and ensure that implementers can use resources quickly and simply. An adaptable budget monitoring structure for crises would also be crucial security in the Amazon, anticipating financial crises and allowing for agile and flexible responses when resource reallocation is needed. Examples include:

-  Additional resources from ACTO, such as the Amazon Fund, the Climate Fund, and IDB funds, among others.
-  Specific European Union funds for emergencies and crises, including humanitarian action and natural disaster reduction.

Operational capacities:

Investing in professional training and equipment enhancement



With regard to operational capacities within the governance structure, it is recommended to allocate qualified professionals and invest in their development, as well as to provide them with the technical resources and ensure their maintenance. Well-trained personnel equipped with appropriate technical resources are crucial for security actions in the Amazon to strategically respond to the demands of this context. Notable examples include:

-  In Enem, the use of specialized human resources for test design, which requires high qualifications, as well as for the administration of the exam, which requires specific protocols.
-  The continuous investment of SAMU in health professionals, transportation, communication, and planning contributes significantly to the efficiency of service delivery. This demonstrates that so-called “street-level bureaucrats” (actors operating outside formal government offices) have enormous potential to customize a service that requires adaptations..

Internal interaction of the governance model:


Creating customized relationship flows for strategic alignment, feedback, and assessments

It is essential to establish strategic meeting flows for aligning objectives and common causes, joint planning, and defining roles and collaborations. Additionally, regular meetings are necessary for exchanging information, feedback, methods, and discussions on possible adaptations and improvements in the design of policies, programs, or services. These elements contribute to more effective internal alignment of the entities involved in Amazon security, promoting institutional engagement, cohesion with common organizational values and principles, and optimizing efforts to avoid duplicity of activities. Examples of this approach include:

-  The continuous feedback cycle of Enem, which identifies lessons learned to be incorporated in subsequent editions.
-  The interaction of SAMU between different sectors and federal levels, based on a general management protocol that establishes clear guidelines and roles.


Develop institutional engagement and organizational ethos with shared values

In the context of Amazon security, it is essential to promote a common ethos related to human rights, sustainable development, environmental preservation, and the dignity and land rights of indigenous peoples. Practices in this regard can be observed in initiatives such as:

-  The European Union's constant encouragement to strengthen organizational ethos and promote shared values, emphasizing the importance of political and commercial cooperation among its members, as well as the promotion of human rights and democratic values.

Create thematic working groups for targeted actions

For more effective internal interaction, focusing on specific objectives and key areas, it is recommended to create thematic working groups aimed at particular sectors and targeted actions. Notable examples include:



-  The thematic commissions of the European Union and ACTO, which provide a space for in-depth discussions on specific topics, bringing together experts and focusing on concrete projects and objectives.

In the Amazonian context, this autonomy and flexibility in functions, according to demands and opportunities, would allow, for example, law enforcers and security personnel to respond to environmental crimes and issue environmental infraction notices.⁵⁹

External interaction:

Consider relevant external knowledge and adapt options to adverse conditions



For action in this area to be effective, it is essential to consider the diversity of initiatives, integrate local and other organizational knowledge, and adapt processes to the specific challenges of the context. Examples of this approach include:

-  SAMU's collaboration with institutions beyond the health sector, especially those oriented towards security, allows for the integration of complementary and diverse knowledge.
-  The adaptations made by ACTO in its field projects, which often need to be adjusted to face challenges such as lack of infrastructure, difficulty of access, and service limitations in the Amazon. Such adjustments include reformulating methodologies, creating local monitoring networks, partnering with local communities in the territories, modifying schedules, using appropriate technologies such as remote sensors, and adopting renewable energy sources and low-cost communication solutions.

Transparency and evaluation

Collect and dissemination data, results and evaluations

It is essential to maintain effective systems for data collection and dissemination, as well as to conduct periodic evaluations of initiatives and publish their results in an accessible manner. Transparency in data and processes can generate engagement and oversight by users and stakeholders, creating a virtuous cycle that encourages more transparency – a critical factor in the Amazon security context, fostering more participatory processes with greater accountability. Examples of this approach include:

-  In Enem, with the definition and publication of protocols, evaluation criteria, and application processes, complemented by external audits and the possibility for users to request adjustments or appeal to legal resources in cases of procedural irregularities.
-  In the European Union's open portals, with well-organized, accessible, and widely disseminated data, allowing citizens to monitor key topics, such as budget execution, and, in some cases, participate in public consultations during the development of initiatives.

