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# The application of the Open Source Intelligence method in Defense studies

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The new post-pandemic times is also affected by the way in which the field of defense studies and, within that, military sciences will be built. Some debates can propel this new era, where informational elements are highlighted. Information is the constant variable in technological processes that transform strategy and military operating models, but it is also a defining attribute of how institutions will relate in the years to come.

If, on the one hand, we move through an amount of dissipated information, on the other, the barriers that interrupt unwanted flows of information are not placed in a safe or reliable way. Therefore, there is an expressive dissonance between the powerful information needs, for the purpose of assertive decisions, and the flows that bring varied insecurities. In addition to the elements of critical insecurity being endowed with major informational components – electronic warfare, cross-cutting or transnational threats, cybersecurity and cyberdefense – the defense attributes of a State are not only defined by its capabilities, since the informational components affected are both internal and external.

Thus, the contrast between information needs and the inability of institutions to respond efficiently to these demands seems to be central to the resulting strategic planning. The renewal of intelligence models, which are much more focused on the treatment

of information than on the obsolete conception linked to the models of the last century, may be the new equation to be solved by States.

Although collaborative regimes are under suspicion, the protocols that drive the behavior of state actors continue to express interest in some degree of control and submission of behaviors to the international system (KRAHMANN, 2003; AXELROD; HAMILTON, 1981). Thus, States cannot fail to observe imperatives caused by third parties, which are added to those of state or interstate expression. A kind of overlapping consensus among the various types of representatives of the informational arena seems to be composed of some possible common minimums that touch on data privacy, the control of personal data by private corporations and state entities, the mobilization of falsified information, and the existence of barriers and parallel universes on the internet.

It is precisely because of parallel environments that insecurities are expressed about defense systems, with high repercussions in terms of trust and stability. Therefore, it does not require both a more in-depth, systematic and academic analysis of these variables, as well as an input on public policies, strategies and doctrines, coming from academic research. The construction of appropriate methodologies and tools fuels the possibility of building a hybrid field of studies with critical potential and manifested ordinarily over the state institutions affected (MEDEIROS, 2016).

In this regard, the possibility of using the so-called OSINT (Open Source Intelligence) can substantially expand the possibilities of analysis inside and outside defense institutions (GLASSMAN; KANG, 2012). The central idea of using open sources for the benefit of intelligence systems aims at the conception that the greater the ability to observe open data, the better the conditions for strategic and operational visibility, since the virtual world provides a universe of untreated information (BENES, 2013). Even though OSINT is not characterized as a scientific method, as an instrument, it qualifies research with the possibility of large-scale qualitative analyses, with a high impact of data science in the broad epistemological field of defense studies (GONG; CHO; LEE, 2018).

The challenges that affect the collection and analysis of open sources and data show that the technology paradigm, in addition to affecting the objects of defense studies, guides the way in which agents and researchers must be trained to analyze security systems (DAVIS; O'MAHONY, 2017). Added to these are ethical challenges, given that the human interface with technology exasperates by its limits (HRIBAR; PODBREGAR; IVANUŠA, 2014). The so-called information technology revolution also mobilizes new forms of human interaction and, for this reason, the new intelligence models are endowed, in addition to open data, with the so-called Crowdsourcing Intelligence (WILLETT; HEER; AGRAWALA, 2012). The elements linked to this model highlight not only the means and type of data collected, but the subjects' ability to interact for the benefit of obtaining data that increases the visibility of a given subject.

In this sense, the themes related to national security, international security, cooperative security, are cross-sectional and deserve an input from the informational components involved. This includes addressing issues such as: migratory flows from the collaboration networks involved; defense economics and information transfer involved in agreements of various collaborative terms; illicit and human trafficking and submerged

connection networks; and new ways of materializing agreements in areas lacking sovereignty or contestable sovereignty.

To complement this perspective on the use of data and information technology in a collaborative and reliable way, a series of methods are adapted and crossed so that the databases have a mining and the most coherent and secure interpretation to be transmitted by the media, thus facilitating the dissemination of knowledge in the field of defense.

When analyzing decision-making tools, databases, software for checking variables and analyzing behavior are used in the public and private fields, by governments and corporations, so they are assisted by technology about future decisions that will affect their businesses and individuals. In the case of this process, there is responsibility for the risks and impacts of these decisions analyzed with data collected individually and categorized for collective understanding and also for the emergence of collective phenomena that affect national security, defense and development issues.

It is with great satisfaction that we present this edition of Coleção Meira Mattos. This issue has five articles with varied themes, but all contribute substantially to the advancement of research in Military Sciences. In addition, we highlight that the thematic variety – cyber threats (QUEIROZ; KRISHNA-HENSEL, 2020), conflicts of the future (FONFRÍA, 2020), drug trafficking (ARIAS HENAO, 2020), military logistics (VIOLANTE et al., 2020), and geopolitics resources (PEREZ, 2020) – present in this publication represents well the plurality of themes and agendas that compose the defense area. Enjoy!

## References

ARIAS HENAO, D. P. An anti-narcotics look at Colombia in post-conflict. **Coleção Meira Mattos**, Rio de Janeiro, v. 14, n. 51, p. 305-330, 2020. DOI: <https://doi.org/10.22491/cmm.a035>. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/4205>. Access on: 11 ago. 2020.

AXELROD, R.; HAMILTON, WD. The evolution of cooperation. **Science**, [S], v. 211, n. 4489, p. 1390-1396, 1981.

BENES, L.. OSINT, new technologies, education: expanding opportunities and threats. A new paradigm. **Journal of Strategic Security**, [S], v. 6, n. 3, p. 22-37, 2013.

DAVIS, PK; O'MAHONY, A. Representing qualitative social science in computational models to aid reasoning under uncertainty: national security examples. **The Journal of Defense Modeling and Simulation**, [S], v. 14, n. 1, p. 57-78, 2017.

FONFRÍA, A. The conflicts of the future: a new scenario for the defense industry. **Coleção Meira Mattos**, Rio de Janeiro, v. 14, n. 51, p. 235-249, 2020. DOI: <https://doi.org/10.22491/cmm. a032>. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/3879>. Access on:11 ago. 2020.

GLASSMAN, M ; KANG, MJ Intelligence in the internet age: the emergence and evolution of Open Source Intelligence (OSINT). **Computers in Human Behavior**, [S], v. 28, n. 2, p. 673-682, 2012.

GONG, S .; CHO, J .; LEE, C. A reliability comparison method for OSINT validity analysis. **IEEE Transactions on Industrial Informatics**, [S], v. 14, n. 12, p. 5428-5435, 2018.

HRIBAR, G.; PODBREGAR, I.; IVANUŠA, T. OSINT: the “gray zone”? &#39;. **International Journal of Intelligence and CounterIntelligence**, [S], v. 27, n. 3, p. 529-549, 2014.

KRAHMANN, E. Conceptualizing security governance. **Cooperation and conflict**, [S], v. 38, n. 1, p. 5-26, 2003.

MEDEIROS, SE Of the Epistemology of Defense Studies and its Hybrid Fields. **Brazilian Journal of Defense Studies**, Niterói, RJ, v. 2, n. 2, 2016.

PEREZ, J. G. The Falklands/Malvinas conflict from the perspective of the Geopolitics of Natural Resources. **Coleção Meira Mattos**, Rio de Janeiro, v. 14, n. 51, p. 331-356, 2020. DOI: <https://doi.org/10.22491/cmm.a036>. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/4093>. Access on: 20 ago. 2020..

QUEIROZ, F. de; KRISHNA-HENSEL, S. F. An assessment of cyber threats and migration as challenges to the European Union Pluralistic Security Community in the World Order 2.0. **Coleção Meira Mattos**, Rio de Janeiro, v. 14, n. 51, p. 279-303, 2020. DOI: <https://doi.org/10.22491/cmm.a034>. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/3677>. Access on: 11 ago. 2020

WILLETT, W. ; HEER, J. ; AGRAWALA, M. Strategies for crowdsourcing social data analysis. *In* : SIGCHI CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS. 12., 2012, Austin, TX. **Proceedings...** Austin, TX: SIGCHI, May 2012. p. 227-236.

VIOLANTE, R. V.; CARVALHO, Y. M. de; SANTOS, M. dos; SILVA, P. A. L. da. Interoperability in the Amazon region: application of the SAPEVO-M method to select logistical equipment to be used by the Armed Forces. **Coleção Meira Mattos**, Rio de Janeiro, v. 14, n. 51, p. 251-277, 2020. DOI: <https://doi.org/10.22491/cmm.a033>. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/3373>. Access on: 11 ago. 2020.

# The conflicts of the future: new scenario for the Defense Industry

*Los conflictos del futuro: nuevo escenario para la Industria de Defensa*

**Abstract:** Technological innovation is the source of major industrial changes. The defense industry does not ignore this fact. The entry to the defense market of civil companies, with cutting-edge technologies, sometimes disruptive, implies substantial changes in aspects such as the definition of the industry, the level of existing competition, changes in supply chains, forms of financing for research and development (R&D), the performance obtained, and industrial policies. This study analyzes in a synthetic way the main changes in these aspects together with the needs of the ministries of defense to prepare themselves for future conflicts.

**Keywords:** Disruptive technologies. Defense industry. Market. Industrial policy.

**Resumen:** La innovación tecnológica es fuente de importantes cambios en el seno de las industrias. La industria de defensa no es ajena a esto. La llegada al mercado de defensa de empresas civiles, con tecnologías punteras, a veces disruptivas, implica la existencia de cambios sustanciales en aspectos tales como la propia definición de la industria, el nivel de competencia existente, los cambios en las cadenas de suministro, las formas de financiación de la investigación y desarrollo (I+D), el performance obtenido y, finalmente las políticas industriales. Este trabajo analiza de forma sintética los cambios en estos aspectos unidos a las necesidades que tienen los ministerios de defensa para prepararse para los conflictos del futuro.

**Palabras clave:** Tecnologías disruptivas. Industria de defensa. Mercado. Política industrial.

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## 1 Introduction

The technological changes happening in the world, their speed and the extensive set of applications in different fields are a challenge for the defense industry. Although this industry is highly innovative, most of the new technological developments today come from the civil world. Its military application – with the developments in the world of defense –, implies important changes in the industrial structure and in the dynamics of all kinds.

The new technologies generate important advances in aspects such as the productivity of companies, the speed of data transmission and the efficiency of decision-making, which implies a significant increase in the possibilities of improving security of all kinds. However, they are also sources of risks and threats and, in the case of disruptive technologies, they represent a change in the ways we approach and solve problems. Therefore, new opportunities arise.

The analysis made in these pages tries to show to what extent these technological changes linked to the military world and oriented to “cleaner and more surgical” conflicts but also of high intensity and continuous along the time – for example, the cyber-attacks –, impose changes in the defense industry.

To this end, after analyzing the concept of disruptive technology, the need to reconvert the defense industry is studied from various perspectives: the definition of the industry, the level of existing competition, changes in supply chains, forms of financing research and development (R&D), the performance obtained and, finally, industrial policies. The article closes with some conclusions.

## 2 New risks, threats and disruptive technologies

The extent of risks and threats coming from various fields – social, economic, environmental, geopolitical or technological, among others<sup>1</sup> –, forces decisions oriented, in most cases, towards technology as a factor that can solve or, at least, mitigate these risks. It occurs both in the civil and in the military sphere because many risks are common to both spheres. This has led to a change of paradigm in the generation and dissemination of military technologies since the 1980s until today.

If initially a large part of the technological innovations was originated in the military world, nowadays most of them are produced in the civil field, due to the greater amplitude of the market and a growing demand for products and services with a high technical sophistication. Therefore, there is a change from a closed innovation model<sup>2</sup> in the military world to a more open one, with the participation of civil companies, generally innovative, which contribute to satisfying the demands coming from the defense field. Obviously, this

1 See World Economic Forum (2020) for an analysis of major risks.

2 According to Adams (1981), the “privacy” in which the defense industry operated was moving towards an opening with lower entry barriers and increased competition; at least in some dual and pure defense technologies and subsectors.

gradual change implies the redefinition of roles in the generation, acquisition and exploitation of new technologies, as well as the pronounced dual character of many of them.

Nevertheless, the problem is not in the generation of new technologies, occurring at an accelerated speed and responding more to the need for supply than demand, which is often dominated by the speed of technological expansion. In other words, the balance between demand-pull and supply push is based on the last one<sup>3</sup>. In the case of defense, the reasons for this situation can be explained in the urgent need for traditional defense companies to stay in the market, offering more sophisticated systems to ensure that the competitive capabilities of countries' armed forces can face the risks.

In addition to the factors aforementioned, it should be noted that the knowledge that companies have about new technologies is greater than the knowledge of the armed forces, so that they have the ability to guide technological development in specific ways, together with the operational needs of the army. Moreover, in general terms, there is usually more than one technical solution to the same problem, so there is an element of technology substitution – according to Howells, 2003. Finally, the armed forces of the most developed countries often set the pace for technological advances linked to security needs. The new weapons systems are instruments for solving risks and threats that each country can approach differently depending on its technical and economic capacity, geopolitical situation and many other kind of priorities. However, these devices tend to be standard and are characterized by a series of technological trajectories<sup>4</sup> (NELSON; WINTER, 1977; FREEMAN; PEREZ, 1988), which originate in the most developed countries.

One of the most important problems that arises when considering adopting a technological path, a direction to solve a problem or a set of problems, is the cost involved. This cost has several prisms. On the one hand, obviously, the economic one, but also the one derived from the risk of having to abandon the path due to lack of results. This last case implies the search for new solutions that require more efforts of all kinds. There is also an opportunity cost when it is possible to choose among different paths. The less developed countries try to imitate the leaders, so they do not incur the costs of generating new technologies – in addition to the aforementioned opportunity costs –; they only have the expenses to adopt, imitating (WIETHAUS, 2007) and learning them, which also implies a cost, although lower.

This situation becomes even more complex when the objective is to generate or use disruptive technologies that change the technological paradigm –the conceptual framework of solving problems–, and revolutionary ways are sought to generate new solutions to problems that involve technological leaps. As stated by Kostoff, Boylan and Simons, 2004, these technologies can modify the structure of an industry and even create

3 See Van den Ende and Dolsma (2005) for an intensive analysis of this aspect.

4 A technological path is a way of solving a problem or a set of problems in a specific direction, considering both the technological state of the art and the position in which companies are placed. On the other hand, a technological paradigm poses the problems and solutions within an analytical framework, which is developed by means of trajectories.

new industries by introducing new processes and products<sup>5</sup>. Usually the combination of several technologies – what is not obvious at first – is needed to generate a new one that provides cheaper and better performing services or products. Obviously, in the face of the emergence of a disruptive technology, the response must be a specific training focused on the exploitation of its current and potential capabilities, which implies modifications in business training processes and in the public sector. Therefore, the learning curves are substantially transformed, as well as the time needed to put the new technology into force.

However, the generation of disruptive technologies requires significant cultural, managerial resource allocation – economic, human, infrastructure, and adjacent technologies –, technological and industrial policy changes, and a broad concurrence of factors that motivate the usual way of acting. In short, it implies changes in the different routines of the parties involved. This situation also imposes modifications on the behavior of other agents who, initially, may not be affected by the new technology, but who, due to their subsequent developments, may use its benefits to obtain a better performance in their activity or are directly affected over time<sup>6</sup>.

Therefore, in contrast to the incremental innovations oriented towards maintaining the existing model, with small changes aimed at improving business productivity or the performance of products or services (PAVITT, 1984), the changes produced by disruptive technologies modify the knowledge bases, even altering social and power relations at the international level, leading to a rebalancing of powers as well as the emergence of new actors and the appearance of risks and threats not considered until now. Aspects such as security and defense are involved or affected by the new scenario and must respond to previously unspecified strategic contexts. This situation requires profound changes in doctrines, materials, weapons systems, strategies and forms of collaboration between national and international armies, among other aspects.

Faced with this change of scenario, both the business sphere linked to defense and the armed forces have to modify their behavior and structures. The key question is in what direction these changes should be aimed.

### 3 Need for restructuring the industry<sup>7</sup>

#### 3.1 Definition of defense industry

The analysis of the defense industry requires primarily a definition of it. This is not simple, since this industry shows a high heterogeneity in terms of the type of goods and

<sup>5</sup> A classic example is the introduction of computers, which generated significant changes in the morphology of industries and generated a new industry.

<sup>6</sup> Depending on the level of horizontality of a new technology, this effect can be more or less intense. The more horizontal the new technology is, the more intense it will be.

<sup>7</sup> At the end of this study, a summary table is presented sowing the current characteristics and the expected changes, as well as others that can be projected given the transformations that will be exposed along these lines.

services developed. Some authors have defined the defense industry as the one that refers the criterion according to the demand side, which would be the factor that gives homogeneity to the set of heterogeneous companies. Thus, the definition would be focused on the satisfaction of the demands of the ministries of defense by a range of companies, giving them the character of "defense companies," which in an aggregate way would make up the defense sector or industry (GARCÍA ALONSO, 2010). Other authors propose a definition that distinguishes companies that produce lethal equipment and those that do not produce it, and exclude post-production, as Hartley describes (2018).

On the supply side, it could be assumed that the type of production distinguish the boundaries between what is and is not a defense industry, so that those companies producing goods unequivocally linked to national security and defense will belong to it. Among the examples we have: fighter planes, armaments, frigates, among hundreds of other systems. However, numerous producers of software, communications, armored vehicles on wheels, simulators, etc. are also suppliers of highly specific defense products (FONFRÍA, 2013).

In addition, there are also non-specific products, such as insurance, food, logistics operations, and fire-fighting systems, as a substantial part of the offers to the ministries of defense and of their demands. Therefore, a possible distinction, diffuse, would be the one that considers the specialized suppliers versus the general ones.

However, in both cases it is important to note that it is only from a specific volume of turnover that a company can be considered part of this industry. For example, if an aeronautics company carries out 90% of its production for the civil market and the rest for fighter planes for defense, is it a defense industry company? On the contrary, if an insurance company obtains, for example, 75% of its turnover from the military market, is it a civil company, as it is not specialized in a specific defense good? What about a cybersecurity company? In short, duality is a characteristic that is clearly linked to this industry, making its delimitation more complex<sup>8</sup> (FONFRÍA, 2013).

It would even be necessary to include the activities that have traditionally been carried out by the armed forces, such as maintenance or system modifications, which are developed by companies through outsourcing methods (HARTLEY, 2018).

Finally, and as an additional problem to the definition, the scarcity of homogeneous data and statistics by country, related to the economic activities of companies in the defense markets, is a severe restriction for an adequate knowledge about them.

The intensity of technological change, along with the emergence of new weapon systems and other needs such as cyber defense or artificial intelligence, implies a redefinition of the defense industry. The entry and exit of companies, including the emergence of new sectors that are basically dual, associated with new technologies, leave, again, this industry without a satisfactory definition.

<sup>8</sup> Even in the case of the large global defense companies, the percentages of civil-military production vary significantly, even over time. Some examples: McDonell-Douglas, over 70% of its production goes to the military market; Finmeccanica, 60%; British Aerospace, 40%; Airbus 17% or General Electric, 15%. See SIPRI, various years.

### 3.2 Level of competition

Traditionally, competition is not the fundamental characteristic of the defense industry. Initially, and for decades, the industry of each country has been the main supplier of defense systems of all kinds, being closed to new entrants from other countries (MARTÍ, 2015). Thus, a certain industrial and technological autonomy was achieved alongside the security of supply of inputs and maintenance of the systems, that is, sovereignty. The “defense industrial autarchy,” based on the concept of Hamilton’s nascent industry of the 18th century, became diluted due to the need to incorporate systems and technologies that were not within the reach of the country, for these were imported from foreign countries.

The international arms trade has grown substantially in recent decades<sup>9</sup> with the entry of new relevant actors and the diversification of the supply of all types of systems for military and dual use. While most countries try to keep their market closed, internationalization has also reached the world of defense. This greater internationalization brought a substantial increase in competition between defense companies, although due to the markedly oligopolistic nature of some large systems – such as submarines, or fighter and transport aircraft – the market is restricted to a small number of firms that compete at a global level.

However, it must be emphasized that national and international competition works in different ways. Thus, at the national level, countries with industrial capacities try to protect their market for national companies, generating monopolies and oligopolies, many of them of public capital. At the international level, competition has traditionally been based on several aspects, many of them not linked to prices. Some of these include:

- The negotiating capacity and the political, economic and geostrategic power of some countries to export their systems to third countries. The US is a typical case.
- The technological level of the systems.
- The power of large multinationals from developed countries.
- The offset agreements that have substantially benefited many less developed countries and have become a bargaining power far from the price with positive results, for exporters of defense material and for importers<sup>10</sup>.

While these factors remain and continue to be relevant in the procurement of military systems, it should be highlighted that price and competitive procurement are increasingly seen as key factors in decision-making. Significant budgetary restrictions are changing the importance of the various factors and the entry of new international producers,

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<sup>9</sup> As shown by data from the Stockholm International Peace Research Institute (2019), during this century the arms trade has grown by 7.8% between 2009 and 2013, reaching the highest level since the Cold War from the latter date until 2018.

<sup>10</sup> See Fonfría (2019) for an analysis of the application and optimal evaluation of offset agreements.

such as China, Brazil, India and Russia, pressing both the rising competition and, in some cases, falling prices.

We must add to this situation the increased entry of civil companies – in many cases SME (Small and Medium Sized Enterprises) – into the defense market, which develop new low-cost and high-value technologies – cybersecurity, small drones, C4ISTAR, among others – that intensify the competition in increasingly larger market niches. In addition, and with its smaller size, the entry and exit of the military market does not suppose important costs for these firms, which maintain their orientation towards the civil market as the base of their business, given that civil markets are much more dynamic, using the technological duality as a focus.

In this regard, governments are allowing the entry of new competitors because of their reduced bargaining power, due to forms of procurement based on price and not on cost-plus fee – which was a significant burden on defense budgets – and by increasing competition.

### 3.3 Supply chain

Supply chains are the core of the defense industry's activities. Although the general case is to appoint a main contractor who is responsible for selecting suppliers and subcontractors – tier 2, tier 3... –, these involve at least two fundamental aspects for the correct development of a contract. The first is the quality of the products and services they deliver to the main contractor in the stipulated time. The second is security of supply, so that the supply chain is not broken and coordination between suppliers and the contractor is adequate.

As supply chains become more global, their complexity increases and the demand for value added increases as well. If in the past value was placed on the services and products delivered, nowadays this is based on the process of change, something that will intensify and expand in the future. The value of use, oriented towards the consumer – ministries of defense – must be the main objective of suppliers. Therefore, changes in demand must find a flexible and rapid response in supply, even if it involves costs. How to minimize these costs? According to Bellouard and Fonfría (2018), it is possible to minimize them by making polled demands, by expanding the market, in such a way that different countries are involved in shared development with a single supply chain.

Thus, an option in the new scenarios may be the Outcome-based Service Contract (OBC), which allows the customer to pay only when companies delivery results, not simply for activities or tasks (NG; NUDURUPATI, 2010). Obviously, the adoption of these contracts requires changes in the behavior of companies and in the supply chain, as the relationship with the customer must be very simple in a co-creation process in which the connection of responsibilities and risks can change significantly.

In short, adjustments to variations in demand, confidence in the supply chain as a whole – a key aspect – and lag times must be the basic factors on which

supply chains are based in order to be efficient and reduce costs (CHRISTOPHER; PECK; TOWILL, 2006), combined with a high capacity for innovation that raises medium-term and long-term objectives.

### 3.4 R&D Funding

For the acquisition of major weapon systems, governments fund the main contractor's R&D activities necessary for the development of appropriate technologies to meet defense needs. This is due to the scale of many programmes, as a private company would not itself make such investments. Ministries of defense expect that the costs incurred by such funding are less than the return they get from the contracted system; this is a specific characteristic of the defense market and it is not common in civil markets<sup>11</sup>.

Given the trends in the type of systems currently being developed and that will be implemented in the future along with the budgetary limitations faced by defense, it is necessary to seek alternatives to the current systems of R&D funding that decrease pressures on the budgets of the ministries of defense. In this respect, one of the options is co-financing or financing with costs and avoiding non-refundable subsidies or zero rate credits.

The reasons for this change of perspective can be found in the need to share risks between the Ministries of defense and the contractor, so that it is a stimulus to increase efficiency in the use of both public and private resources. Faced with this changing situation, companies must adapt their behavior in relation to R&D carried out in connection with defense contracts, which implies the proposal of new strategies that include the search for greater efficiency and its repositioning within the country's innovation system.

Among these strategies is that related to property rights, since co-financing may involve the sharing of these rights between the administration and companies, which requires negotiation between the two parties in terms of both ownership and exploitation (MOLAS-GALLART; TANG, 2008). Something similar occurred in France with changes in defense R&D funding policy in recent years, which have led to companies being less dependent on public funds, using tax credits as the main funding instrument in the defense field (BELIN et al., 2019). Other countries such as the United Kingdom emphasize other ways of procurement in order to regulate technological aspects and business financing channels (HARTLEY, 2011).

### 3.5 Performance

According to Hartley (2018), there are several ways to measure business performance: prices, profits, productivity and exports. However, in the case of the defense industry these parameters must be qualified, due to the peculiarities of this market,

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11 There are some exceptions, such as in the case of European satellites or in the development of positioning systems.

since the results are often not comparable to those obtained in the civilian market. A clear example of this is the financing of R&D activities by governments. Another example is the pricing when there is only one customer – monopsony –, and when there are oligopolies or monopolies in the supply side. A third example is the ability to shift cost increases into the final price of the product – cost-shifting hypothesis, initially raised by Rogerson (1989).

In general terms, profitability in this industry must be qualified by considering that national markets – mainly in developed countries – have been closed to international competition and their companies have benefited from contracts with low or no competition on many occasions – as shown by some studies, such as those by Bower and Osband (1991) or Fonfría and Correa-Burrows (2010) –, which have resulted in profitability above the industrial average in many countries<sup>12</sup>.

However, there is a need to expand the range of options, in terms of factors that influence company performance due to the changes mentioned above. These factors will be more and more linked to the increase in competition from two different areas. The first is international, through the entry of new competitors. The second is the change of paradigm in the generation of dual-use civilian technologies, which implies the entry of civil companies in the military market, increasing competition – as Watts (2008) states for the case of the United States. Essentially, the newcomers are SME with small capacity to negotiate with the ministries of defense, which imposes rules close to the market. In addition, due to the growing importance of technologies and developments linked to the world of cybersecurity and artificial intelligence, among others, the number of micro-firms – those with less than 10 workers –, that have these capabilities is increasing, so the number of suppliers tends to rise<sup>13</sup>.

Another aspect to emphasize is the performance derived from the operation of the supply chain, since by increasing the added value of the goods and services delivered to the customer, as mentioned above, and by using new technologies. That productivity can be increased by generating a greater volume of output per unit of input. If we add to this the growing importance of the reduction in delivery times demanded by the ministries of defense, it is clear that the agility of companies is a key factor in satisfying new demands, which can give advantages to small companies compared to large ones that are usually more bureaucratic.

### 3.6 Industrial policy

Public sector intervention in the economy and particularly in the industry, responds to the need to reduce or eliminate market failures and to model the type of market required according to some political, economic and strategic orientations. In the case of defense industrial policy, market failures vary widely, ranging from the

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<sup>12</sup> Even, the productivity of the companies shows peculiar characteristics, as explained in the works of Martínez-González and Rueda-López (2013) and Duch-Brown, Fonfría and Trujillo-Baute (2014), both for the Spanish case, but very similar to other countries in this aspect.

<sup>13</sup> This advantage could be reduced if there is a significant effect of mergers and acquisitions of innovative SME by large companies.

aforementioned lack of competition to different forms of asymmetric information, control of product characteristics, efficiency in the supply market and control of prices and costs, to highlight some – see Hartley (2011) for a broad analysis of these aspects.

To this end, the ministries of defense use part of their budget – that related to investments –, to carry out their industrial defense policy. Thus, the continuity of funding and predictability in the budgets are fundamental in the share that corresponds to investments, in order that the potential contractors and, therefore, the supply chain behind them, can provide the value demanded by the ministries of defense. Along with this, the questions of what and how the contracts are made by the ministries of defense is the cornerstone of industrial policy, since they define the type of systems needed – therefore the technologies – and hence the companies capable of meeting those demands.

However, it seems more appropriate to speak about “industrial defense policies” rather than industrial policy in the singular. There are two reasons for this. The first is the aforementioned heterogeneity of this industry, which requires different approaches to industrial policy due to the different problems that sub-sectors face, such as aeronautics, weaponry and ammunition or shipping, to mention just some examples. The second refers to the high changes that are occurring, as mentioned above, which involve the entry and exit of companies, the modification of entry barriers, the incorporation of disruptive technologies or the long acquisition periods (ARNOLD; HARMON, 2013).

A substantial part of industrial policies is concerned with R&D policies, beyond the funding programmes mentioned. According to Schons, Prado Filho and Galdino (2020), the development of these policies in the field of defense must be linked to the national innovation system and has an effect on both the economic growth and the security of countries, based mainly on the formation of human capital. It was the basis of some successful industrial policies in the 1980s in some countries, such as South Korea, or Japan, as Sakakibara and Cho (2002) point out in a comparative analysis between the two countries.

In this sense, it is fundamental to develop analyses that consider innovative culture as a basic, necessary and intrinsic feature of the capacity to generate new processes and products. However, as shown by Azevedo (2018), one of the difficulties lies in making innovative culture compatible with military doctrine, since the vertical hierarchy usually makes the horizontal flow of information more complex.

For all these reasons, defense industrial policies must have long-term objectives that can be combined with changes in the short-term, in order to adjust it to new operational, technological, economic and strategic scenarios. Flexibility – keeping the objectives, at least in the basics – is a fundamental characteristic since without it, opportunities will be lost, both for industry and for an adequate use of budgets and the improvement of the armed forces’ capabilities.

Thus, governments need to use the tools they have in order to achieve industrial policy objectives. In this sense, their role as customers contributes to policy, but due to budgetary restrictions, this role is weakened over time, because the companies have to export and get foreign customers who can buy more than the national one, consequently, it is necessary to use other instruments. These include the

role of governments as legislators, as main shareholders in specific companies and as R&D activities funding.

However, industrial defense policies can only be understood in the context of a country's industrial and technological system as a whole – increasingly internationalized –, which imposes the need to consider these industries as part of the national innovation system (NIS), and therefore users of the horizontal stimuli that are articulated within the NIS.

**Table 1 – Summary: Current situation and changes in the face of new scenarios for the defense industry**

Main aspects	Situation at present	Main changes
Definition of the industry	Heterogeneous, supply and demand perspectives	Increased heterogeneity. Greater mobility: entries and exits. New sectors
Level of competition	Traditional monopolies and oligopolies and markets closed to competition	Greater international openness and new competitors: “newcomers” countries and civil companies. Greater price competition
Supply chain	Focused on services and products. Security of supply	Greater value creation. Service contract based on results. Focused on the customer.
R&D funding	Soft credits and subsidies. Low or no risk assumption by companies. Property rights generally owned by the company	Co-financing. Risk sharing between client and contractor. Tax credits. Shared property rights
Performance	Ability to shift cost increases into prices. Lack of competition by oligopolies/monopolies generates higher returns, but not a higher performance.	Increased competition for entry of new civil and smaller companies in key technologies. Increased value added in supply chains. More agile response of the SME
Industrial policy	Alleviating market failures. Promote a concrete industrial structure. Encourage innovation	Situation at present and articulate policies (in plural) for defense industries, given their heterogeneity

Source: Own elaboration.

#### 4 Conclusions

Major technological changes and the continuous emergence of risks and threats imply the need for industrial responses that provide added value to countries' armed forces. Disruptive technologies are one of the greatest challenges for their incorporation into the military system and the incentives for their adequate use must be guided by industrial, economic, strategic and technological policies.

However, all these changes focused on the near future raise numerous questions. How the industrial structure will be in the future? Which capacities the armed forces will need in the coming years? What will be the role of the large multinationals in the face of the

irruption of new countries and companies –many of them coming from the civil world, as exporters that accentuate competition? What will be the effect of the new conflicts – hybrid, in the grey zone... – on the countries? To what extent business collaboration and joint demands are a solution to the growing unit costs? This text tried to outline from a broad perspective some of these issues, but they require additional detailed studies over the next years.

## References

ADAMS, G. **The politics of defense contracting**: the iron triangle. New Brunswick: Transaction Books, 1981.

ARNOLD, S. A.; HARMON, B. R. **The relative costs and benefits of multi-year procurement strategies**. Alexandria: Institute for Defense Analyses, 2013. (Document NS D-4893).

AZEVEDO, C. E. F. Los elementos de análisis de la cultura de innovación en el sector de defensa y su modelo tridimensional. **Coleção Meira Mattos, Rio de Janeiro**, v. 12, n. 45, p. 1-25, set./dez. 2018.

BELIN, J.; GUILLE, M.; LAZARIC, N.; MÉRINDOL, V. Defense firms adapting to major changes in the French R&D funding system. **Defence and Peace Economics**, Abingdon-on-Thames, v. 30, n. 2, p. 142-158, 2019.

BELLOUARD, P.; FONFRÍA, A. **The relationship between prime contractors and SMEs**: how to best manage and fund cooperative programmes. Paris: Armament Industry European Research Group, 2018. (ARES Policy Paper 24).

BOWER, A. G.; OSBAND, K. When More is Less: Defense Profit Policy in a Competitive Environment. **RAND Journal of Economics**, [S.I.], The RAND Corporation, v. 22, n. 1, p. 107-119, Spring 1991.

CHRISTOPHER, M.; PECK, H.; TOWILL, D. A taxonomy for selecting global supply chain strategies. **International Journal of Logistics Management**, Bradford, v. 17, n. 2, p. 277-287, 2006.

DUCH-BROWN, N.; FONFRÍA, A.; TRUJILLO-BAUTE, E. Market structure and technical efficiency of Spanish defense contractors. **Defence and Peace Economics**, Abingdon-on-Thames, v. 25, n. 1, p. 23-38, 2014.

FONFRÍA, A. Economía de la defensa: definición y ámbitos de análisis. In: FONFRÍA, A.; PÉREZ-FORNIES, C. (ed.). **Lecciones de economía e industria de la defensa**. Madrid: Civitas, 2013. p. 19-40.

FONFRÍA, A. Offsets, economía y resultados. In: SIMPOSIO INTERNACIONAL DE SEGURIDAD Y DEFENSA, 5., 2019, Lima. **Anales** [...]. No prelo.

FONFRÍA, A.; CORREA-BURROWS, P. Effects of military spending on the profitability of the Spanish defence contractors. **Defence and Peace Economics**, [S.I.], v. 21, n. 2, p. 177-192, 2010.

FREEMAN, C.; PEREZ, C. Structural crisis of adjustment business cycles and investment behaviour. In: DOSI, G. et al. **Technical change and economic theory**. London: Pinter Publishers, 1988. p. 38-66.

GARCÍA ALONSO, J. M. **La Base Industrial de la Defensa en España**. Madrid: Ministerio de Defensa, 2010.

HARTLEY, K. **The economics of defence policy**: a new perspective. New York: Routledge, 2011.

HARTLEY, K. Arms industry data: knowns and unknowns. **The Economics of Peace and Security Journal**, Marietta, v. 13, n. 2, p. 30-36, 2018.

HOWELLS, J. The response of old technology incumbents to technological competition: does the sailing ship effect exists? **Journal of Management Studies**, Hoboken, v. 39, n. 7, p. 887-906, 2003.

KOSTOFF, R. N.; BOYLAN, R.; SIMONS, G. R. Disruptive technology roadmaps. **Technological Forecasting and Social Change**, Amsterdam, v. 71, n. 1, p. 141-159, 2004.

MARTÍ, C. **Sobre la eficiencia en defensa**. Madrid: Instituto Universitario General Gutiérrez Mellado, 2015.

MARTÍNEZ-GONZÁLEZ, A.; RUEDA-LÓPEZ, N. A productivity and efficiency analysis of the security and defence technological and industrial base in Spain. **Defence and Peace Economics**, Abingdon-on-Thames, v. 24, n. 2, p. 147-171, 2013.

MOLAS-GALLART, J.; TANG, P. Ownership matters: intellectual property, privatization and innovation. **Research Policy**, Amsterdam, v. 35, n. 2, p. 200-212, 2006.

NELSON, R. R.; WINTER, S. G. In search of a useful theory of innovations. **Research Policy**, Amsterdam, v. 6, n. 1, p. 36-77, 1977.

NG, I. C. L.; NUDURUPATI, S. S. Outcome-based service contracts in the defence industry: mitigating the challenges. **Journal of Service Management**, Bradford, v. 21, n. 5, p. 656-674, 2010.

PAVITT, K. Sectoral patterns of technical change: towards a taxonomy and a theory. **Research Policy**, Amsterdam, v. 13, n. 6, p. 343-374, 1984.

ROGERSON, W. P. Profit regulation of defense contractors and prizes for innovation. **Journal of Political Economy**, Chicago, v. 97, n. 6, p. 1284-1305, 1989.

SAKAKIBARA, M.; CHO, D-S. Cooperative R&D in Japan and Korea: a comparison of industrial policy. **Research Policy**, Amsterdam, v. 31, n. 5, p. 673-692, 2002.

SCHONS, D. L.; PRADO FILHO, H. V.; GALDINO, J. F. Política Nacional de Innovación: una cuestión de crecimiento económico, desarrollo y soberanía nacional. **Coleção Meira Mattos, Rio de Janeiro**, v. 14, n. 49, p. 27-50, 2020

STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE. **SIPRI Yearbook 2019**: armaments, disarmament and international security. Stockholm: Oxford University Press, 2019.

VAN DEN ENDE, J.; DOLFSMA, W. Technology-push, demand-pull and the shaping of technological paradigms: patterns in the development of computing technology. **Journal of Evolutionary Economics**, Basel, n. 15, 83-99, 2005.

WATTS, B. D. **The US defense industrial base; past, present and future**. Washington, DC: Center for Strategic and Budgetary Assessments, 2008.

WIETHAUS, L. Cooperation or competition in R&D when innovation and absorption are costly. **Economics of Innovation and New Technology**, Abingdon-on-Thames, v. 15, n. 6, p. 569-589, 2007.

WORLD ECONOMIC FORUM. **The global risks report 2020**. Geneva: World Economic Forum, 2020.



# Interoperability in the Amazon region: application of the SAPEVO-M method to select logistical equipment to be used by the Armed Forces

*Interoperabilidad en la region amazónica: aplicación del método SAPEVO-M para seleccionar el equipo logístico que utilizarán las Fuerzas Armadas*

**Abstract:** The intermodal transportation is essential to the logistical planner at the Amazon region and, to become accessible, its handling or its transshipping cost cannot be excessively onerous. Along the way, the Armed Forces have opportunities to improve the loading and unloading processes in the Amazon region, which, in 2020, hinder the interoperability and increase their aggregate cost. This research approaches the general context of intermodality context and the integration between the Armed Forces in Brazil, as well as bringing forward the interoperability in the United States and European Union. As a study case, there are some needs that should be solved to improve interoperability in the Amazon region. In this context, the SAPEVO-M method had been applied to select the right equipment to be used in cargo handling and intermodal logistics integration. It is clear from this paper that the equipment selected, through the method applied in the Army, can be extended to the other Forces, so that each one will have the means to solve this logistical problem.

**Keywords:** Amazonia. Logistics. Interoperability. Intermodality. SAPEVO-M Method.

**Resumen:** El transporte intermodal es esencial para el planificador logístico en la región del Amazonas y, para que sea posible, el costo de la manipulación o el transbordo no puede ser excesivamente caro. Sin embargo, se observa que las Fuerzas Armadas tienen oportunidades de mejorar los procesos de carga y descarga en la región amazónica, lo que, para 2020, dificulta la interoperabilidad y aumenta el costo agregado. Esta investigación aborda el contexto general de la intermodalidad y de la integración entre las Fuerzas Armadas del Brasil, y presenta la interoperabilidad en los Estados Unidos y la Unión Europea. Como caso de estudio de caso, hay algunas necesidades que deben ser resueltas para mejorar la interoperabilidad en el Amazonas. En este contexto, se aplicó el método SAPEVO-M para la selección del equipo que se utilizaría para la manipulación de la carga y la integración de la logística intermodal. Se llegó a la conclusión de que el equipo seleccionado mediante el método aplicado en el Ejército puede extenderse a las demás Fuerzas, de modo que cada una de ellas disponga de los medios para solucionar este problema logístico.

**Palabras clave:** Amazonia. Logística. Interoperabilidad. Intermodalidad. Método SAPEVO-M.

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## 1 Introduction

In Brazil, transportation infrastructure has faced great limitations for decades due to insufficient investment in the sector, a complex tax system, vicious contracts between the public administration and the private sector (generating legal uncertainty), and excessive bureaucracy. These difficulties lead to an increase in the Brazil Cost that, consequently, is added to the value of products for final consumers. A study carried out in 2019 by the Competitive Brazil Movement in partnership with the Special Secretariat for Productivity, Employment and Competitiveness of the Ministry of Economy pointed out that the real impact of this cost on the economy is R\$ 1.5 trillion, that is, 22% of the national Gross Domestic Product (MOVIMENTO BRASIL COMPETITIVO, 2019).

In more recent research of the World Economic Forum, Brazil ranks 85<sup>th</sup> in a list of 141 nations that had their transportation infrastructure evaluated, and ranks last in Latin America, which demonstrates the magnitude of the problem that exists in the country (WORLD ECONOMIC FORUM, 2019).