The learnings and solutions from the four cases analyzed take place in distinct locations and involve multiple sectors, such as health, education, monetary policy, and water resources. They combine the participation of a range of actors, both state and non-state, as well as different forms of financing and operation. Other cases could illustrate alternative paths and ways to improve security governance in the Amazon in terms of effectiveness and efficiency, with the proposals formulated above being the main contribution of the text.

Based on the evaluation of the evidence presented, interesting solutions have been proposed that can be adapted to the context of Amazonian security to address the challenges mentioned at the beginning of the text ([1-8](#)). An enhanced governance structure, which considers these aspects and key attributes ([I-IV](#)), can help organize more coordinated, effective, and efficient actions than those currently in place.

We have contributed with new evidence to the debate on promising arrangements to improve coordination among entities responsible for detecting, deterring, and dismantling crimes in the Amazon. By combining challenges and attributes that address how these challenges can be faced, mitigated, and overcome, we initiate a reflection on alternatives to resolve governance deficits in the system ahead of combating organized environmental crime in the region.

In summary, it is hoped that the publication, the analysis of cases with outstanding attributes, and the recommendations derived from them will contribute to enhancing security governance in the Amazon. While overcoming the problem is an ambitious goal, an effective governance agenda is a first step in improving crime control and addressing insecurity in a strategic, systematic, and continuous manner.

Endnotes

1. Igarapé Institute (2022), [Governar para não entregar: uma agenda de segurança multidimensional para a Amazônia brasileira](#)
2. Federal Prosecution Service (MPF). [Governança no MPF](#)
3. Waisbich, L., Risso, M., Husek, T., & Brasil, L. (2022). [The ecosystem of environmental crime in the Amazon: an analysis of illicit rainforest economies in Brazil](#). Strategic Article 55, Igarapé Institute.
4. Sérgio de Lima, R. (2022). [Governança e capacidades institucionais da segurança pública na Amazônia](#). Fórum Brasileiro de Segurança Pública.
5. Pires, R., & Gomide, A. (2016). [Governança e capacidades estatais: uma análise comparativa de programas federais](#). Revista de Sociologia e Política, 24(58), 121-143.
6. Pires, R., & Gomide, A. (2018). [Governança e capacidades estatais a partir da abordagem dos arranjos e instrumentos de políticas públicas](#). Boletim de análise político-institucional, 19, 25-32.
7. European Union. [Aims and Values](#)
8. European Union. [Types of institutions and bodies](#)
9. Bulgaria, Czech Republic, Hungary, Poland, Romania and Sweden are part of the EU, but does not use the euro.
10. European Commission. [How decisions are made](#)
11. European Union. [How EU policy is decided](#)
12. Best, E. (2016). [Understanding EU decision-making](#), European Institute of Public Administration.
13. European Union. [How EU policy is decided](#)
14. European Economic and Social Committee (CESE) and the initiative [Community Led Local Development](#) (CLLD)
15. European Commission. [Conference on the Future of Europe](#)
16. European Commission. [Energy communities](#)
17. European Commission. [EU funding programmes](#)
18. European Union. [European Union funding, grants and subsidies](#)
19. Horizon Europe. [What is Horizon Europe?](#)
20. European Commission. [How we measure and report results](#)
21. Exact External Wiki. [Introduction to Results and Monitoring](#)
22. European Commission. [How we measure and report results](#)
23. Eurostat (2021). [How has the EU progressed towards the Sustainable Development Goals?](#)
24. European Union, EUR Lex. [Principle of Subsidiarity](#)
25. European Commission. [Better Regulation: why and how](#)
26. Landman T., Larizza M. (2010). [EU Policy Discourse: Democracy, Governance, and Human Rights](#), International Institute for Democracy and Electoral Assistance (IDEA).
27. European Union. [European's Citizen Initiative](#)
28. European Parliament. [Competition Policy](#), Fact Sheets on the European Union.
29. European Central Bank (2024). [Family ties: ten years of monetary policy and banking supervision under one European roof](#)
30. Coren SP Portal, Regional Nursing Council of Paulo (2022). [SAMU oferece treinamento em primeiros socorros para leigos no Metrô de São Paulo](#)
31. Alagoas Government Portal (2024). [Samu realiza Curso de Atendimento Pré-Hospitalar para acadêmicos de Medicina e residentes](#)
32. Gomes, R. (2018). [Os desafios na implementação de políticas públicas no campo da saúde: o SAMU 192](#). National School of Public Administration (Enap).
33. Nunes, P. de C., Carvalho, P. V. R. de, Arcuri, R., Bellas, H., Bulhões, B., Viana, J., & Jatobá, A. (2023). [Prospecção das condições de trabalho do Samu-192 fluvial em cenários de crise a partir da resiliência no enfrentamento à Covid-19 no Alto Solimões](#). Saúde em Debate, 47 (139), 791-805.