The Brazilian Amazonia has a number of physiographic factors, characteristic of the region, which make regional and inter-regional transportation even more difficult. In addition to the great distances to be covered, the infrastructure is outdated in relation to other Brazilian regions, due to deficits in the road, waterway, airport and railway – networks, characterizing the region as a real challenge for logistics activities.

The Legal Amazon has an area of approximately 5,217,423 km<sup>2</sup>, which corresponds to about 61% of the territory. It is composed of the states of Amazonas, Acre, Roraima, Rondônia, Mato Grosso, Amapá, Pará, Tocantins and the municipalities of the state of Maranhão situated west of the 44<sup>th</sup> meridian (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2014).

This region is divided into Western and Eastern Amazonia. The Western Amazonia is made up of the states of Amazonas, Acre, Rondônia and Roraima. By exclusion, the Eastern Amazonia is made up of the states of Pará, Amapá, Mato Grosso, Tocantins and the municipalities of the state of Maranhão (BRASIL, 1968, 2007).

The legal definition of the Brazilian Amazonia has always been linked to the implementation of government policies for the integration of the vast region and the creation of public bodies. Thus, the areas established above, as well as the aforementioned divisions, have undergone several changes since their creation. The last change was when the Superintendence of the Amazon Development (SUDAM) was instituted through Complementary Law No. 124, of January 3, 2007. On that occasion, the limit represented by the 13<sup>th</sup> parallel south, in force until then, was replaced by the limit between the states of Goiás and Tocantins (INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2014).

In the Amazon region, the Armed Forces (FA), in addition to other bodies, such as the Federal Police, the Public Ministry and state governments, safeguard our sovereignty and preserve the rich plant and animal biome, the immeasurable mineral heritage and the world's largest hydrographic basin.

According to Carvalho and Silva Júnior (2019), the development of logistical systems has improved slowly and gradually over centuries, but has been largely improved with military activities. Therefore, the development of the FA logistical system in the region is responsible

for supplying military units with greater efficiency and assisting the country's development by promoting trade in municipalities and places isolated from the rest of the nation.

The region has several rivers with the potential to transform into waterways capable of draining much of the grain production in the Midwest through northern ports (CÂMARA DOS DEPUTADOS, 2016), stimulating economic and social development in that territory.

The Ministry of Infrastructure (BRASIL, 2018) mentions that, in 2016, Brazil had 19,464 kilometers of economically navigable waterways. According to the Bureau of Transportation Statistics (UNITED STATES, 2018) and the United States Army Corps of Engineers (2019), the United States of America (USA), a country with geographic dimension similar to Brazil's, has 40,200 kilometers of waterways, with approximately 19.3 thousand kilometers being shallow water courses (depth from 2.74 to 4.27 meters) and 33.7 thousand kilometers being deep channels with more than 4.27 meters. The comparison showed that the United States, in addition to having almost twice (in kilometers) our economically navigable waterways, has a transportation capacity on these ways much greater than the Brazilian reality.

In Brazil, the inconsistency of the water level, the rainy periods and the lack of adequate signage make traffic intermittent in the Amazon region, which makes logistical planning difficult.

According to Santos (2016), air transportation in this scenario is essential for planning the logistical supply in the Amazonian region due to the great distances to be covered and, mainly, because of the precarious surface connections. This mode of transportation is advantageous since is relatively easy to construct an airstrip (whether paved or not), which brings an almost immediate return for the local population.

However, even if the modes of transportation did not present problems individually, when an Amazonian transport network is composed it has to be capable of integrating these modes, because, currently, highways, waterways and airports do not connect, and, when they do so, often the equipment needed for transshipment does not exist or is inadequate.

McGinnis (1990) found that six variables are fundamental to the choice of transportation services: 1) freight rates; 2) reliability of the service provider; 3) time in transit; 4) losses, damages, claims processing and order traceability; 5) considerations regarding shipper's market; 6) considerations regarding shipping companies. It is noticed that the time and resource optimization indicator permeates all variables directly or indirectly, indicating that they are important logistical factors to be targeted for decision making.

Ballou (2006) reiterates that, although freight rates are usually determining factors for the option of the mode of transportation, the quality of customer service should be the main to be considered, indicating the best cost-benefit ratio option. Transportation in the Armed Forces is no different; it seeks to improve public expenditure efficiency and services.

In this scenario, the increase in logistical interoperability between the Brazilian Army (EB), the Brazilian Navy (MB) and the Brazilian Air Force (FAB) will greatly contribute to simplifying the structure and execution of logistical support, as prescribed in the Manual of Joint Operations Doctrine, Ministry of Defense – MD30-M-01, 3<sup>rd</sup> Volume (BRASIL, 2011).

In addition to these factors, Ordinance No. 301 – General Staff of the Army, of November 10, 2015, approved the rationalization of positions in the Personnel (QC)

and Expected Personnel (QCP) of the Military Organizations (OM) of the Brazilian Army (BRASIL, 2015b). Besides, the macroeconomic environment overview after the pandemic is not encouraging. The IPEA (INSTITUTO DE PESQUISA ECONÔMICA APLICADA, 2020) established three possible economic scenarios impacted to a lesser or greater degree by the duration of the social isolations established due to the disease. In the best of the economic scenarios, the Gross Domestic Product will fall 0.4% by the end of 2020, which may impact the financial resource allocation to the FA in the short and medium term.

Thus, analyzing the economic situation exposed and meeting the guidelines for rationalizing personnel, unitization<sup>1</sup> of cargoes and improvement of automation in intermodal transfer logistics and in loading and unloading processes at warehouses will help optimize resources and personnel by increasing transport efficiency.

## 2 Contextualization of the problem

### 2.1 Interoperability in the Armed Forces

Robbins (2007), through his work *An Essay on the Nature and Significance of Economic Science*, conceptualizes economics as “the science that studies human behavior as a relationship between ends and scarce means,” addressing human characteristics in decision-making by economic agents. Thus, for the logistical function to provide lasting operations, costs are essential for planning, given that resources are limited.

The search for cost reduction is sometimes confused with a reduction in fighting power, as it is mistakenly associated with indiscriminate demand for cutting costs. Thus, in order to resolve this paradox, the fundamental foundation to discuss integration between the Singular Forces is emphasized: the excessive search for cost reduction restricts the operational capacity by reducing its core activities, but the cost reduction refers to another concept, and it is fundamental to lasting operations.

For example, if the Frigate *União* in *Operação Libano XV*, part of the Maritime Task Force of the United Nations Interim Force in Lebanon, suffered damage that needed urgent repairs so that it could proceed with the mission, the cost of shipping parts by air would be much larger than if it were sent by another sea vessel. However, attention should be paid to the customer service level. That is, one of the needs of the frigate is replacement time, regardless of value, since lives can be lost. However, although it is necessary to use a more expensive mode to accomplish this mission of transporting spare parts, planning for hiring the shipping company should not be overlooked, seeking to reduce total costs. In this example, the trade-off<sup>2</sup> for the use of a more costly mode of transportation

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1 According to the Council of Supply Chain Management (2020) glossary, unitization can be understood as the consolidation of several units into larger units to improve efficiency in handling and reduce transportation costs.

2 It is a term that defines a situation in which there is a conflict of choice. It occurs when an economic action aimed at solving a problem entails another, and a choice has to be made.

was the maintenance of the lives of the vessel crew, which did not hinder the planning for carrying out the cheaper transportation among the possible options.

Therefore, rather reducing expenses in an indiscriminate manner, what is intended through logistical interoperability is to reduce expenditure in operations, making the aggregate logistical cost lower and increasing the combat and *deterrence* capacity.<sup>3</sup>

According to the Manual of Military Logistics Doctrine of the Ministry of Defense -MD42-M-02, "Logistics Interoperability is the use of skills, capabilities and means between organizations, verified in the ability to exchange services and information, without changing the operational structure itself, to solve a logistical problem" (BRASIL, 2016, our translation).

In order to elucidate the classification of military operations according to the military branches employed and the understanding of sharing and interoperability between them, Table 1 below presents the definition and objectives for each employment situation in a generic and synthesized manner.

**Table 1 – Armed Forces X military operation, objectives and demand**

Armed forces			
	Singular	Joint	Combined
Definition of military operation	Singular operations are carried out by only one branch of the Armed Forces (FA). The receipt of small fractions and/or resources from another branch does not change this concept.	Operations involving the coordinated use of elements of more than one branch, with interdependent or complementary purposes, through the constitution of a Joint Command.	Operations carried out by ponderable elements of the Multinational Armed Forces, under the responsibility of a single command.
Objectives	Defense of the State, guarantee of constitutional powers and guarantee of law and order upon the initiative of those powers.	Universality, unity, objectivity, economy of resources, flexibility, versatility, simplicity, and interoperability.	Achievement of common interests among nations within the framework of an alliance or coalition, determined by a military or civilian authority in a war or non-war situation.

Source: Based on FA manuals, Brasil (1988, 2011, 2015a, 2017), Lopes (2013), and Freire (2018).

The mechanisms for more effective global governance, as set out in the Defense White Paper (LBDN), go through the integration of the Brazilian Armed Forces, reaching the capacity for interoperability in joint and combined operations.

The Armed Forces Joint Staff exercises a fundamental role in the execution of the National Defense Strategy. It is responsible for the coordination of interoperability programs with the purpose of optimizing military resources for national defense, border security as well as rescue and humanitarian operations (BRASIL, 2012, p. 59, our translation).

<sup>3</sup> According to Figueiredo and Violante (2019), the objective of deterrence is to reduce and/or inhibit the use of force by an eventual opponent, so that there is no opposition to Brazil's will.

Coordination and integration of the FA logistical systems (modes and capacities) are facilitated by the standardization of materials and processes, favoring the reduction of the diversity of parts, materials and services, with positive effects for the Industrial Defense Base, since it reduces bureaucratic barriers and benefits the predictability of demand.

The binomial feature between the National Defense Strategy and the National Economic and Social Development Strategy refers to the concept of Figueiredo (2015) that national defense and development are inextricably linked, based on state-level documents.

Power and politics must be linked to national independence, which, in turn, is linked to defense and development, just as it can be said that there is no real development without credible defense systems. Development and defense are concepts that cannot be thought inseparably (FIGUEIREDO, 2015, p. 62, our translation).

Brazil addition to NATO Codification System (NCS), for example, internationalizes and further expands the reach of national agents/stakeholders in the defense area. Embraer is an example of a company that needed to adapt to the requirements contained in that catalogue and to the life cycle of products to materialize the sale of the KC-390 to Portugal (MEDEIROS; MOREIRA, 2018).

The United States of America's support for Brazil to participate as a member in the Organization for Economic Cooperation and Development (OECD) formalized on January 15, 2020 (BRASIL, 2020b) not only demonstrates strengthening of foreign policy, but also accelerates and evidences the need for consolidating standards and metrics in the country. Thus, increasing standardization of modes enables greater integration and joint planning between the Forces, making it a project for improving public expenditure efficiency, which will bring greater efficiency to the Ministry of Defense and expand its operational capacity in view of the savings generated by reduction of duplicate or idle transportation caused by joint planning.

Initially, this article will discuss the development of the Joint and Combined Armed Forces doctrine and present a brief history of interoperability in Brazil. After that, the EB transportation system in the Amazon region will be evaluated for the study on interoperability and intermodality in the FA, seeking to improve the logistics in the region by applying the SAPEVO-M method to support decision making for selection of logistics equipment that meets the peculiarities of the region. Finally, a succinct conclusive analysis will be made.

## 2.2 Interoperability in the international environment

### 2.2.1 Combined military operations

The right to collective self-defense is at the heart of several international treaties, uniting its members and committing them to protect each other from external threats,

as we can see in the extract below, for example, of Article 5 of the North Atlantic Treaty, to which Brazil is a signatory.

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence [sic] recognised [sic] by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked (...) (NORTH ATLANTIC TREATY ORGANIZATION, 2019).

Thus, in order for combined military operations to be effective, military logistics among the pacing countries should be aligned with the collaborative reality of the supply chain in all countries, providing greater fluidity to the flow of goods, people and information.

The low incidence of regional armed conflicts in South America, especially in the twentieth century, creates a dangerous feeling of protection and leads to misunderstandings about the elements of security in several national public agents. However, several cross-border tensions demonstrate the importance of integrating and deepening cooperative ties between States through the so-called “new threats”: war on drugs, arms and human trafficking, piracy, terrorism, and smuggling. These threats are often generated by financial and humanitarian crises that impact the defense both of the Amazon region and of the South Atlantic (FIGUEIREDO; VIOLANTE, 2019).

In general, security in its expanded concept (political, economic, and social security, considered qualitatively and quantitatively) is one of the aspects that makes States sign international agreements, in order to avoid the erosion of the armed conflict or to create deterrent capacity against an external threat. With this pretext, Europe overcame its historical rivalries to draft a peaceful coexistence treaty that permeates all sectors of the economy of the countries involved.

In Europe, the Movement Coordination Centre Europe (MCCE), established since 2007, aims to manage and use transportation capacities of the 28 member countries jointly, in order to optimize structures and maximize efficiency of military transportation (MOVEMENT COORDINATION CENTER EUROPE, 2018). In times of austerity, the creation of this center reinforces the idea that the union of logistical capacities and the use of strategic cooperation in defense bring positive results for military logistics.

The MCCE remains prepared to guarantee support for the coordination of operations of the European Union (EU), the North Atlantic Treaty Organization (NATO), and the United Nations (UN). For this purpose, it uses several mechanisms and systems that are capable of managing the costs involved and the idle modes in air, sea and land transportation, which include railways, roads and *inland navigable waterways*.<sup>4</sup>

<sup>4</sup> The distinction of understanding inland waterways in Brazil and the European Union is highlighted. In Europe, they are defined as a designation that covers rivers, lakes, canals and navigable estuaries, not limiting to the routes of a single country. Thus, if they form a common border between countries, they should be included in the statistics for each country (UNIÃO EUROPEIA, 2007).

Within air transportation management, for example, the mechanism entitled *Air Transport and Air to Air Refueling and other Exchange of Services* (ATARES) is a system for exchanging air transportation services between member countries, based on the equivalent flight time. That is, taking the cost per flight hour for the C-130 and C-160 aircraft as a reference, the value of the transportation to be performed by another country is calculated and the reimbursement is made without financial compensation, solely and exclusively with the commitment to future transportation. As a result, idleness in air transportation is reduced, which has the highest aggregate cost, benefiting and supporting the nations involved (EUROPEAN AIR TRANSPORT COMMAND, 2017).

The combined Forces' interoperability in the face of scarce strategic modes of transportation is vital for the timely use of the Force and for the success of military operations in the face of the aggressions that NATO and the EU may receive due to the operation global environment covered by these organizations. Therefore, the MCCE enables economic efficiency and the reduction of duplicate transportation with unused capacity, optimizing synergies and each member state's available modes and capacities.

### *2.2.2 Joint military operations*

In the USA, after the World War II, the pressure for more effective inter-force coordination was increasingly evident. Several factors delayed the design of an effective Joint Chiefs of Staff, which became a reality after the Goldwater-Nichols Act, published on October 4, 1986. This reform was quite controversial, because it originated in the US Congress, that is, outside the scope of the Armed Forces, resulting in a costly and constructive legislative debate that altered the highest level of strategic decision-making on matters related to National Defense.

The reform is considered the most important and comprehensive reorganization of that country's Department of Defense (LOCHER III, 1999), and has implemented several important programs or functions for the Armed Forces, including (1) Strengthening the authority of the Chairman of the Joint Chiefs of Staff (2) Acquisition of integrated systems; (3) Policy of valuing and promoting military personnel who act in joint commands; (4) More effective advice to the Joint Chiefs of Staff; (5) Changes in the functions of the Joint Chiefs of Staff; and (6) Dynamics of Commanders in the Theater of Operations (PIRES; HONORATO; COSTA, 2019).

It appears that the logistical integration provided by the reform increased the effectiveness of Combatant Commands, increasing combat capacity. In the First Gulf War (1991), for example, the operation known as "Desert Storm" was preceded by a major six-month logistical mobilization for a 100-hour land campaign, demonstrating the complexity of modern combat and the need for integration to make the clashes more proficient.

Despite the consensus regarding the benefits that the reform brought to the US Department of Defense, McInnis (2016) points to the need for a reformulation, revealing the concern of several US military personnel regarding the lack of interaction between the Armed Forces and the public security agencies.

The analysis regarding interoperability in other countries allows us to compare the current situation of our FA, providing the opportunity for a more balanced and integrated action.

### 2.3 Brazil's Military Interoperability in the Ministry of Defense

Adhering to the doctrinal evolution, the Ministry of Defense prepared, in 2001, the first publications referring to Combined Command Basic Doctrine and to Combined Operations Logistics, through the manuals MD33-M-03 – Combined Command Basic Doctrine, and MD34- M-01 – Combined Operations Logistics. In 2007, according to Lopes (2013), specific objectives were established regarding interoperability between the Armed Forces, including the integration of military logistics. During this period, the Military Defense Structure – MD35-D-01 (in 2005), the Command and Control Procedures for Combined Operations – MD31-M-04 (in 2007), and the methodology of Combined Employment Strategic Planning of the Armed Forces – MPEECFA – MD33-M-07 (in 2008) were approved

The Armed Forces Joint Staff (EMCFA) was created in 2010 with the mission of promoting and coordinating interoperability between the Single Forces and advising the Minister of Defense. Since then, several manuals and ordinances have been revoked and a new doctrine has been established, through the Manual of Joint Operations Doctrine – MD30-M-01. EMCFA was assigned to plan the joint and integrated employment of personnel from the Singular Forces, optimizing the use of available resources (BRASIL, 2020a).

The migratory movement initiated in 2015 and triggered by the political and economic crisis in Venezuela is a contemporary example of the joint application of the Armed Forces, being the largest displacement of people in the history of Latin America. So far, more than 4 million Venezuelans have left the country (MILLIONS..., 2019). In Brazil, the Humanitarian Logistics Task Force<sup>5</sup> performed and coordinated by the Federal Government with the support of UN agencies and more than 100 civil society entities brought more than 27.2 thousand Venezuelans to 24 Brazilian states by January 2020. According to the Federal Police, from 2017 to November 2019, approximately 6.6% of Venezuelans who left the country (264 thousand immigrants) requested migratory regularization (BRASIL, 2020c).

By restricting interoperability to the logistical aspect, more specifically to the transportation function, the Ministry of Defense (MD), through its Armed Forces Joint Staff, has been improving logistical systems in order to integrate the three military branches. The management of military transportation information is the responsibility of this Central Body, which performs the joint articulation of the Navy, Army and Air Force transportation through the Defense Transportation System (STD) (BRASIL, 2013).

The STD is an integral part of the Defense Logistics System (SISLOGD) (BRASIL, 2013) and works as an integrated agent for the various structures related to the Armed Forces' transportation logistics and resources that can be contracted and/or mobilized.

<sup>5</sup> OPERAÇÃO ACOLHIDA. Available at: <<https://www.gov.br/acolhida/historico/>>. Access on: Feb. 5, 2020.

Although the STD is already in operation, the transportation of military supplies is planned and carried out individually by each Brazilian Armed Force, according to their subsistence needs or in response to the demands of military operations. Only in some more sporadic cases, and for materials (ammunition, for example) or specific mission, there is integration between the military branches, even though there are similar Supply Axes performed by each that could be integrated through a transportation network optimization algorithm.

### 3 Problem description

#### 3.1 Intermodal efficiency as a key factor for interoperability in the Amazon environment

##### 3.1.1 Problem characterization

According to Orair (1990), the economic and fiscal crises of the 1990s were the turning point in the Brazilian strategic planning for the financing of transportation infrastructure by public resources, with the dismantling of the developmentalist State. During this period, the government no longer had the resources to make new works viable or to increase existing ones. The solution was to start partnerships with the private sector, in order to finance the construction of highways, ports, airports, railway sections, as well as for the maintenance of the roads built.

In the Amazon region, in general, there is a lack of installed logistical infrastructures, mainly in municipalities located in the interior of the states. The river system of the Amazon hydrographic region can be classified, according to Bertani (2015), as a system of predominantly meandering rivers with the presence of flood plains that may contain a complex of several depositional sub-environments. These rivers, influenced by the rain regime, restrict navigation, making it even more imperative to maintain the waterways so that their potential is fully utilized.

The five main waterways are the ones with the highest volume of cargo transported and are shown in Table 2.

Table 2 – Hydrographic regions and their waterways

Hydrographic region	Waterways	Gross weight in tons
Amazon	Of Amazonas, Solimões, Madeira, Tapajós, Pará, Negro, Juruá, Trombetas and Xingu	39,455,613
Tocantins-Araguaia	Of Tocantins and Araguaia	21,871,197
South Atlantic	Of South	4,574,867
Paraná	Of Paraná-Tietê and Paranaíba	2,878,619
Paraguay	Of Paraguay	2,788,405

Source: Based on Brasil (2019).

According to the Institute of Logistics and Supply Chain (2017), the waterway modal has the cost of almost a third of the road modal (predominant in Brazil), in addition to being little explored. The Legal Amazon is the one with the greatest potential for inland water navigation in Brazil, and it is essential that the Armed Forces be equipped with machinery that facilitates the much needed intermodality in that location. According to Hornstra et al. (2020), it is necessary to standardize and organize the cargo of the vehicle for situations in which loading, unloading processes or even cargo transshipment occur, and the costs for handling the cargo have to be considered.

Santos (2016) presented several suggestions for contributing to military logistics in the Eastern Amazonia; among them, he stressed the importance of employing new tools for cargo separation, palletization and unitization, containerization, and intermodal transportation. These factors are fundamental to a sustainable development of logistics in the event of mobilization of large amounts in the region of the Amazon River mouth.

Gansterer and Hartl (2018) present a research on collaborative vehicle routing, analyzing and comparing centralized and decentralized plans, with and without freight auction. As a result, the authors indicate that collaboration between shipping companies minimizes transportation costs. In this sense, the EB could plan the execution of its transportation through the modes that will be available (air, river and road) for its execution in a collaborative way with the other military branches, aiming to reduce costs.

Carvalho and Silva Júnior (2019) point out that the lack of return cargo is one of the logistical problems of the EB in the Eastern Amazonia, which makes the cargo transportation by river more expensive than it should be. However, it is observed that this is a cyclical problem for the Armed Forces and that it could be mitigated with transportation interoperability.

### *3.1.2 Case study: The Brazilian Army's intermodality in the Amazon region*

The bibliographic research carried out from the study of the Structure of the Brazilian Military Logistics, the precept of logistical cooperation of the Movement Coordination Centre Europe and the doctrine of joint operations in the USA composes the prelude to this work. However, in order to measure the logistics of intermodal transportation operations, main fact so that interoperability in the Armed Forces can occur, logistical equipment for transshipment of cargoes that meet the specificities of the Amazon region was identified and parameters were defined (for example, better products in the Brazilian market, prices, technical specifications), and based on which the most appropriate equipment should be selected using the SAPEVO-M method.

In the context of Ground Force logistics, the implantation of the project to incorporate fixed-wing aircraft into the air modal of military logistics in the Amazon region, using the aircraft C-23B + SHERPA, also includes another variable in the EB transportation system, making the processes for intermodal integration in the Amazon region even more essential. In this opportunity, interoperability with the Air Force will only be possible if, from the beginning, logistical obstacles are observed in terms of the means to carry out goods handling and unitization. Figure 1 shows that the cargo handling performed at the Air Force Logistics Center (CTLA) is mechanized and that the handling equipment that will be proposed in this

study is similar to that used. In addition, in Figure 2, the pallets used are aeronautical, showing a problem of cargo unitization that would increase the transshipment time in joint operations.

Figure 1 – Pallet handling equipment



Source: Authors (2020).

Figure 2 – 463L HCU aeronautical pallet



Source: Authors (2020).

Thus, there is a lack of standardized processes, unified and palletized supplies for logistical integration in the transshipment of cargo within interoperability. This is necessary so that there is no increase in the execution time of cargo transposition and neither is there an excessive increase in the total transportation cost for carrying out loading or unloading. In the case it occurs, the entire operation that requires intermodal transportation will have costs increased, reducing the resources destined to the Armed Forces' core activity.

Therefore, the Brazilian Army, observing its logistical chain, approved the Instruction Book for Preparation of Cargoes for Transportation (EB40-CI-10.900) (BRASIL, 2017), 1<sup>st</sup> Edition, 2017, by means of Ordinance No. 12 – COLOG, of January 31, 2017. It was published as offprint of the Army Bulletin No. 21/2017, on May 26, 2017. It introduced, in the context of the Brazilian Army Transportation System (STEB), the unitization procedures using pallets and containers, mainly by means of the Army Logistics Support Base, located in Rio de Janeiro.

Although these devices for unitizing cargoes in transportation have brought control, operational dexterity and cost reduction, the concept is not yet fully consolidated in the EB. It is still possible to glimpse two obstacles: the unitization at the level of the Ministry of Defense and the other at the regional level of the EB.

Within the scope of the Ministry of Defense, the military branches are seeking to improve in isolation, without synergy. The means for handling and unitizing cargoes are not always the same, which will cause integration difficulties in joint operations.

At the regional level of the EB, it was observed that the Military Organizations are not always prepared to receive the material wrapped in stretch film and palletized. Then, at this level it is possible to observe that what occurs in the Amazon region is the handling of the cargo according to Figure 3 below, although it was unitized and palletized while it was transported by road.

Figure 3 – Transshipment at Madeira River



Source: 17th Jungle Infantry Brigade (2016).

Inefficient cargo transfer between transportation modes increases the time of operations and the total costs, decreasing resources that should be used in the main activity.

As an example, it is possible to mention what was observed in loading and unloading processes in fluvial operations of the EB's 8th Supply Deposit (DSup) in the

Eastern Amazonia (Belém, PA). In its regional delivery routes, the 8th Supply Deposit supplies several garrisons by waterway transportation. The average supply delivered to each garrison is around 20 tons (including refrigerated cargo) and the estimated time for loading and unloading in these garrisons is two days,<sup>6</sup> given that it is carried out as shown in Figure 3 and, generally, in inappropriate places to perform this activity.

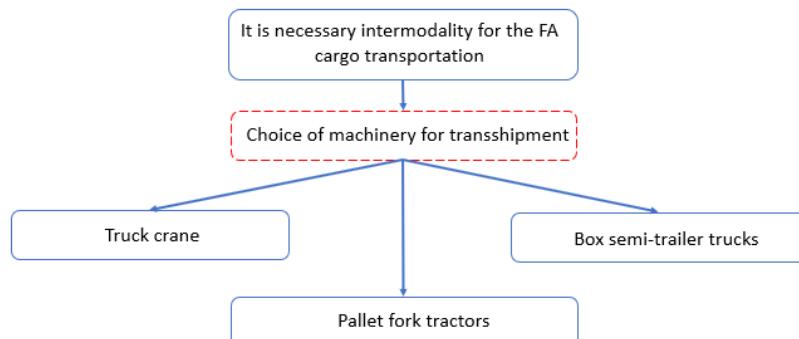
Therefore, the mechanization process through the use of tractors, forklifts and other equipment will continue the development of logistics in the Amazon region. The proposal would be to use equipment designed to carry out cargo transshipment at intermodal points.

However, it is observed that the EB does not have port facility contracts in all garrisons or locations supplied. In other words, it is common for material material unloading to be performed in banks or in rudimentary port facilities, which make it impossible to use common machinery similar to small loaders due to the steep unevenness and irregularity of the terrain. In addition, they increase the risk for container maneuvers by sidelifter due to the total weight of the container and the instability of the terrain.

Therefore, a technical visit was carried out in the city of Belém (PA), from 10 to 15 November, 2019, to verify the suggestions of the logistical staff of the 8th Military Region with regard to more suitable equipment to facilitate cargo transfer in intermodal processes in the Amazonia (considering the procedures and equipment for transshipment adopted by private companies operating in the region), which were: 1) Truck crane with adapter to move pallets; 2) Box semi-trailer truck with truck unraveling at the ferries (dry and refrigerated cargo); 3) Pallet fork tractors. This equipment that does not normally belong to the provision of military units not specialized in logistics.

In view of this equipment, the following question arises: which one would more fully meet the EB' needs for loading and unloading cargo in the Amazon region? In response to this question, the SAPEVO-M method (detailed in item 4) was used to support decision making, which is shown in Figure 4.

Figure 4 – Schematic map



Source: Authors (2020).

<sup>6</sup> Average Planning Data obtained from the river transportation executor and head of a vessel from the 8th Supply Deposit, in Belém (PA), Staff Sergeant Mauro Fernando Ramos de Miranda and ratified by the Logistic Staff of the 8th Military Region.

### 3.1.3 Objectives of machinery selection

In order to support the research, it was sought to establish parameters for the equipment through technical specifications and prices, so that they contemplate technical requirements for the characteristics of the Amazonian environment.

It was also observed the system called man-machine proposed by Fonseca (1975), used in operations in which machines are used in conjunction with human effort. This system needs to be fluid, avoiding operator's physical distress, which would reduce his productivity and quality of work, increasing accident risks at work.

Thus, from the observations of the Logistics Staff of the 8th MR and private companies operating in the Amazon region, mandatory items that the equipment must have were indicated (Table 3), so that its quality does not negatively impact decision makers. From the mandatory items indicated, a new field research was carried out from December 5, 2019 to January 15, 2020 to verify the equipment that will be presented to decision makers and that most fit the logistical needs of the region. Prices are related to equipment manufactured in 2019.

Table 3 – Mandatory criteria

Mandatory criteria	
1	Four-wheel drive for better grip with the ground and better relative drag between the axles.
2-	Air-conditioned cabins, seats with ergonomic adjustments to ensure good posture, viewing, movement and operation conditions.
3	Components such as video monitors, signals and commands should enable clear and precise interaction with the operator in order to reduce the possibility of misinterpretation or feedback error.
4	Engine and body from the same manufacturer, in order to mitigate maintenance logistics costs for eventual breakdowns and equipment defects.
5	Technical assistance for maintenance in Manaus or Belém.
6	Rollover Protective Structures (ROPS).
7	Possibility of coupling back-up alarm to the transmission system.

Source: Authors (2020).

Based on these criteria, the prices for the selected equipment were as follows in Tables 4, 5 and 6:

Table 4 – Truck crane with adapter to move pallets



Machinery	Average price
Truck (6x2 axle configuration)	R\$ 340,000.00
Trailer truck	R\$ 106,000.00
Crane F20/4H	R\$ 47,000.00
Fork adapter for pallets of up to 9 tons	R\$ 18,000.00
Amount necessary for Military Organization	R\$ 511,000.00
Characteristics	
Crane maximum load capacity	8,700 kg
Maximum lifting height	17.4 m.
Maximum horizontal reach	14.00 m

Source: Authors' images and data (2020).

Table 5 – Pallet shipment with pallet fork tractor



Machinery	Average price
Tractor with breakout force of 9,193 kg	R\$ 360,000.00

continue

Table 5 – Continuation

Machinery	Average price
Pallet fork for 7,000 kg	R\$ 15,000.00
Amount necessary for Military Organization	R\$ 375,000.00
Characteristics	
Average operational capacity	12,400 kg
Lifting height	3.25 m

Source: EaeMaquinas magazine images (EAEMAQUINAS, 2016) and authors' data (2020).

Table 6 – Box trailer being transported by ferry

	
Machinery	Average price
Truck (6x2 axle configuration)	R\$ 340,000.00
Semi-trailer van for dry goods	R\$ 100,000.00
Semi-trailer van for refrigerated goods	R\$ 152,000.00
Refrigerated van cooling motor	R\$ 110,000.00
Amount necessary for Military Organization	R\$ 1,042,000.00
Characteristics	
Average capacity	15 tons

Source: ANTAQ image (2011) and authors' data (2020).

#### 4 SAPEVO-M method

In complex decision-making, the opinions of the decision-makers' advisors are usually considered. However, this advice on collective decisions in the Armed Forces, due to the peculiarities of a strict hierarchy and discipline, is often distorted in favor of the decision-maker, often leaving relevant technical criteria behind.

Santos (2018) presents a spiral of decision-making made up of eight stages, starting with the perception of the problematic situation until the decision to implement or not the model. Thus, in the course of the process, the decision maker's perception

incorporates new facts from the underlying reality that had not been taken into account before, structuring a new understanding of the problem, which, perhaps, may lead to a new objective, making all the process to be repeated.

Therefore, the SAPEVO-M Method is used when it is not possible to reach a consensus among the advisors to proceed with the application of a certain criteria ordering method. For this reason, Greco et al. (2019) improved the SAPEVO multicriteria assessment method, developed by Gomes et al. (1997). They included the possibility that each decision maker could establish his preferences, generating an ordinal vector for the criteria. Finally, all ordinal vectors are aggregated into a single vector. Similarly, the same concept is used to establish the alternative preferences within each criterion, that is, from the capture of multiple perceptions.

SAPEVO-M Method also has an interesting sociological aspect, since the advisory process is carried out in order to inhibit external factors that significantly influence the opinions of each member. This is because the evaluation is carried out in a secret and individual way, with the vectors being all aggregated into a single final vector, not indicating the military's preferences. In this way, susceptibilities are avoided when a collective decision needs to be taken by members of different ranks in the Force. This makes the process clearer and more efficient, since the decision maker will have higher quality data.

The method has been applied in several areas such as Santos, Oliveira and Lima (2019) in the selection of the best route for a road transportation company, and in Greco et al. (2019) in the selection of a troop landing vessel for the Argentine Navy.

In 2019 a website<sup>7</sup> was developed to data implantation using the SAPEVO-M method, making it easier to be used. The SapevoWeb system was possible to be created through a partnership between the technical staff of the MB's Navy Systems Analysis Center (CASNAV), a research group of the Graduate Program in Production Engineering of the Universidade Federal Fluminense (UFF) and a research group from the Graduate Program in Systems and Computer Engineering at the Instituto Militar de Engenharia (TEIXEIRA; SANTOS; GOMES, 2019).

#### *4.1.1 Solution proposal*

In order to determine some evaluation criteria for the selection of the appropriate equipment for the logistical peculiarities in the Amazon region, a senior officer from the Instituto Militar de Engenharia and 3 intermediate officers from a technical and logistical framework who have already served in the Amazon region were interviewed.

The selected criteria were: a) Safety in the use of machinery; b) equipment maintenance; c) transshipment time; d) possibility of different use, and e) acquisition cost.

Safety in the use of machinery refers to the basic requirement that need to be met in the Amazon region – to carry out transshipment on uneven and uneven terrain

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<sup>7</sup> The tool can be found at: [www.sapevoweb.com](http://www.sapevoweb.com). Access on: Feb. 9, 2020.

with low risk for the army officer who is operating the machine, so that there is no cargo and equipment loss.

The “equipment maintenance” criterion is essential, as there are not large numbers of companies capable of supporting equipment maintenance for the public administration in the interior of the states of the Amazon region. Sometimes the cost of maintenance is higher than that of purchasing new equipment. Therefore, the greater the complexity of the machinery, the more difficult its maintenance tends to be.

“Transshipment time” refers to the cargo transfer from the road to the waterway modal or to the air and vice versa.

The more versatile the equipment and the shorter the transposition time of a five-ton vehicle for the SHERPA aircraft, for example, the better it will be for the EB. This criterion is fundamental for interoperability between the Armed Forces, as it will save time in operations, human resources and financial availability.

The “possibility of different use” was a criterion determined to differentiate the equipment that can be used in other daily activities, not only in cargo transfer. The intention is to reduce unused capital and depreciation costs.

The “acquisition cost” will prove to be fundamental for the implementation of this project, in view of the budget restrictions imposed on the Armed Forces. It is important to note that box semi-trailer trucks have to be purchased to separate refrigerated materials, ammunition and the rest of the cargo in the case of choosing the third option, that is, box trailer truck. However, comparing to other handling equipment, this acquisition would not be necessary, since the supported units already have their own cargo transportation vehicles that could be used.

All of these parameters are taken into account when elaborating and presenting the study. In addition, SAPEVO-M method will be used to determine the importance of each criterion in decision making.

The “preferences” are measured from the semantic scale proposed by Gomes, Mury and Gomes (1997), as shown in Table 7.

Table 7 – Table of preferences

Scale 1 (symbol)	Scale 1 (variable/ corresponding linguistic expression)	Scale 2
<<<1	Absolutely worse/ absolutely less important	-3
<<1	Much worse/ much less important	-2
«1	Worse/ less important	-1
1	Equal or equivalent/ as important as	0
»1	Better/ most important	1
>>1	Much better/ much more important	2
>>>1	Absolutely better/ absolutely more important	3

Source: Derived from Greco et al. (2019).

After defining and exposing the criteria to be evaluated, the military make their judgments about the criteria in order of preference and importance, comparing the criteria and the alternatives with each other. Thus, a project was created in the SapevoWeb tool to assist decision making. The data entered are as follows, in Tables 8, 9 and 10.

The decision-making agents are registered one by one, until all are inserted in the system. In this article, the following Decision Makers were used: "Senior logistics officer," "PhD IME's Professor" and two "Technician officer/ IME Engineer", as illustrated in Table 8.

**Table 8 – Inclusion of decision makers**

Decision Makers	
#	Decision Makers
14	Senior logistics officer
15	PhD IME's Teacher
16	Technician officer/ IME Engineer
17	Technician officer/ IME Engineer

Source: Based on SAPEVOWEB online software.

Similarly, information on the names of the alternatives and the criteria analyzed were inserted, as shown in Tables 9 and 10, respectively.

**Table 9 – Inclusion of alternatives**

Alternatives	
#	Alternatives
16	Truck crane
17	Pallet fork tractor
18	Semi-trailer truck

Source: Based on SAPEVOWEB online software.

**Table 10 – Inclusion of criteria**

Criteria	
#	Criteria
14	Safety
15	Maintenance
16	Transshipment time
17	Different use
18	Cost

Source: Based on SAPEVOWEB online software.

When performing the multicriteria analysis, the system returns values related to the criteria analyzed according to the weights given by the decision makers. The result obtained is shown in Table 11:

**Table 11 – Weight of each criterion**

Weight
Criteria - <b>Safety</b> - 4.0
Criteria - <b>Maintenance</b> - 3.0950598421186655
Criteria - <b>Transshipment time</b> - 2.1475426534250066
Criteria - <b>Different use</b> - 1.2009931245225363
Criteria - <b>Cost</b> - 0.012009931245225364

Source: Based on SAPEVOWEB online software.

From Table 11, it can be seen that the safety criterion was the best evaluated, with the greatest weight. Thus, among the selected factors, this was the most relevant for decision makers, followed by maintenance, transshipment time, different use, and cost.

#### *4.1.2 Results achieved*

It can be seen in the results matrix, shown in Table 12 below, that, in view of the selected criteria, the best alternative was to purchase tractors with forks for allocation at cargo transfer points.

Truck crane, the second alternative, has a higher acquisition cost and a relatively higher risk for the operator's safety and cargo loss. In addition, the dual use of the equipment is restricted to transportation in eventual vehicle breakdowns.

The box semi-trailer truck is the one with the easiest maintenance in the Amazon region and also the easiest transfer in the case of changing from road to waterway modal, which is the most common in the region. However, it does not present itself as an optimal solution for logistical use when transportation is by air. Intermodal transfer would be facilitated; however, unloading and loading process through the military would continue to occur. In addition, the acquisition cost proved to be excessively high, since it would be necessary to purchase several box trailer trucks for the transfer to be directly carried out.

Thus, the equipment chosen was the tractor with forks, as shown in Table 12.

**Table 12 – Ordering after using SAPEVO-M multicriteria analysis**

Ranking
1º -- <b>Pallet fork tractor</b> -- 29.4847598675834
2º -- <b>Truck crane</b> -- 4.443584151842555
3º -- <b>Semi-trailer truck</b> -- 3.22131398013751

Source: Based on SAPEVOWEB online software.

## 5 Final considerations

The beginning of the decade is marked by an increase in Brazilian leadership in response to the overflow of several regional crises, whether through external relations with Latin American countries, or with the strengthening of public security and the Armed Forces.

At the same time, the country is still in a deep economic crisis, aggravated by the social isolation resulting from the pandemic caused by the SARS-CoV-2 virus (which causes the Covid-19), making scarce financial resources vital to the continuity of basic healthcare and the promotion of education, demanding a reduction in defense expenditure.

Therefore, considering that the variables Security and Defense are closely correlated with the investments made in these areas, there is an urgent need to optimize processes to maintain the levels of service provided with the reduction of financial resources.

In this way, it is possible to infer that the capacity of integrating military logistics is an alternative not only to increase the combat power of the Armed Forces and their deterrent capacity, but also to more efficiently manage the resources destined for National Defense.

Thus, this scientific research sought to analyze military interoperability in developed countries to sustain the Brazilian doctrinal evolution, showing that it is not possible to have logistical interoperability without the Singular Forces being able to integrate quickly and effectively.

In addition, in a country that aims to achieve greater international projection, effective interoperability in its Armed Forces is paramount, with the standardization of processes, modes and systems.

The case study of the EB in the Eastern Amazonia demonstrated that there are precarious means and processes for the transshipment of cargo between modes, revealing an opportunity for improvement that will bring practical results for the optimization of human, financial and interoperability resources.

Therefore, by applying the SAPEVO-M method to support decision-making, it is possible to observe that the best equipment to be acquired by EB in the Amazon region is the pallet fork.