34. Ministry of Health. [SAMU-Serviço de Atendimento Móvel de Urgência](#)
35. SAMU 192 Regulatory Centers System. [e-SUS SAMU](#)
36. Brasil Agency (2024). [Enem 2024 terá 140 mil salas de provas em 1.753 cidades](#)
37. Anísio Teixeira National Institute for Educational Studies and Research (INEP). [3,9 milhões estão inscritos no Enem 2023](#)
38. Gov Agency (2023). [Entenda logística da prova do Enem 2023](#)
39. Ministry of Education (MEC) - 2024. [MEC publica edital do Enem 2024](#)
40. G1 (2024). [PF indiciou servidora que aplicou provas por vazamento no Enem e propõe segurança adicional no CNU](#)
41. Ministry of Justice and Public Security (MJSP) - 2024. [Polícia Federal deflagra operação contra vazamento de provas do Enem](#)
42. Brazil Agency, Brazilian Communications Company (EBC). [Problemas estruturais distanciam alunos do Enem, dizem especialistas](#)
43. Amazon Cooperation Treaty Organization (ACTO). [About Us](#)
44. Amazon Cooperation Treaty Organization (ACTO) - 2023. [Get to Know the Belém Declaration Signed by the Amazonian Countries at the Summit](#)
45. Amazon Cooperation Treaty Organization (ACTO) - 2023. [Listado de Projetos da OTCA](#)
46. Amazon Fund. [Monitoramento da Cobertura Florestal na Amazônia Regional](#)
47. Brazilian Development Bank (BNDES) - 2013. [BNDES aprova R\\$ 23 milhões para monitoramento da floresta amazônica nos países da OTCA](#)
48. Amazon Cooperation Treaty Organization (ACTO) - 2021. [Project Contingency Plan for Health Protection in Indigenous Peoples Carries Out a Technical Mission in the Triple Frontier: Peru-Brazil-Colombia](#)
49. Gov Agency (2024). [Brasil realiza oficina nacional de implementação do programa para a gestão integrada das águas na bacia Amazônica](#)
50. Amazon Cooperation Treaty Organization (ACTO) - 2016. [The Regional project to manage, monitor and control wild fauna and flora species endangered by trade set to begin implementation](#)
51. Amazon Cooperation Treaty Organization (ACTO). [Project "Institutional Strengthening of the Member Countries of ACTO in forest management environmentally responsible and conservation of biodiversity in managed forests of the Amazon" \(ITTO/CBD/ACTO\)](#)
52. Machado, E. (2020). [Vinte anos de Organização do Tratado de Cooperação Amazônica: uma análise da conjuntura atual](#), Brazilian Journal of International Relations, Marília, SP, v. 9, n. 1, p. 170-201.
53. Amazon Cooperation Treaty Organization (ACTO). [Base jurídica del Tratado de Cooperación Amazónica](#)
54. Amazon Cooperation Treaty Organization (ACTO) - 2023. [ACTO member countries bring together decision-makers, experts and civil society to promote strategic actions for the integrated management of Amazonian waters](#)
55. Amazon Cooperation Treaty Organization (ACTO) - 2023. [Países Membros da OTCA reúnem tomadores de decisão, especialistas e sociedade civil para promover ações estratégicas para a gestão integrada das águas amazônicas](#)
56. Amazon Cooperation Treaty Organization (ACTO) - 2017. [AD Hoc Working Group hold a meeting to discuss the long-term financing proposal of the ACTO](#)
57. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - 2017. [Strengthening the Amazon Cooperation Treaty Organization \(ACTO\)](#)
58. Amazon Cooperation Treaty Organization (ACTO). [OTCA and Ipea united to generate studies on the Amazon](#)
59. A successful example of integration between public security and the environment is discussed in [Operation Curupira: An Integrated Approach to Combat Deforestation in Southern Pará](#). Igarapé Institute, 2024.

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