By adopting this machinery: 1) The number of injuries resulting from incorrect cargo handling during loading and unloading processes will decrease. This movement of cargo is carried out, in large part, by the EB temporary personnel; in the case of injuries, after cause and consequence being proved through an administrative process, the EB is obliged to provide an adequate health treatment, increasing the burden of the health system. 2) The transshipment process will be accelerated, increasing the Force's operational logistical capacity, as the mode of transportation used will be available in a shorter time to be used in a new mission. Thus, vehicles need bottleneck is reduced; 3) Direct and indirect costs resulting from this process will be reduced, allowing the supplies to be delivered to the Special Border Platoons, for example, unified and palletized.

In addition, the model observed in the EB should be adopted by other Forces, and this logistical project should have a strategic conception, that is, it is suggested that the Ministry of Defense should be responsible for its management, so that each military branch would have its means to carry out the necessary procedures for intermodal integration.

Finally, as an opportunity for further studies to deepen the theme of this work, the recommendation is that: a) the feasibility of inserting the equipment into other operating environments should be assessed, with special attention to its peculiarities; and b) the strategic transportation axes of each Force should be studied, and they could be unified or integrated.

## References

17ª Brigada Infantaria de Selva. **Logística na Amazônia** [2016]. Available at: <[http://www.17bdainfsl.eb.mil.br/index.php?option=com\\_content&view=article&id=398:logistica-na-amazonia&catid=59](http://www.17bdainfsl.eb.mil.br/index.php?option=com_content&view=article&id=398:logistica-na-amazonia&catid=59)>. Access on: May 18, 2020.

ANTAQ. Agência Nacional de Transporte Aquaviário [2011] . Transporte de Cargas nas Hidrovias Brasileiras – 2010. Available at: <<http://portal.antaq.gov.br/wp-content/uploads/2017/03/Hidrovia-do-Rio-Madeira.pdf>>. Access on: May 18, 2020

BALLOU, R. H. **Gerenciamento da cadeia de suprimentos: planejamento, organização e logística empresarial.** 5. ed. Porto Alegre: Bookman, 2006.

BERTANI, T. C. **Sensoriamento remoto e caracterização morfológica no Baixo Rio Solimões, com análise de suas rias fluviais.** 2015. Tese (Doutorado em Sensoriamento Remoto) – Instituto Nacional de Pesquisas Espaciais, São José dos Campos, 2015. Available at: <https://bit.ly/3fnfmdT>. Access on: Dec. 3, 2019.

BRASIL. **Decreto-lei nº 356, de 15 de agosto de 1968.** Estende Benefícios do Decreto-Lei número 288, de 28 de fevereiro de 1967, a Áreas da Amazônia Ocidental e dá outras Providências. Brasília, DF: Presidência da República, 1968. Available at: <https://bit.ly/3dhziwU>. Access on: Feb. 5, 2020.

BRASIL. Ministério da Defesa. **Estado-Maior Conjunto das Forças Armadas (EMCFA).** Brasília, DF, 2020a. Available at: <https://bit.ly/3c9JPtP>. Access on: Jan. 28, 2020.

BRASIL. **Lei complementar nº 124, de 3 de janeiro de 2007.** Institui, na forma do art. 43 da Constituição Federal, a Superintendência do Desenvolvimento da Amazônia – SUDAM [...]. Brasília, DF: Presidência da República, 2007. Available at: <https://bit.ly/35AG6mH>. Access on: Feb. 5, 2020.

BRASIL. Ministério da Defesa. **Doutrina de operações conjuntas (MD30-M-01): 3º volume.** Brasília, DF: Ministério da Defesa, 2011.

BRASIL. Ministério da Defesa. **Livro branco de defesa nacional.** Brasília, DF: Ministério da Defesa, 2012. Available at: <https://bit.ly/2SU6lzx>. Access on: Jan. 15, 2019.

BRASIL. Ministério da Defesa. **Manual de transporte para uso nas Forças Armadas (MD34-M-04).** Brasília, DF: Ministério da Defesa, 2013.

BRASIL. Ministério da Defesa. **Glossário das Forças Armadas (MD35-G-01).** Brasília, DF: Ministério da Defesa, 2015a.

BRASIL. Ministério da Defesa. Portaria nº 301 – EME, de 10 de novembro de 2015. Aprova a Diretriz de Racionalização de Cargos nos Quadros de Cargos e nos Quadros de Cargos Previstos das Organizações Militares do Exército Brasileiro (EB20-D-01.027). **Boletim do Exército**, Brasília, DF, n. 46, p. 78, 2015b.

BRASIL. **Constituição da República Federativa do Brasil de 1988**. Brasília, DF: Presidência da República, 1988. Available at: <https://bit.ly/2yjVK9X>. Access on: Dec. 3, 2019.

BRASIL. Ministério da Defesa. **Doutrina de logística militar (MD42-M-02)**. Brasília, DF: Ministério da Defesa, 2016.

BRASIL. Ministério da Defesa. **Caderno de instrução**: preparação de cargas para o transporte (EB40-CI-10.900). Brasília, DF: Ministério da Defesa, 2017. Available at: <https://bit.ly/3dn36s7>. Access on: Feb. 5, 2020.

BRASIL. Agência Nacional de Transportes Aquaviários. **VEN 2016**: vias economicamente navegadas. Brasília, DF: Agência Nacional de Transportes Aquaviários, 2018. Available at: <https://bit.ly/3fi4oGB>. Access on: Feb. 5, 2020.

BRASIL. Presidência da República. **EUA formaliza apoio à entrada do Brasil na OCDE**. Brasília, DF, 16 jan. 2020b. Available at: <https://bit.ly/2WzdTbG>. Access on: Apr. 18, 2020.

BRASIL. **Operação Acolhida**. Brasília, DF, 2020c. Available at: <https://bit.ly/3b64f5J>. Access on: Jan. 28, 2020.

CÂMARA DOS DEPUTADOS. Centro de Estudos e Debates Estratégicos. **Arco norte: o desafio logístico**. Brasília, DF: Câmara dos Deputados, 2016. Available at: <https://bit.ly/2xCjIwJ>. Access on: Apr. 18, 2020.

CARVALHO, Y. M.; SILVA JÚNIOR, O. S. S. Otimização da rede de transporte de suprimentos do Exército Brasileiro na região da Amazônia Oriental. In: SIMPÓSIO DE PESQUISA OPERACIONAL E LOGÍSTICA DA MARINHA, 19., 2019, Rio de Janeiro. **Anais** [...]. Brasília, DF: Ministério da Defesa, 2019. Available at: <https://bit.ly/3c7Olcp>. Access on: Dec. 3, 2019.

COUNCIL OF SUPPLY CHAIN MANAGEMENT PROFESSIONALS. **CSCMP Supply Chain Management Definitions and Glossary (2020)**. Lombard, ago. 2013. Available at: <https://bit.ly/35xTHLm>. Access on: Apr. 17, 2020.

EUROPEAN AIR TRANSPORT COMMAND. **ATARES**. Eindhoven, 28 jan. 2017. Available at: <https://bit.ly/2W33VQW>. Access on: Jan. 28, 2020.

FIGUEIREDO, E. L. **Pensamento estratégico brasileiro**: discursos. Rio de Janeiro: Luzes, 2015.

FIGUEIREDO, E. L.; VIOLANTE, A. R. A Comunidade dos Países de Língua Portuguesa (CPLP) e a estratégia de projeção de poder inteligente do Brasil: análise da política externa brasileira, 1995-2016. **Revista da Escola de Guerra Naval**, Rio de Janeiro, v. 25, n. 1, p. 129-166, 2019.

FONSECA, S. F.; Sistema homem-máquina: uma proposta de conceituação. **Arquivos Brasileiros de Psicologia Aplicada**, Rio de Janeiro, v. 27, n. 1, p. 202-210, jan./mar. 1975. Available at: <https://bit.ly/3fn3bxF>. Access on: Feb. 5, 2020.

FREIRE, M. E. L. S. **A interoperabilidade entre as Forças Armadas brasileiras: uma análise da Operação Ágata**. 2018. Trabalho de Conclusão de Curso (Graduação em Relações Internacionais) – Universidade Federal da Paraíba, João Pessoa, 2018. Available at: <https://bit.ly/2W6SAzt>. Access on: Jan. 31, 2020.

GANSTERER, M.; HARTL, R. F. Collaborative vehicle routing: a survey. **European Journal of Operational Research**, Amsterdam, v. 268, n. 1, p. 1-12, jul. 2018.

GOMES, L. F. A. M., MURY, A. R., GOMES, C. F. S. Multicriteria ranking with ordinal data. **Systems Analysis Modelling Simulation**, Abingdon, v. 27, n. 2, p. 139-145, 1997.

GRECO, T.; SANTOS, M.; GOMES, C. F. S., LIMA. A. R. Escolha de um navio de desembarque de tropa para a armada argentina por meio do método SAPEVO com múltiplos decisores (SAPEVO M). In: SIMPÓSIO DE APLICAÇÕES OPERACIONAIS EM ÁREAS DE DEFESA, 21., 2019, São José dos Campos. **Anais** [...]. São José dos Campos: Instituto Tecnológico de Aeronáutica, 2019.

HORNSTRA, R. P.; SILVA, A.; ROODBERGEN, K. J.; COELHO, L. C. The vehicle routing problem with simultaneous pickup and delivery and handling costs. **Computers & Operations Research**, Amsterdam, v. 115, 2020.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Amazônia Legal**: 2014. Rio de Janeiro, 2014. Available at: <https://bit.ly/2SEJac>. Access on: Dec. 3, 2019.

INSTITUTO DE LOGÍSTICA E SUPPLY CHAIN. **Custos logísticos – Brasil**. São Paulo, 2017. Available at: <https://bit.ly/2zaRUQo>. Access on: Dec. 3, 2019.

INSTITUTO DE PESQUISA ECONÔMICA APLICADA. **Carta de conjuntura nº 46**. Brasília, DF, 2020. Available at: <https://bit.ly/2YIQszD>. Access on: Apr. 3, 2020.

LOCHER III, James R. Building on the Goldwater-Nichols. In: QUINN, D. J. (org.). **The Goldwater-Nichols DOD Reorganization Act**: a ten-year retrospective. Washington, DC: National Defense University Press, 1999.

LOPES, E. I. D. P. B. **A integração logística das forças singulares no nível estratégico visando à racionalização do emprego de recursos**: uma nova concepção da estrutura da logística militar no nível estratégico. Rio de Janeiro: Escola de Comando e Estado-Maior do Exército, 2013. Available at: <https://bit.ly/2WwXZyy>. Access on: Feb. 5, 2020.

MCINNIS, K. J. Goldwater-Nichols at 30: defense reform and issues for Congress. **Congressional Research Service**, Washington, DC, 2 jul. 2016. Available at: <https://bit.ly/3fqd6lV>. Access on: Jan. 28, 2020.

MCGINNIS, M. A. The relative importance of cost and service in freight transportation choice: before and after deregulation. *Transportation Journal*, Chicago, v. 30, n. 1, p. 12-19, 1990. Available at: <https://bit.ly/2SGFtCG>. Access on: Dec. 3, 2019.

MEDEIROS, S. E.; MOREIRA, W.S. The mobilization of the defense industrial base in South America through the brazilian admission in the NATO catalog system. **Austral**, Porto Alegre, v. 7, n. 14, p. 183-208, Jul./Dec. 2018. Available at: <https://www.seer.ufrgs.br/austral/article/view/87993/50768>. Access on: Jan. 31, 2020.

MILLIONS of refugees from Venezuela are straining neighbours' hospitality. **The Economist**, London, 12 set. 2019. Available at: <https://econ.st/2WsmY68>. Access on: Jan. 28, 2020.

MOVEMENT COORDINATION CENTRE EUROPE. **MCCE at a glance**. Eindhoven: Movement Coordination Centre Europe, Sept. 2018. Available at: <https://www.mcce-mil.org/wp-content/uploads/2019/03/MCCE-At-A-Glance-March-2019.pdf>. Access on: Dec. 3, 2019.

MOVIMENTO BRASIL COMPETITIVO. **Enfrentar o custo Brasil, prioridade de todos**. Brasília, DF, 29 dez. 2019. Available at: <https://bit.ly/3dw5E7p>. Access on: Feb. 5, 2020.

NORTH ATLANTIC TREATY ORGANIZATION. **The North Atlantic Treaty**. Washington, DC, 10 abr. 2019. Available at: <https://bit.ly/3fVHLj>. Access on: Jan. 28, 2020.

ORAIR, R. O. **Investimento público no Brasil**: trajetória e relações com o regime fiscal. Rio de Janeiro: Instituto de Pesquisa Econômica Aplicada, 1990. Available at: <https://bit.ly/3fo5i4f>. Access on: Dec. 3, 2019.

PIRES, G. C. G.; HONORATO, H. G.; COSTA, R. P. A importância da reforma Goldwater-Nichols para a evolução da interoperabilidade nas Forças Armadas dos Estados Unidos da América. **Revista da Escola Superior de Guerra**, Rio de Janeiro, v. 33, n. 69, p. 198-220, 2019. Available at: <https://bit.ly/3b93uIW>. Access on: Jan. 28, 2020.

**EAEMAQUINAS. Pá carregadeira John Deere 824J com garfo pallet.** Available at: <[https://www.youtube.com/watch?v=XWm9hWYx\\_3w](https://www.youtube.com/watch?v=XWm9hWYx_3w)>. Access on: May 18, 2020.

**ROBBINS, L.** *An essay on the nature and significance of economic science*. Auburn: Mises Institute, 2007.

**SANTOS, A. D. N.** A influência da infraestrutura logística da Amazônia Oriental para o dimensionamento do grupo funcional transporte. **Revista Científica da Eceme**, Rio de Janeiro, v. 8, n. 16, p. 95-108, 2016.

**SANTOS, M.** Proposta de modelagem atuarial aplicada ao setor militar considerando influências econômicas e biométricas. Tese de doutorado apresentada no Programa de Pós-graduação em Engenharia de Produção da Universidade Federal Fluminense. Niterói/ RJ, 2018.

**SANTOS, M.; OLIVEIRA, G. S. M.; LIMA, A.** Aplicação do Método SAPEVO-M na ordenação dos trajetos Rio de Janeiro X Belém para uma empresa de transporte rodoviário. *In: SIMPÓSIO DE ENGENHARIA DE PRODUÇÃO DE SERGIPE*, 11., 2019, São Cristóvão (SE). **Anais** [...]. São Cristóvão (SE): Universidade Federal do Sergipe, 2019. Available at: <https://bit.ly/2zUroen>. Access on: Dec. 3, 2019.

**TEIXEIRA, L. F.; SANTOS, M.; GOMES, C. F. S.** Proposta e implementação em Python do Método Simple Aggregation of Preferences Expressed by Ordinal Vectors – Multi Decision Makers: uma ferramenta web simples e intuitiva para Apoio à Decisão Multicritério. *In: SIMPÓSIO DE PESQUISA OPERACIONAL E LOGÍSTICA DA MARINHA*, 19., 2019, Rio de Janeiro. **Anais** [...]. Brasília, DF: Ministério da Defesa, 2019.

**UNIÃO EUROPEIA.** Regulamento (CE) N.º 425/2007 da Comissão de 19 de Abril de 2007 que aplica o Regulamento (CE) n.º 1365/2006 do Parlamento Europeu e do Conselho relativo às estatísticas do transporte de mercadorias por vias navegáveis interiores. **Jornal Oficial da União Europeia**, Bruxelas, 5 ago. 2018. Available at: <https://bit.ly/2yx8N7N>. Access on: Jan. 28, 2020.

**UNITED STATES. Department of Transportation. National Transportation Statistics.** Washington, DC: Department of Transportation, 2018. Available at: <https://bit.ly/2Wwn0tI>. Access on: Dec. 3, 2019.

**UNITED STATES ARMY CORPS OF ENGINEERS. Navigation.** Washington, DC, 2019. Available at: <https://www.usace.army.mil/Missions/Civil-Works/Navigation/>. Access on: May 26, 2019.

**WORLD ECONOMIC FORUM. Global Competitiveness Index 4.0 2019 edition: Brazil.** Cologny, 2019. Available at: <https://bit.ly/2W7fsyP>. Access on: Dec. 3, 2019.



# An assessment of cyber threats and migration as challenges to the European Union Pluralistic Security Community in the World Order 2.0

*Una evaluación de las ciberamenazas y la migración como desafíos para la Comunidad de Seguridad Pluralista de la Unión Europea en el Orden Mundial 2.0*

**Abstract:** This article departs from the assumption that European Union is a Pluralist Security Community resulting from symbiotic interactions between material and ideational variables such as beliefs, identities, material capabilities, borders, distribution/perception of power, anarchy and polarity, which gives to this theoretical model greater analytical consistency and ontological density. So, looking into the potential threats the EU is being confronted with and for the negative externalities they can generate in the near future, we are led to reflect on some paradigmatic issues: has the EU reached the limits of its capacity to effectively deal with contemporary challenges? Accordingly, is there a need for a new European concerted plan of action on security and defense issues? To verify how the EU has been tackling some of these challenges and how they impact the defining features of the EU as a Pluralistic Security Community, cybersecurity and migration were selected as our objects of analysis for being good examples of transnational problems the contemporary international system is being confronted with.

**Keywords:** European Union. Pluralistic Security Community. Cybersecurity. Migration.

**Resumen:** Este artículo parte del supuesto de que la Unión Europea es una Comunidad de Seguridad Pluralista resultante de interacciones simbóticas entre variables materiales e ideológicas como creencias, identidades, capacidades materiales, fronteras, distribución/percepción del poder, anarquía y polaridad, lo que da a este modelo teórico una mayor consistencia analítica y densidad ontológica. Por lo tanto, al examinar las posibles amenazas a las que se enfrenta la UE y las externalidades negativas que pueden generar en un futuro próximo, nos vemos obligados a reflexionar sobre algunas cuestiones paradigmáticas: ¿ha alcanzado la UE los límites de su capacidad para hacer frente con eficacia a los desafíos contemporáneos? En consecuencia, ¿es necesario un nuevo plan de acción europeo concertado sobre cuestiones de seguridad y defensa? Para verificar cómo la UE ha abordado algunos de estos desafíos y cómo repercuten en las características que la definen como una Comunidad de Seguridad Pluralista, se seleccionaron la ciberseguridad y la migración como nuestros objetos de análisis porque son buenos ejemplos de los problemas transnacionales a los que se enfrenta el sistema internacional contemporáneo.

**Palabras clave:** Unión Europea. Comunidad de Seguridad Pluralista. Ciberseguridad. Migración.

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## 1 Introduction

In a paradigmatic article written in 1867 – *L'avenir* (The Future) – Victor Hugo (1802-1885), inspired by the dream of living in a federalist Europe, although in a very nationalist epoch, scattered the seeds of what would become a European political and economic unification project and, in many aspects, anticipated what was about to come several years later by stating that:

in the twentieth century there would be an extraordinary nation. This nation will be large, which will not prevent its being free. It will be illustrious, rich thoughtful, peaceful towards the rest of humankind. This Nation will have Paris as its capital, but it will not be called France: it will be called Europe. It will be called Europe in the twentieth century, and in the centuries that follow [...]. (HUGO apud DUROSELLE, 1990, p. 324).<sup>1</sup>

Nonetheless, even being in its essence a romanticized depiction of Europe as the ultimate stage of a cultural and political entity, the imaginary content of Hugo's ideas has gradually materialized. His words harbingered an unprecedented process of economic integration firstly fostered by the establishment of a bold proposal for unifying the European production of coal and steel based on supranational principles.<sup>2</sup>

In this endeavor, by bringing together the BENELUX countries (Belgium, the Netherlands and Luxembourg), West Germany, France and Italy, the Treaty of Paris, signed in April 1951, established the European Coal and Steel Community (ECSC), a welcome attempt to stimulate integration and cooperation which, in turn, paved the way towards other initiatives such as the Treaty of Rome (1957) and the Treaty of Maastricht (1992) leading to the modern European Union (EU) as currently known: a political and economic union of 27 countries<sup>3</sup>. And, in fact, it clearly seemed that the creation of a common market followed by the introduction of a single currency<sup>4</sup> heralded a promising new era of economic growth and political integration.

As pointed out by Mix (2013), reflective of this project of a broader and deeper Europe, from then on, several aspects of policy and decision-making processes have been

1 The idea of a "United States of Europe" was firstly addressed by Victor Hugo in the opening discourse at the first Peace Congress, held in Paris, 21 August 1849, and, later, in his speeches for the Peace Congress of Lausanne (1869) and Lugano (1872). It is worth mentioning that federalist ideas are found in contributions from other emblematic personalities that preceded Victor Hugo, such as in the Prussian philosopher Immanuel Kant's 'Perpetual Peace' (1795) or, yet, in the essay 'A Plan for a Universal and Perpetual Peace' (1789) authored by the English jurist Jeremy Bentham. Another influential federalist, this one contemporary to Victor Hugo, is the Italian philosopher and writer Carlo Cattaneo (1801-1869). For additional information on the federalist epistemological approach see Burgess (2009).

2 As for European integration, there are many theories focused on explaining this process, amongst them, Neofunctionalism, Intergovernmentalism, and Federalism. Neofunctionalism was the first one trying to explain the patterns of cooperation in the bloc and, for that, it is grounded in two epistemological pillars: spillover effects and the role of interest groups. In contrast, for Intergovernmentalism – a theory that gained ground in the troubled 1970s – integration is, above all, the result of rational choices made by sovereign states that always act aimed at promoting and maximizing national interests. Andrew Moravcsik is one of the main exponents of this theoretical current. In turn, modern Federalism attributes a fundamental role to the supranational level of analysis, and, for this theoretical perspective, the EU is best understood as a form of cooperative federalism, however, refuting the Neofunctionalism's spillover concept.

3 Few years after a referendum held on 23 June 2016, popularly known as BREXIT (the "British exit") – when "the leave side" won by nearly 52% to 48% – the United Kingdom officially withdrew from the European Union on 31 January 2020.

4 The euro (€), launched in 2002, is the official currency of 19 out of 27 EU countries that are collectively known as the Eurozone.

progressively shifting from national capitals to the EU institutions in a wide array of sectors such as the Common Foreign and Security Policy (CFSP), but, it shall be highlighted, in a context whose decisions are taken by unanimity among the EU Member States in the scope of the Council of European Union (a.k.a the Council of Ministers).

Closely related, the Common Security and Defense Policy (CSDP) – originally conceived in 1999 as European Security and Defense Policy (ESDP)<sup>5</sup> – is part of the CFSP and remains a fundamentally intergovernmental tool aimed at enabling cooperation between the EU Member States in operational missions for conflict prevention; crisis management and strengthening of international security drawing on civilian and military assets<sup>6</sup> (CHAPPELL; MAWDSLEY; WHITMAN, 2016; PIROZZI, 2014, 2018).<sup>7</sup>

And, notwithstanding what critics have been stating about EU lack of institutional coordination and coherence in many aspects, as we shall see, with the passing of time the aforementioned policies have contributed to overcoming historical rivalries towards a new idea of community. One built on a prevailing desire of peaceful coexistence based on shared values resulting in a perception of Europe as a Pluralistic Security Community thought to deal with complex demands stemming from a challenging operating system labeled by Richard Haass as World Order 2.0, a new international order mainly based on the premise of sovereign obligation, in other words, what a country owes to other countries.<sup>8</sup>

Moreover, considering that nowadays little stays local and just about anyone and anything can reach almost anywhere, thus establishing complex relations of interdependence, and also presuming that in the World Order 2.0 “what goes on inside a country can no longer be considered the concern of that country alone” (HAASS, 2017, p. 2), overlapping threats originating from abroad and within the European Union demand concerted responses in order to protect EU’s interests.

This is the case of a wide range of issues such as environmental degradation; climate change; conflict-induced forced displacement; radicalization and terrorist financing; the proliferation of weapons of mass destruction; large-scale cyberattacks; the intentional use of violence by nonstate entities; the proliferation of failed states and organized crime.

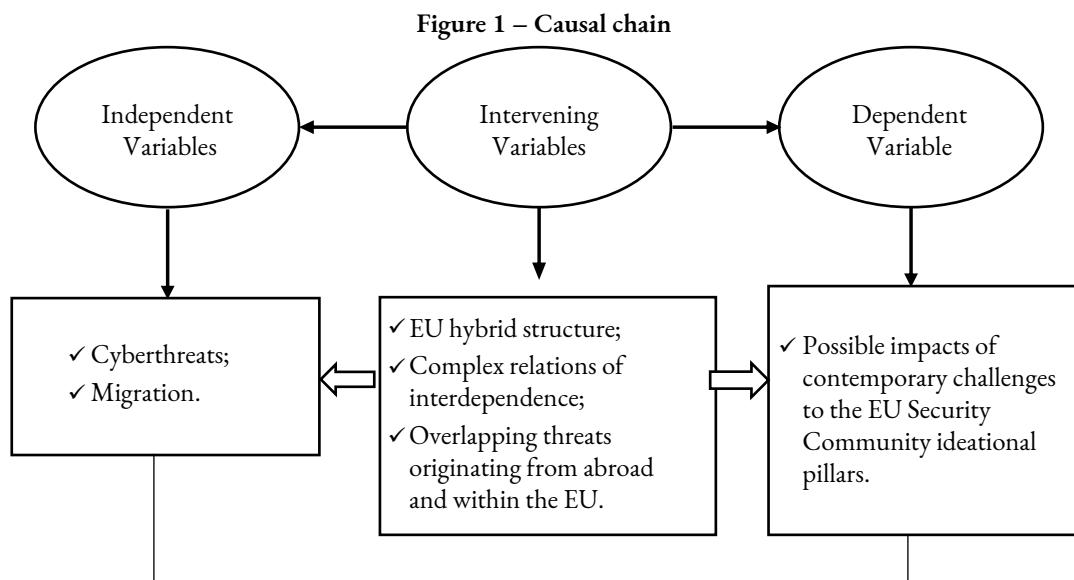
<sup>5</sup> Signed in 2007 but into force since 2009, the Treaty of Lisbon, by amending the Treaty of Maastricht, amongst other provisions introduced the Common Security and Defense Policy to replace the former European Security and Defense Policy (ESDP). It also created the new post of High Representative of the Union for Foreign Affairs and Security Policy, position firstly occupied by Catherine Ashton (2009-2014). Appointed by the European Council with the agreement of the President of the European Commission for a mandate of 5 years, the High Representative is also Vice-President of the European Commission and is charged with shaping and carrying out the EU’s Foreign and Security Policy. The foreign minister of Italy, Federica Mogherini, was appointed to succeed Ashton for the 2014-2020 term.

<sup>6</sup> It is important to point out that the CSDP activities are not exclusively military including, for instance, civilian operations such as police and judicial training. According to Pirozzi (2018, p. 1) “the civilian component of EU crisis management has often been neglected in terms of visibility and resources, but it is mainly through civilian Common Security and Defense Policy (CSDP) missions that the EU has been able to show its added value as a security provider”.

<sup>7</sup> Another worth mentioning benchmark for EU foreign policy is the European Security Strategy (ESS) originally launched in 2003 to 1) identify global challenges and threats to EU security; 2) foster stability in its neighborhood (Balkans, Caucasus, the Mediterranean region and the Middle East, and; 3) seek the construction of a multilateral world order based on international law, peace and security (Mix, 2013, p. 4).

<sup>8</sup> According to Haass (2017) the World Order 1.0 – built around the protection and prerogatives of states – is no longer sufficient to satisfactorily explain the dynamics of today’s globalized world.

To verify how EU has been tackling some of these challenges and, on the other hand, how they impact the defining features of EU as a Pluralistic Security Community, namely, values; capacity of response and predictability of behavior on security and defense issues, we have selected cybersecurity and migration as our independent variables. As depicted in the causal chain, these subjects were chosen for being good examples of transnational problems the contemporary international system is being confronted with and, in addition, issues that reflect the need to construct effective policy frameworks to restrain possible negative externalities stemming from these threats (VAN DER MEULEN; JO; SOESANTO, 2015; CHRISTOU, 2016; KASPAREK, 2016; RICHARDS; LASALLE; VAN DEN DOOL, 2017; CALAMUR; SCHULTHEIS, 2018; SCHMID-DRÜNER, 2019):



Source: Authors (2020).

To accomplish the proposed task the research, methodologically quantitative and qualitative, firstly discusses some aspects of the Pluralistic Security Communities' conceptual framework to explain how the EU – this hybrid structure simultaneously combining intergovernmental and supranational features – was conceived. Then, by using primary and secondary sources, it analytically suggests propositions capable of pointing out causal relations between our dependent and independent variables.

## 2 From conflict to peaceful coexistence: Europe's path towards a Pluralistic Security Community

We begin this analysis from the assumption that European Union is a Regional Security Complex (RSC) or, in other words, a set of units (mainly states) whose major perceptions and security concerns are so interlinked that their security problems cannot reasonably be analyzed or resolved apart from one another

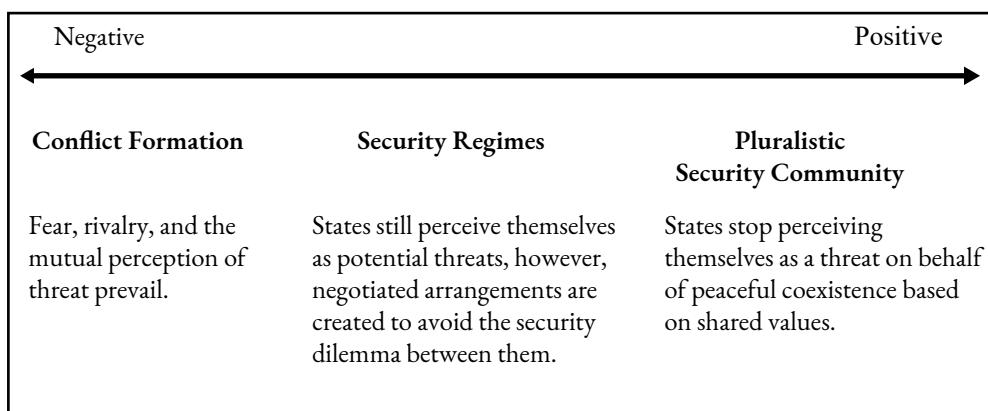
(BUZAN, 1991; BUZAN; WÆVER; DE WILDE, 1998). The basic premise of this theoretical model assumes that RSC is a result of symbiotic interactions between material and ideational variables such as beliefs, identities, material capabilities, borders, distribution/perception of power, anarchy, and polarity, which gives the model greater analytical consistency and ontological density.

From this perspective, Buzan and Wæver (2003) have identified in the Post-Cold War world several RSC, although in different stages of maturation: North America, South America, Post-Union of Soviet Socialist Republics, Middle East, West Africa, Central Africa, Southern Africa, South Asia, East Asia and Europe, our object of analysis.

In this major structure, the epistemological role developed by relations of amity and enmity between their units as part of interactive processes of identity formation is of utmost importance for our effort in understanding European Union as a Security Community. Regarding the standards of amity-enmity, shaped by historical and societal dynamics, RSC can be classified within a continuum as schematically depicted in Figure 2. Thus, in the positive pole, friendly relations between units prevail and give rise to Security Communities where the expectations of change are always peaceful and war (or the threat thereof) is no longer an option for resolving conflicts among its members.

On the other hand, in the negative pole, these relations are tensioned by mistrust and fear resulting in conflictive trends. Between these poles, it is possible to observe the formation of Security Regimes, a hybrid configuration in which patterns of security interdependence continue to be shaped by the fear of conflict and use of armed violence or other extreme emergency measures. However, these expectations used to be contained by negotiated “sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given area of international relations” (KRASNER, 1982, p. 185-6) in this case, security-related issues:

**Figure 2 – RSC as a result of patterns of rivalries and shared interests**



Source: Queiroz (2012, p. 150).

As originally defined by Deutsch et al. (1957), Security Communities are composed of states that share fundamental values and behaviors to adapt their principles,

rules, and common institutions and processes of joint decision on behalf of peaceful coexistence. This concept was later brought back to the academic spotlights by Emmanuel Adler and Michael Barnett (1998) who refined it by incorporating elements such as the role of shared identities as they can petrify and become relatively constant elements to be reckoned with, a crucial variable for understanding the dialectical contours of the alterity built on relationality between “Self” and “Other” (HARVEY, 2011).<sup>9</sup>

Adler and Barnett (1998, p. 37) highlight that “sometimes a community of states will establish pacific relations, sometimes a community will not. But those that do have formed a security community”. In general, these communities may form a new political entity resulting from the formal merger of two or more previously independent units into a single larger one, with some type of common government – Amalgamated Security Communities – or keep its members as independent units – Pluralistic Security Communities. In both cases, security concerns are notably marked by a Kantian social structure where the actors stop perceiving themselves as threats. For our purposes, in Pluralistic Security Communities it is noteworthy the core conditions for their existence: (a) compatibility of major values such as peace, commitment to democracy, the rule of law and human rights; (b) mutual responsiveness and; (c) mutual predictability of behavior.<sup>10</sup>

Therefore, taking into consideration these premises, it is noticeable the successful path of European integration towards a zone of stability and cooperation so far, one in which states and populations have come to share common norms of behavior and values in search of, amongst other things, a lasting peace as the outcome of a phenomenon labeled by Deutsch et al. (1957, p. 5) as “dependable expectations of peaceful change”.

This achievement materialized through an increasing integration process that took place shortly after the end of World War II and, concomitantly, after decades of arduous processes of social construction of identities – this set of meanings that actors attribute to themselves in relation to others through cognitive interpretations and connections – is something unique. The European Union’s feat is even more remarkable if we consider, as stated by Telò (2009, p. 3), that:

never before in world history have a number of sovereign states, of which some were formerly mortal enemies, freely decided to collaborate within new institutions that are both supranational and intergovernmental, and to jointly exercise their sovereignty through interstate and transnational process rooted in their civil spheres.

<sup>9</sup> For an updated discussion on the role of otherness in International Relations, mainly focused on the so-called radical otherness or alterity in the relationality between ‘Self’ and ‘Other’, see the contribution of Nordin and Smith (2019). By constructing a typology of four accounts of otherness, they explore sensitive issues such as domination and assimilation considering, as epistemological references, Chinese and Western thoughts.

<sup>10</sup> There is a variety of typologies aiming at differentiating Security Communities based on the depth of their integration, cooperation, sense of community, peaceful change, and so on. For a good summary of these definitions see Laporte (2012, p. 6-12).

In light of the mentioned facts, the EU can be interpreted as the institutional personification of a common desire of some European states and populations to put an end to the succession of wars on the continent by giving up to use violence to resolve their disputes, thus making the EU a good example of a Security Community. It is also ‘pluralistic’ because it is not governed by a single government and a fully shared set of rules (LAPORTE, 2012, p. 4-5).

Nonetheless, the European Union’s strategic environment has changed fundamentally over recent years and the classic notion of balance of power is no longer sufficient to satisfactorily keep the respect for sovereign attributes such as independent existence and autonomy. As previously said, international relations have entered into the so-called World Order 2.0, a conceptual framework developed by Richard Haass (2017, p. 2) to typify this emerging new operating system that “includes not only the rights of sovereign states but also those states’ obligations to others” as the outcome of today’s globalized and highly interconnected world marked by complex and disruptive challenges, some of them unprecedented.

From climate change and energy dependence to one of the major migration<sup>11</sup> crises ever seen since World War II; from the dramatic and messy Brexit negotiations to a strengthening far-right; from terrorist attacks on European soil to the cyberspace and its impending implications to security, EU has been facing uncertainties at this international architecture based on a variable geometry of power in which the destinies of several actors are interwoven in a context favorable to connections of varied order (BENDIEK, 2017; MATTHIJS, 2017; BISCOP, 2018; MITZEN, 2018).

For Pirozzi and Bonomi (2019) these aspects have contributed to generate increasing ambivalences in views and perceptions regarding the future of the Union. This trend was corroborated by a European Parliament’s Eurobarometer’s survey held in March 2018, demonstrating that most of the European citizens still support the EU, but also pointing out that the expectations are less straightforward.

In this sense, the survey’s findings revealed that 62% of the interviewees believe that being part of the EU is a good thing and 68% perceive the membership to the Union as a benefit for their countries. In the meantime, interestingly, 50% alleged to see things in the European Union going in the wrong direction. These contrasting perceptions stimulated the ascension of Eurosceptic parties – both right and left-wing – as a political force that cannot be

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<sup>11</sup> Although commonly used interchangeably to explain the displacement of people, it is important to conceptually distinguish migration, immigration, and refugees, since public perception varies according to the imperatives underlying the movement of displaced persons. For the purposes of this article, we consider a) **migration** as “the movement of a person or a group of persons, either across an international border or within a State. It is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification; b) **immigration** as “a process by which non-nationals move into a country for the purpose of settlement” and, c) **refugees** “as persons who are outside their country of origin for reasons of feared persecution, conflict, generalized violence, or other circumstances that have seriously disturbed public order and, as a result, require international protection” (INTERNATIONAL ORGANIZATION FOR MIGRATION, [201-]).

ignored as we could witness, for instance, in national elections in France (2017), Italy (2018) and Sweden (2018) amongst many other cases (SCHULMEISTER, 2018).<sup>12</sup>

Given this challenging environment, it is unavoidable to reflect if Europe's long peace is somehow at risk. Or, in addition, if the EU still exerts a power of attraction towards its neighbors through the norms and values which constitute its 'raison d'être' as a Pluralistic Security Community.

### 3 **Quo Vadis, European Union? A brief overview**

According to Ferguson (2014), Centro de Investigaciones y Estudios Estratégicos (2018, p. 12) and Pirozzi and Bonomi (2019), EU's unit and, some would also say, values – mostly described in art. 2 of the Treaty on European Union<sup>13</sup> – began to dangerously deteriorating since the 2008 eurozone crisis.<sup>14</sup> In addition, problems arising from its borders, especially due to the increasing hostilities in its relation with Russia after Crimea annexation, exposed latent fragilities of EU capacity to take forward foreign, security and defense policies capable of effectively and permanently ensure peace in its international surroundings without depending on external support<sup>15</sup>, mainly from the United States that have historically had a strong voice on European security issues through the North Atlantic Treaty Organization (BISCOP, 2018 MIX, 2013; DUKE; VANHOONACKER, 2016).

The response came on 28 June 2016, with the adoption of the EU Global Strategy (EUGS) which redefined the normative framework of the Common Foreign and Security Policy. Under the motto "Shared vision, common action: a stronger Europe", EUGS – the main document on strategic security since the 2003 European Security Strategy (ESS) –

12 In France, Marine Le Pen rose within the ranks of the National Front (FN), a party founded and previously led by her father, Jean-Marie Le Pen. Le Pen's campaign defended France's exit from the eurozone based on FN's traditional concerns about security and immigration. Le Pen lost the presidential run-off by a 20-point margin to Emmanuel Macron, but the National Front party won a seat in parliament for the first time. In the 2018 Italian general election for choosing over 900 members of its two houses of parliament, voters opted for anti-establishment parties such as the Five Star Movement (5SM) and the anti-illegal migrant League party, both sharing a skepticism about Italy's relationship with the European Union. Finally, general elections held in Sweden in September 2018 elected the 349 members of the Riksdag, and smaller parties, including the far-right, made gains at the expense of the major ones. The anti-immigrant party, Sweden Democrats, won 17.6% of the vote, up on the 12.9% it scored in 2014. On the other hand, the governing Social Democrats, led by prime minister Stefan Löfven, saw their score fall to 28.4%, the lowest since 1917.

13 Respect for human dignity; freedom; democracy; equality; the rule of law, and respect for human rights (PARLAMENTO EUROPEU, 2018).

14 The European sovereign debt crisis also referred to as the eurozone crisis, began in 2008 as a combination of complex factors and structural problems such as the collapse of financial institutions, high government debts, real estate market turmoil, and property bubbles. Looking for a financial bailout, seventeen Eurozone countries agreed to create the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM) in 2010 and 2012, respectively, to assist them with the debt crisis that reached its peak within that period.

15 For Mandelbaum (2017) Russia's invasion of Ukraine in 2014 – as part of Putin's need for public support to sustain the regime he presides – put an end to the post-Cold War European peace. He also points out that "Putin claimed that Russia's actions were necessary because the Euromaidan revolution stemmed from a Western plot to isolate, humiliate, and ultimately destroy Russia" (MANDELBAUM, 2017, p. 109). Since 2014, the EU suspended regular bilateral summits with Russia (Partnership and Cooperation Agreement). Although EU-Russia relations remain strongly interdependent, the EU has applied a "selective dialogue" approach combining a policy of progressive sanctions with attempts to reach a diplomatic solution to the conflict in eastern Ukraine.

advocates the adoption of a strategic autonomy to pursue EU's own interests without being constrained by other states. According to the Global Strategy, a resilient EU would have two main characteristics: 1) the ability to avert external risks and dangers and, 2) the capability to stabilize its neighboring states (BENDIEK, 2017, p. 14).

In a nutshell, EUGS was designed to respond by means of a 'principled pragmatism' to an increasingly conflict-prone external environment and to internal divisions capable of jeopardizing the coherence of the EU's external action, thus, reconciling its self-interests and normative commitments.

Additionally, amid anxieties and uncertainties unleashed by rising doubts concerning the US president Donald Trump's commitment to European security (MANDELBAUM, 2017, p. 108), the EU launched its Permanent Structured Cooperation (PESCO), an initiative aimed at setting out a new level of joint action in the pursuit of a renewed strategic direction on security issues by pooling the defense efforts of 25 of the then EU's 28-member states through new and flexible agreements.<sup>16</sup>

For Smith (2018), although all these efforts respect NATO's primary role in European defense and, at least theoretically, give room for more practical EU-US collaboration regarding crisis management and security assistance operations, they also reveal the EU increasing willingness to forge its own path in this domain.

In line with these facts, defining critical priorities on security and defense is at the heart of EU concerns. In this regard, the EU Global Strategy has established terrorism and organized crime; illegal migration; cybercrime; and energy security as essential priorities to be addressed aiming at defending the Union's citizens, its territory and infrastructure and the supply of critical needs in the face of inside and outside threats (CONTE; CLERCK-SACHSSE, 2018, p. 142).

And, for our purposes, as previously stated, we have selected cybersecurity and migration as our objects of analysis for being issues endowed with high capillarity and, accordingly, capable of generating negative transboundary effects.

As highlighted by Krishna-Hensel (2007) cyber threats globalize because they universalize and equalize. They affect all users, transactions, and dataflows regardless of location or political persuasion. Since networks are cross border organisms, the security of networks is only possible through supranational solutions.

In this regard, cyberspace stands out as one of the newest domains of international activity, one endowed with remarkable potential for both conflict and cooperation. As previously pointed out, in an international order marked by unprecedented flows of information and communication, where states and nonstate actors are integrated into a comprehensive global cyberspace (HAASS, 2017, p. 6), the digital realm is intimately connected to foreign policy, intelligence, security and defense issues, and the EU is not immune to this trend.

<sup>16</sup> It is noteworthy that even with all European NATO allies accomplishing the agreed commitment of spending two percent of their GDP on defense (as they have promised to do by 2024) they would still be dependent on the United States aid for the deployment of their forces (BISCOP, 2018).

On the other hand, violent political and social conflicts have as one of its major consequences forcibly migratory movements generally triggered by the use of force, persecution or coercion, thus, making forced migration originating from places like Syria, Libya, Iraq, Afghanistan, South Sudan, and Yemen a potential security issue not only for their immediate surroundings but for international society as a whole.<sup>17</sup> As a result, the global population of forcibly displaced people increased to 68.5 million, compared with 65.6 million in 2016 (UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES, 2018, p. 4).

After all, forced displacement of populations both within countries and across borders may dangerously undermine the resilience of communities of origin and host communities.<sup>18</sup> As European Union traditionally stands out as one of the most targeted migration destinies, the implementation of an agenda on migration and related issues shall be aligned to its security and defense policies in order to properly address common actions aimed at dealing with mass population displacement and conflict resolution. That said, last but least, the question is: to what extent cyberthreats and migration can pose risks to UE's core values as a Security Community?

#### 4 European Union Cybersecurity Policy

The European Union has had many challenges in formulating policies that are acceptable to all its members. In some instances, common policies have led to fractures in the group of nations. In a specific area, however, there is a greater consensus amongst the members. Europe's information networks and its critical infrastructures are of significant concern for the future of the EU (EUROPEAN UNION, 2013).

The EU has accorded top priority to the formulation of a common cybersecurity protocol. Where cybersecurity measures have been put forth, it has been far more effective in linking the various efforts initiated by individual nations, with a consensual protocol. The main challenge has been to oversee cybersecurity governance that had been the responsibility of individual member states for the most part (CHRISTOU, 2018).

The increase in cyberattacks with the implications for business and government, as well as, the possible impact on essential services that can be disrupted through network failures has provided urgency to this issue. Simultaneously, the interconnectedness of digital networks and infrastructures has raised awareness for the implementation of common protocols in response to cyberthreats. In this regard, in accordance with the European Commission, ransomware attacks have increased threefold between 2015 and 2017, the economic impact

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<sup>17</sup> According to the United Nations High Commissioner for Refugees, 68% of the world's refugees in 2017 came from five countries: the Syrian Arab Republic (6.3 million), Afghanistan (2.6 million), South Sudan (2.4 million), Myanmar (1.2 million) and Somalia (986,400). Syria had the largest amount of new internal displacements due to conflict and violence in 2017, with 2.9 million internally displaced persons. On the other hand, the United States of America was the world's largest recipient of new individual applications (331,700), followed by **Germany** (198,300), **Italy** (126,500), and **Turkey** (126,100) (UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES, 2018).

<sup>18</sup> Are considered forcibly displaced persons not only refugees and asylum seekers who look for protection in other countries, but also, and indeed mainly, individuals who have been displaced within the borders of their own countries.

of cybercrime rose fivefold since 2013 and 87% of Europeans see cybercrime as an important challenge for EU's internal security (EUROPEAN COUNCIL, 2020).

In 2016, the European Commission established NIS (Network and Information Systems) a cybersecurity cooperation group. The principal responsibilities of this body were to formulate EU-wide legislation on cybersecurity and promote the exchange of information between the member states to coordinate an effective response to cyber incidents.<sup>19</sup>

On a practical level, the group was to be assisted by an incident response network tasked with monitoring and neutralizing cyberthreats as they emerged. Envisioned as a cooperative framework to deal with the challenges of a cyber world, this body represented a recognition of the importance of coordinating the reactions of individual states. Thus, states were required to:

- (1) Create a national strategy on the security of network and information systems, “defining the strategic objectives and appropriate policy and regulatory measures.”
- (2) Identify all public and private operators of “essential services” – across energy, transport, banking, financial market infrastructure, health, water, and digital infrastructure sectors – and define “appropriate security measures” as well as thresholds requiring organizations to report any security incidents they suffer to national authorities. The same goes for all online marketplaces, cloud computing services, and search engine providers, excepting small businesses.
- (3) Maintain national computer security incident response teams – a.k.a. computer emergency response teams – “to rapidly react to cyber threats and incidents” as well as work closely with other EU member states’ CSIRTs (Computer Security Incident Response Team). Such activities will be coordinated by the European Union Agency for Network and Information Security, a.k.a. ENISA.
- (4) Participate in a new “Cooperation Group” between member states designed “to support and facilitate strategic cooperation as well as the exchange of information, and to develop trust and confidence,” backed by forthcoming European Commission recommendations on improving cross-border cooperation in the wake of a major online attack. (SCHWARTZ, 2016).

Ongoing efforts to further ensure effective responses have resulted in the projected network of certification centers, industrial competence and research centers, and risk management capacities. Among the many initiatives was the development of an

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19 For additional information, see Parlamento Europeu (2016).

open-source database for threat management and providing citizens tools for ensuring data privacy.

Interestingly, the sensitivity to cyberthreats is only one element of the cooperative cyber initiatives of the EU. A corollary is the determination to benefit from the opportunities of the new technologies. Through certification of new devices, promoting a digital single market, and digital single gateway, the European Commission proposes to give individuals and businesses the tools for making informed decisions and formulating advantageous policies.

The cybersecurity certification framework was designed to facilitate the mutual acceptance of certified products by member states. The reasoning underlying the certification initiative was that a set of common standards would facilitate the development of “interoperable products” thereby enabling networks with highly differentiated nodes to operate securely. The affirmed aim of the measure was to build consumer trust in technology products located throughout a single digital marketplace.

This would be challenging, given the existence of various cybersecurity certification rules amongst the individual member states. To this end, a series of penalties for breach of compliance and inadequate security protocols was recommended to reinforce the required outcome of the EU cybersecurity Act. A related complication involved the legal liabilities in case of a data breach occurring when cross border data transfers between the EU and nations outside the common market were involved via an EU certified device. European Commission cyber initiatives go beyond the member states to include foreign entities like Google and Facebook to report security breaches that are likely to affect their operations in Europe.

To reach these goals, new legal options as well as an emphasis on existing international law has been emphasized. As a corollary, there has been a move to encourage cooperation between the private and public sectors in sharing information, identifying threats, and coordinating solutions to crises. Since most of the infrastructure is privately owned, governments are beholden to industry for access. This is designed to ensure, among other things, the competitiveness of European industries and businesses. This is the logical response to recognizing the growing importance of the on-line economy, as more and more transactions occur via the cyber channels replacing the traditional brick and mortar commercial spaces.

In addition, securing payment systems from identity theft and other criminal activity is given the highest importance to protecting the financial sphere. Securing commercial transactions remains a particularly challenging environment due to the continuously evolving nature of the threats. While individual member nations have their own secure systems, the cross-border threats require a coordinated response at the EU level. It is this rationale that is driving the efforts to integrate cyber policy in the EU and to build a consensus on the need for a cooperative policy.

The common cybersecurity policy is linked to the Common Security and Foreign Policy and its scope is still being worked out to define the specific conditions under which it is to be activated as well as the scale of the attack which would trigger its

launch. The borderless character of the threats places the risk in an entirely undefined realm. Risk assessment is consequently much harder under these circumstances.

In addition, the security dimension is complicated by the extensive reliance on foreign technology suppliers such as China which has a large market share of telecoms networks in several member states. As the cheapest source of 5G technology, it is difficult to overlook Chinese importance to modernizing communications. The contradiction inherent in such a situation lies at the heart of efforts to integrate cybersecurity systems.<sup>20</sup>

It is evident that economic incentives for cybersecurity are not the primary driving force behind cyber cooperation. Significant impetus comes from national security considerations which provide urgent motivation for integrating cyber defenses across the EU. Much of this initiative is conducted in a closed security environment as policymakers and technicians confront the pressure to not only deal with current crises but also face the daunting challenge of anticipating future attacks on the infrastructure and weapons systems. This constitutes an arena for consensus-building which continues to remain an elusive goal of European integration. Preparing a common cyber defense across its membership remains a high priority and one which has a realistic prospect for success.

Cyber defense is also confronted by the increasing number of ransomware attacks on individuals and businesses that have cost the EU member countries upwards of “1.6 percent of their GDP or \$41.3 billion annually for the EU as a whole” (SPRING, 2016). Overall, the EU lacks precise information to accurately estimate the total revenue loss from cybercrime due to the absence of standardized measures and criteria for estimation.

It is cited as all the more of an imperative to coordinate and develop common policies and approaches towards having an effective deterrent in place. Policymakers have concentrated on risk-driven inventive and flexible strategies for cyber defense. Reflecting on the seriousness of their efforts, the European Commission further developed clarifications in the 2018 regulations, identifying the criteria that determined who would be designated an OES (Operator of Essential Services) that would be required to comply with laws and penalties for non-compliance. Essential services include energy, transport, health, water, as well as digital infrastructure.

In emphasizing EU wide criteria for complying with these guidelines, the commission recognized that greater efficiency could be achieved by clarifying the parameters of regulation to ensure uniformity of result. The document provides detailed principles to enable states to meet the basic objectives set forth. As an override of the existing state measures, this further serves to consolidate the cyber defense strategy of the EU. The directives serve to characterize risks, by classifying them, and in defending against cyberattacks, to reduce the frequency of these vulnerabilities.

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<sup>20</sup> In the fierce competition for leadership in this highly strategic market, the Chinese are at the forefront and 5G technology is one of the instruments for implementing the “New Silk Road”, Beijing’s great foreign policy project. China’s Huawei is the leader of the 5G sector and controls almost 30% of the global market. On the other hand, the Nordic companies, Ericsson and Nokia, are alternatives for the bloc.

Finnaly, the significant effect that disinformation has had on public discourse and on voting behavior in several instances has been an area of concern. The EU already possesses a range of instruments to protect electronic communications networks and in combination with its code of practice on disinformation, a self-regulatory mechanism as well as the sanctions regime of May 2019, some progress is expected in this domain.

## 5 The Migration Policy in the European Union

The migration policy of the European Union is closely tied to the underlying rationale of creating a unified European entity in the aftermath of World War II. The concept has its basis in the historical forces that molded European identity following the period of national conflict. Europe found itself confronting fundamental questions regarding nationalism, borders, citizenship, and ethnicity as the societies devastated by conflict tried to move forward with a new vision.

Emerging from all this soul searching were divisions reflecting different experiences and ideologies and groupings mostly identified as East European and West European. Societies formed and re-formed and eventually The Maastricht Treaty, officially known as the Treaty on European Union (TEU), marked the beginning of a new stage in the process of integration. The Treaty was signed on 7 February 1992 by twelve countries that consisted of Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and the United Kingdom. The treaty was ratified following referendums in some instances and resulted in the establishing of the European Union in 1993. As more countries joined the alliance, the cause of European integration continued to advance.

As previously said, the integration laid the foundations for a single currency, the euro, and significantly expanded cooperation between European countries in a number of new areas, that included, European citizenship giving citizens the right to reside in and move freely between the Member States, a common foreign and security policy, and a decision to foster closer cooperation between police and the judiciary in criminal matters.

European integration remained a high priority of the new alliances and agreements that followed the TEU. Since the signing of the Maastricht Treaty, European countries have advanced in growing closer to each other while some areas such as economic and fiscal policies remain at the national level. European leaders have agreed on additional steps to promote further integration between European states on important issues including economic and monetary union, defense, and immigration.

The Dublin Regulation facilitated the application for asylum in the first EU state where the migrant was registered. This was protested by the Greek government and aid agencies which argued that the EU should restructure the Dublin Regulation so that asylum-seekers could be more evenly distributed amongst the various members of the EU. The current system unfairly placed the burden on five countries – Greece, Italy, Spain, France, and Germany – which received most of Europe's asylum applications. Greece, for example, received 70 times as many claims as Hungary, a country of comparable size and wealth.

This resistance to this situation resulted in the disruption of existing open border agreements such as the Schengen protocol<sup>21</sup> and led to several border closings (COLLETT, 2018).

Responding to criticism of the original convention, the Dublin III Regulation which came into effect in 2013 sought to limit the number of places where asylum petitions could be submitted. The “Visegrad” countries, or V4, (Poland, Hungary, Czech Republic, and Slovakia)<sup>22</sup> have not been receptive to any modifications of the agreement and have been strongly resisting the suggestion of equitable distribution. Consequently, the Regulation was suspended temporarily during the 2015 migration crisis and sustained by the ECJ (European Court of Justice) in 2017 (COLLET, 2018).

The V4 group calls for more effective control of the Mediterranean borders, and it is precisely the existing fragilities on border controlling one of the reasons why V4 rejects the policy of compulsory quotas for refugees and the way in which financial support for the subject is being applied. As expected, the Group is particularly concerned about the migration route of the Western Balkans.

But it is worth mentioning that V4 is not the only one that has reacted negatively to migrants, since other countries, mainly from Eastern Europe, have criminalized them, which has generated fierce frictions within the Union. In any case, the problem is clearly demonstrative not only of the absence of common cultural criteria on humanitarian issues but it also draws attention to the risks of a system collapse (CENTRO DE INVESTIGACIONES Y ESTUDIOS ESTRATÉGICOS, 2018, p. 13).

The sense of unreasonable requirements was further enhanced by the perceived inequity of the Lisbon Treaty which suggested a centralized leadership and an emphasis on human rights and democracy promotion in the pursuit of foreign policy, while also enforcing binding rules for withdrawal from the European Union (SCHMID-DRÜNER, 2019). This has interrupted the ongoing attempts to create a united Europe in which territorial identities are subservient to a cooperative construct of a supranational economic entity that is beneficial to all.

It has also resulted in the emergence of a wave of ethnonationalism in several countries which can only be understood about the migrant crisis that appears to have provoked this reaction. The grand European concept of a borderless region sharing peace and prosperity across a multiethnic environment and moving past the historical divisions of nation-states has always had challenges. Nevertheless, it is in response to the unchecked mass migration that the existing fault lines gained prominence as individual societies resisted the imposition of migrant populations on them by central edict.

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21 In the Schengen Area, people, tourists, and other persons legally present on the EU territory can freely circulate without being subjected to border checks. Since 1985, it has gradually grown and encompasses almost all EU countries and a few associated non-EU countries.

22 Bringing together some Central Europe’s countries that share cultural values and common roots in diverse religious traditions, the Visegrad Group – formed on 15 February 1991 – reflects their efforts to jointly work in fields of common interest such as environment, internal security, defense, science and education, transportation, tourism, energy, and information technologies.

On the other hand, migration has benefited from the encouragement it has received through the primacy of global sensitivities towards humanitarian issues. One of the defining features of the present migrant scene is the liberal reception extended by several nations eager to establish their altruistic credentials as open and enlightened societies.

Nations seek to establish their global credentials by asserting their generosity and openness toward human suffering. Thus, leaders have initially opened their societies to unrestrained charity. Subsequently, some of the early responsiveness has been revisited when it has been discovered that the practicality of absorbing masses of individuals faces many obstacles both logically and from the perspective of public opinion. Unplanned assimilation has belatedly led to an examination of the basic premises of migrant reception and in many instances the evaluation is ongoing.

Differences towards migration and open borders associated with the free movement of peoples in Europe has been straining the normative structure that was originally conceived of, and, in addition, these rifts are becoming more established in the aftermath of the adoption of a non-binding Global Compact for Safe, Orderly and Regular Migration in Marrakech by the United Nations Organization<sup>23</sup>.

Despite the large proportion of members who signed the treaty, the event was marked by the withdrawal and absence of several key players from the EU. Austria, the Czech Republic, Hungary, Latvia, Poland, and Slovakia have pulled out of the process. Europeans were increasingly concerned that the governments were losing control of their borders and having to subjugate national interests to a centralized policymaking process (CALAMUR; SCHULTHEIS, 2018).

Proponents have argued that while immigration was a matter of state sovereignty, it also required a greater level of interdependence between countries. Germany, in keeping with its initial enthusiasm for limitless admission of migrants, predictably argued in favor of the UNO initiative and strongly favors an EU wide solution. Nevertheless, individual members of the EU seek different approaches. Germany prefers to send refugees back to their first country of landing. The States that are the landing points for refugees coming from Libya and North African territories have overflowing camps that cannot absorb the sheer volume of migrants.

There is a general agreement that tighter borders should be enforced and the EU should fund staging centers along the North African coast where asylum seekers could be sorted out from economic migrants. While waiting for this plan to be practically implemented, the immediate focus has been on dealing with the refugees who are already in Europe (HENLEY, 2018). Migration continues to remain a central issue in EU relations as its efforts to have a common policy come up against deeply ingrained differences in historical traditions, between political backgrounds of Eastern and Western states, and between its wealthier and poorer members.

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<sup>23</sup> The Intergovernmental Conference to adopt the Global Compact for Safe, Orderly and Regular Migration took place in Marrakech, Morocco, on 10-11, December 2018.

## 6 Final Remarks

Amid advances and setbacks since European countries started to cooperate economically in 1951, the bloc has expanded, laying the foundations of “an ever-closer union among the peoples of Europe”, as envisioned by the Treaty of Rome (1957), thus, giving rise to an audacious economic unification project based on supranational principles or, additionally, in accordance to our conceptual framework, a Pluralistic Security Community constructed on expectations of peaceful coexistence.

However, more than six decades on, in times of increasing uncertainties, this Security Community has been facing several threats in the World Order 2.0, some of them potentially capable of putting at risk achievements hardly obtained, amongst them, one of EU’s greatest symbols of normative power: its long peace. And, more than ever, in order to protect institutions, interests, beliefs, and values in a context whose existing arrangements seem to be increasingly inadequate in dealing with contemporary issues (HAASS, 2017, p. 7), a broad sense of community is required.<sup>24</sup>

Notwithstanding the ideals and logic underlying the concept of a unified Europe, it is clear that achieving consensus on key policies in the contemporary environment is something that is a work in progress, after all, the EU is a dynamic agent, constantly evolving at the pace of major geopolitical changes in the international system. However, despite the efforts, for the European Union the timing could not be more challenging (and, maybe, worse).

Even with the growing optimism demonstrated by Brussels after the announced end of the eurozone debt crisis in 2017, some of the EU’s economies remain fragile. It would be premature to say that the eurozone has already left the crisis behind and the risk to the cohesion of the monetary union no longer exists. Rapid normalization of EU-Russia relations is unlikely since Ukraine remains a key obstacle where no quick progress is to be expected, a crisis that has escalated due to the European support to anti-Russian political movements. Besides, Moscow continues its “saber-rattling” towards the volatile Caucasus as a response to some countries’ attempts to strengthen their ties with the West.

As mentioned, we should also take into consideration the ascension of anti-establishment parties, on both the right and the left, as a relevant political contesting force of the European integration, a phenomenon that is gaining ground, especially in Central Europe. This trend has already materialized in some EU’s member states such as Poland, Hungary, Austria and Slovakia that rapidly slid toward to the so-called “illiberal democracy”, according to Zakaria (1997, 2019) a kind of democratically elected regimes often re-elected or reinforced by referenda that ignore the constitutional limits of their power and deprive their citizens of basic rights and liberties.<sup>25</sup>

<sup>24</sup> In opposition to the arguments advocating the existence of a broader sense of community/identity, political theorists such as Brown (1995, p. 100) point out that this is a longstanding and seriously problematic epistemological issue because a sense of being ‘We’ always requires an ‘Other’ against which to define itself.

<sup>25</sup> Hungarian Prime Minister, Viktor Orbán, in power since 2010, stated that the time has come for a state based on more traditionalist values: the liberal state must give way to the rise of an illiberal state.

As to our objects of analysis, in a nutshell, the possibility of cyberthreats stemming from state and non-state actors such as hacktivists, terrorist and extremist groups calls for more structured coordination among EU members to properly understand what the digital realm is and, on the other hand, to build the trust needed to foster solid cybersecurity governance (CHRISTOU, 2016). Secondly, the refugee crisis has exposed deep divisions across the continent over immigration with relevant consequences, thus, demanding a more flexible and agile manner of dealing with this reality and, accordingly, a less dogmatic vision of the EU in order to make it more resilient to the threat of fragmentation.

Gathered, all these issues, along with many others that were not addressed here, portrait a Europe that seems to be at the brink of a crisis where pressures on States, communities and societies are increasingly rapid and disruptive, a situation that, in turn, invites us to revisit our main question: after all, to what extent cyberthreats and migration can pose risks to UE's core values while a Pluralistic Security Community?

To respond to this question some methodological caveats shall be considered. Firstly, the selected objects of analysis represent only a small sampling of a broader continuum of factors that combined are more likely to result in rupture by jointly contesting the defining elements of this Security Community, namely, its values; capacity of response and predictability of behavior on security and defense issues. So, when isolated, they are, ontologically, only pieces of this puzzle. However, regardless of this limited extension of their explanatory capacities, they may be relevant indicators of potential trends that the EU must be prepared to deal with. But, again, to what extent? As next described, based on the achieved inferences, some causal connections between the EU Pluralistic Security Community's values/interests and externalities related to the objects of our analysis could be delineated.

As to cyberthreats, we may assert that there is wide awareness about the need for common protocols in response to this menace and, accordingly, a recognition of the importance of integrating cyber defenses across the EU as a high priority. As seen, these perceptions tend to converge into agreed actions for the defense of Union's citizens, territory, infrastructure, and supply of critical needs, despite the recognized difficulties in overseen what had been the responsibility of individual states for the most part.

Concerning mutual responsiveness and predictability of behavior on this issue, the evidence demonstrated a greater consensus amongst EU members on cybersecurity governance as the main challenge in this domain once the task demands coordinating cooperation between the private and public sectors in sharing information and identifying threats. As one of EU top priorities, the formulation of a common cybersecurity protocol gained a more robust shape with the creation, in 2016, of a cybersecurity cooperation group (Network and Information Systems) and, shortly after, with the 2018 European Commission regulations, thus, consolidating

the cyber defense strategy of the EU through directives aimed at characterizing risks of cyberattacks in order to reduce vulnerabilities.

Finally, regarding cyber threats, some key-issues not addressed in these pages will, certainly, deserve attention in forthcoming research. This is the case of “narrative wars” and the resulting exposure of citizens to large scale disinformation. In this sense, it should be noted that the European Commission is working to implement a comprehensive set of actions to tackle the spread and impacts of misleading and outright false information (Action Plan Against Disinformation<sup>26</sup>) and to ensure the protection of European values and Institutions.

About migration, this has been a sensitive issue that led to a disruptive wave of ethnonationalism movements in several countries. It is worth highlighting that defining the so-called European identity is far from being a simple task. Some would even say that European identity, in fact, never existed and the alleged current identity crisis triggered by migration and other threats is something confined in the scope of political discourses. On the other hand, also important is the conceptual understanding of identity as a social construction that depends on several factors capable of influencing this common sense of belonging, a feeling that may vary in time, for instance, as a response to a given specific situation as the cases of immigration crisis from Syria and Libya.

Without entering into deeper aspects of the relational logic of ‘Self’ and ‘Other’ that underpins much of this discussion, we assume the premise that over time some characteristics may solidify as elements of collective identity – although not perennially, as suggested by the facts. That said, in this case, we advocated that the observed conflictive perceptions amongst UE members on the problem have acted as a contestatory element of one of its core defining features: a borderless region sharing peace and prosperity across a multi-ethnic environment.

One of the explanations for this situation European integration is facing lies in the noticeable clash between two ontological ideas – nation-state and federalism – leading, in its turn, to a stalemate: some EU core values were conceptualized under the influence of a ‘federalist paradigm’ while their implementation should be achieved within the scope of nation-states. This two-layered framework, as highlighted by Kaplan (2018), feeds trends such as the sensitivity of European nations towards their sovereignty and the rise of Euroscepticism in the integration process.

These facts bred ideational fractures and, concomitantly, intensified the resistance to the ongoing project of Europe as a supranational entity in countries such as Italy, Hungary, Latvia, Slovakia, Austria, Poland, Czech Republic, thus, testing EU’s resilience as an element of collective stability. As a result, we have witnessed the erosion of open border agreements such as the Schengen Protocol due to, amongst other things, the uneven enforcement of migrant’s reception rules within the EU. This is an aspect that certainly deserves attention given its effects on the EU’s responsiveness and predictability of behavior on this issue.

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<sup>26</sup> For additional information see European Commission (2018).

In turn, the EU Global Strategy stands out as a pragmatic response to these facts because it is less ideological in relation to EU Pluralistic Security Community's values and more realistic about its interests or, as defined by Biscop (2016), EUGS is the materialization of a Realpolitik with European characteristics. This perspective means that the EU shall increasingly act as a non-threatening driving force endowed with the capability to deal with normative diversity – and its values-interests dilemma – outside grand abstractions.

In other words, differently from the European Security Strategy, EUGS delivers a more resilient and cautious plan of action considering the complexity and comprehensiveness of the EU's foreign policy. And, in doing so, maybe, for the first time, the EU has been able to assertively define vital interests (EU's citizens and territory security, prosperity, democracy, and a rule-based global order) that have been transformed into political priorities through EUGS.

Finally, considering the inferences, it would be premature, and not advisable, to assert that the outcomes originating from the factors analyzed would represent irreparable risks to European peace and values as a community. But in a wider ontological context – as parts of a combination of externalities – this set of issues could potentially fragilize the ideational pillars upon which the EU Pluralistic Security Community was built notwithstanding the efforts undertaken so far to deal with the challenges of World Order 2.0.

## References

ADLER, E., BARNETT, M. (Eds). **Security Communities**. Cambridge: Cambridge University Press, 1998.

BENDIEK, A. **A paradigm shift in the EU's common foreign and security policy**: from transformation to resilience. SWP Berlin: German Institute for International and Security Affairs, 2017. (Research Paper 11).

BERGBAUER, S. **Explaining European identity formation**: citizens' attachment from Maastricht Treaty to crisis. Cham: Springer, 2018.

BISCOP, S. Letting Europe go its own way: the case for strategic autonomy. **Foreign Affairs**, Clarkstown, 6 jul. 2018. Available at: <https://www.foreignaffairs.com/articles/2018-07-06/letting-europe-go-its-own-way>. Access on: 11 jun. 2020.

BISCOP, S. The EU global strategy: realpolitik with European characteristics. **Security Policy Brief**, Brussels, n. 75, p. 1-6, 29 jun. 2016.

BROWN, C. International political theory and the idea of world community. In: BOOTH, K.; SMITH, S. (eds). **International relations theory today**. Cambridge: Cambridge University Press, 1995. p. 90-109.

BURGESS, M. Federalism. In: DIEZ, T.; WIENER, A. (eds). **European integration theory**. Oxford: Oxford University Press, 2009. p. 25-44.

BUZAN, B. **People, states and fear**: an agenda for international security in the post-cold war era. Chapel Hill: University of North Caroline, 1991.

BUZAN, B.; WÆVER, O. **Regions and powers**: the structure of international security. Cambridge: Cambridge University Press, 2003.

BUZAN, B.; WÆVER, O.; DE WILDE, J. **Security**: a new framework for analysis. Boulder: Lynne Rienner Publishers, 1998.

CALAMUR, K.; SCHULTHEIS, E. A nonbinding migration pact is roiling politics in Europe. **The Atlantic**, Washington, DC, 11 dez. 2018.

CENTRO DE INVESTIGACIONES Y ESTUDIOS ESTRATÉGICOS. **Mirador mundial**: fracturas en la aldea global. Santiago: Academia Nacional de Estudios Políticos y Estratégicos, 2018.

CHAPPELL, L.; MAWDSLEY, J.; WHITMAN, R. The National Priorities of Germany, France and the UK. Enabling or Constraining a Joined-up EU Strategy. In: CHAPPELL, L.; MAWDSLEY, J.; PETROV, P. **The EU, Strategy and Security Policy**. Abingdon: Routledge, 2016. p. 169–185.

CHRISTOU, G. **Cybersecurity in the European Union**: resilience and adaptability in governance policy. London: Palgrave Macmillan, 2016.

COLLETT, E. Borderline irrelevant: why reforming the Dublin Regulation misses the point. **Migration Policy Institute**, Washington, DC, jan. 2018.

CONTE, A.; CLERCK-SACHSSE, J. European Union: preparing for predictable unpredictability. In: BELL, B.; NASSER, F. **The road ahead**: the 21<sup>st</sup>-Century world order in the eyes of policy planners. Brasília, DF: Funag, 2018. p. 139-156.

DEUTSCH, K. W *et al.* **Political community and the North Atlantic area**: international organization in the light of historical experience. Princeton: Princeton University Press, 1957.

DUKE, S.; VANHOONACKER, S. EU-NATO relations: top-down strategic paralysis, bottom-up cooperation. In: CHAPPELL, L.; MAWDSLEY, J.; PETROV, P. (eds.). **The EU, strategy and security policy**: regional and strategic challenges. New York: Routledge, 2016. p. 153-168.

DUROSELLE, J. B. **Europe**: a history of its peoples. London: Viking, 1990.

EUROPEAN COMMISSION. **Action plan against disinformation**. Brussels: European Parliament, 2018. Available at: <https://ec.europa.eu/digital-single-market/en/news/action-plan-against-disinformation>. Access on: 11 jun. 2020.

EUROPEAN COUNCIL. **Cybersecurity in Europe**: stronger rules and better protection. Brussels: European Union, 2020. Available at: <https://www.consilium.europa.eu/en/policies/cybersecurity/>. Access on: 11 jun. 2020.

EUROPEAN UNION. **Cybersecurity strategy of the European Union**: an open, safe and secure cyberspace. Brussels: European Union, 2013.

FERGUSON, N. **The great degeneration**: how institutions decay and economies die. New York: Penguin Books, 2014.

HAASS, R. World order 2.0: the case for sovereign obligation. **Foreign Affairs**, Clarkstown, v. 96, n. 1, p. 1-9, 2017.

HARVEY, A. S. **Amalgamated security communities**. 2011. Dissertation (Doctorate of Philosophy) – University of Kansas, Lawrence, 2011. Available at: [https://kuscholarworks.ku.edu/bitstream/handle/1808/8128/Harvey\\_ku\\_0099D\\_11680\\_DATA\\_1.pdf;sequence=1](https://kuscholarworks.ku.edu/bitstream/handle/1808/8128/Harvey_ku_0099D_11680_DATA_1.pdf;sequence=1). Access on: 11 jun. 2020.

HENLEY, J. EU migration crisis: what are the key issues? **The Guardian**, London, 27 jun. 2018. Available at: <https://www.theguardian.com/world/2018/jun/27/eu-migration-crisis-what-are-the-issues>. Access on: 11 jun. 2020.

INTERNATIONAL ORGANIZATION FOR MIGRATION. **Key migration terms**. Geneva: United Nations, [201-]. Available at: <https://www.iom.int/key-migration-terms>. Access on: 11 jun. 2020.

KAPLAN, Y. (Re)considering sovereignty in the European integration process. **Asian Journal of German and European Studies**, [S.I], n. 3, 5 jan. 2018.

KASPAREK, B. **Migration politics and policies in the European Union**. Athens: Rosa Luxemburg Stiftung, 2016.

KRASNER, S. D. Structural Causes and Regime Consequences: regimes as Intervening Variables. **International Organization**, [S.I], v. 36, n. 2, p. 185-205, Spring, 1982

KRISHNA-HENSEL, S. F. Cybersecurity: perspectives on the challenges of the information revolution. In: CAVELTY, M. D.; MAUER, V.; KRISHNA-HENSEL, S. F. (eds.). **Power and security in the information age**: investigating the role of the state in cyberspace. Montgomery: Ashgate, 2007. Preface, p. 09-14.

LAPORTE, V. **The European Union**: an expanding security community? Bruges: College of Europe, 2012.

MANDELBAUM, M. Pay up, Europe: what Trump gets right about NATO. **Foreign Affairs**, Clarkstown, v. 96, n. 5, p. 108-114, 2017.

MATTHIJS, M. Europe after Brexit: a less perfect union. **Foreign Affairs**, Clarkstown, v. 96, n. 1, p. 85-95, 2017.

MITZEN, J. Anxious community: EU as (in)security community. **European Security**, Abingdon-on-Thames, v. 27, n. 3, p. 393-413, 2018.

MIX, D. E. **The European Union**: foreign and security policy. Washington, DC: Congressional Research Service, 2013. Available at: <https://fas.org/sgp/crs/row/R41959.pdf>. Access on: 11 jun. 2020.

NORDIN, A. H. M.; SMITH, G. M. Relating self and others in Chinese and Western thought. **Cambridge Review of International Affairs**, Cambridge, v. 32, n. 5, 2019.

PARLAMENTO EUROPEU. **Diretiva (UE) 2016/1148 do Parlamento Europeu e do Conselho de 6 de julho de 2016 relativa a medidas destinadas a garantir um elevado nível comum de segurança das redes e da informação em toda a União**. Bruxelas: Parlamento Europeu, 2016. Available at: <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32016L1148&from=EN>. Access on: 11 jun. 2020.

PARLAMENTO EUROPEU. **A proteção dos direitos fundamentais na União**. Bruxelas: União Europeia, 2018. Available at: <https://www.europarl.europa.eu/about-parliament/pt/democracy-and-human-rights/fundamental-rights-in-the-eu>. Access on: 11 jun. 2020.

PIROZZI, N. **The civilian CSDP compact**: a success story for the EU's crisis management Cinderella? [S.l.]: European Union Institute for Security Studies, 2018. Available at: [https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief%209\\_Civilian%20CSDP.pdf](https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief%209_Civilian%20CSDP.pdf). Access on: 11 jun. 2020.

PIROZZI, N. **The external relations of the EC/EU (1957-2010)**: research perspectives and archival sources. Fiesole: European University Institute, 2014. Available at: <https://www.eui.eu/Documents/Research/HistoricalArchivesofEU/FriendsofArchives/FriendsHAEUConfPirozzi.pdf>. Access on: 11 jun. 2020.

PIROZZI, N.; BONOMI, M. (2019). A new idea of Europe: the challenge of flexibility. **IAI Commentaries**, Rome, n. 19. v. 4, 2019. Available at: <https://www.iai.it/en/pubblicazioni/new-idea-europe-challenge-flexibility>. Access on: 11 jun. 2020.

QUEIROZ, F. A. Hydropolitics in South American international relations: a perspective on water governance at the Prata Basin: between conflict and cooperation (1960-1992). *In*: KRISHNA-HENSEL, S. F. (org.). **New security frontiers**: critical energy and the resource challenge. London: Ashgate, 2012. p. 139-173.

RICHARDS, K.; LASALLE, R.; VAN DEN DOOL, F. **2017 cost of cyber crime study 2017**: insights on the security investments that make a difference. Traverse City: Ponemon Institute LLC, 2017. Available at: <https://www.accenture.com/us-en/insight-cost-of-cybercrime-2017>. Access on: 11 jun. 2020.

SCHMID-DRÜNER, M. Immigration policy. **Fact Sheets on the European Union**, Brussels, dez. 2019.

SCHULMEISTER, P. **Delivering on Europe**: citizens' views on current and future EU action. Brussels: European Parliament Eurobarometer, 2018. (Survey 89.2).

SCHWARTZ, M. J. Europe passes landmark cybersecurity law. **Data Breach Today**, Princeton, 8 jul. 2016. Available at: <https://www.databreachtoday.asia/europe-passes-landmark-cybersecurity-law-a-9244>. Access on: 11 jun. 2020.

SMITH, M. E. Transatlantic security relations since the European security strategy: what role for the EU in its pursuit of strategic autonomy? **Journal of European Integration**, v. 40, n. 5, p. 605-620, 2018.

SPRING, T. EU struggles to determine growing cost of cyberattacks. **Threat Post**, Woburn, 12 ago. 2016. Available at: <https://threatpost.com/eu-struggles-to-determine-growing-cost-of-cyberattacks/119870/>. Access on: 11 jun. 2020.

TELÒ, M. **International Relations: A European Perspective**. Farnham: Ashgate, 2009.

UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES. **Global trends: forced displacement in 2017**. Geneva: United Nations, 2018. Available at: <https://www.unhcr.org/5b27be547.pdf>. Access on: 11 jun. 2020.

VAN DER MEULEN, N.; JO, E. A.; SOESANTO, S. **Cybersecurity in the European Union and beyond: exploring the threats and policy responses**. Brussels: European Parliament, 2015. Available at: [https://www.rand.org/content/dam/rand/pubs/research\\_reports/RR1300/RR1354/RAND\\_RR1354.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RR1300/RR1354/RAND_RR1354.pdf). Access on: 11 jun. 2020.

ZAKARIA, F. The rise of illiberal democracy. **Foreign Affairs**, Clarkstown, v. 76, n. 6, p. 22-43, 1997.

ZAKARIA, F. How to handle illiberal Europe. **Fareed's Global Briefing**, Atlanta, 12 fev. 2019. Available at: <https://mailchi.mp/cnn/how-to-handle-illiberal-europe?e=e21d2fdb8>. Access on: 11 jun. 2020.



# An anti-narcotic look at Colombia in post-conflict

*Una mirada antinarcótica a la Colombia en posconflicto*

**Abstract:** The objective is to describe the results and challenges of post-conflict anti-drug policies covered from 2016, when the Peace Agreement with the FARC was signed, to the first half of 2020. A descriptive methodology is used, applying the inductive method through the collection of updated information with qualitative research instruments that, on occasions, are supported by quantitative standards. The exogenous conditions coming from the marijuana market in the United States, the cryptomarkets and the anti-drug policy destined for Colombia are exposed, showing how not attending to all endogenous factors in depth promotes a political polarization regarding the legality and illegality of psychoactive substances and their respective consumption. The most relevant results focus on the paradigmatic contradictions and the situations of non-victory of the war on drugs. Concluding with recommendations for an urgent post-contemporary diagnosis.

**Keywords:** Drug trafficking. Security. Consumption. Post-conflict. Colombia.

**Resumen:** El objetivo es describir los resultados y retos de las políticas antinarcóticas en el posconflicto. Comprendidos entre 2016 cuando se firma el Acuerdo de Paz con las Farc y hasta el primer semestre del 2020. Utiliza una metodología descriptiva que aplica el método inductivo a través de la recolección de información actualizada con instrumentos cualitativos de investigación que, en ocasiones, se apoyan de estándares cuantitativos. Se exponen las condiciones exógenas provenientes del mercado de marihuana en Estados Unidos, los criptomercados y la política antinarcótica destinada a Colombia, sin atender todos los factores endógenos a profundidad. Fomentando la polarización política respecto de la legalidad e ilegalidad de las sustancias psicoactivas y su consumo respectivo. Los resultados más relevantes se enfocan en las contradicciones paradigmáticas y las situaciones de no victoria de la mal llamada guerra contra las drogas. Concluyendo con recomendaciones para un urgido diagnóstico postcontemporáneo.

**Palabras clave:** Narcotráfico. Seguridad. Consumo. Posconflicto. Colombia.

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## 1 Introduction

Before 1945, in the realist school of International Relations, the possibility of using the Military Forces of a regular State as a sovereign tool to solve international conflicts against other sovereign State or States, unilaterally or under the formation of ideological and mainly geostrategic alliances, prevailed. This is how the military coalitions that had clashed in the first half of the 20th century worked, erasing and re-painting the European map.

The socio-political contexts of the world wars led to the abuse of rights in terms of the first provisions of Geneva, in terms of International Humanitarian Law, causing the creation of the *ad-hoc* tribunals of Nuremberg and Tokyo, under the premise of disrespect for the established rules on weapons and conventional methods of warfare. Thus, Transitional Justice as a legal-political concept was born after the Second World War, making international standard change completely.

Contemporary international law prohibits generally the use of armed force to solve international conflicts and, on the contrary, obliges sovereign States to opt for alternative dispute resolution mechanisms, whether judicial or extrajudicial, with a view to putting an end to the confrontations that maintain them in dispute. In addition, it only allows, at least from the theoretical and deontological postulates, the use of armed force in exceptions such as the use of legitimate defense, humanitarian assistance and resolutions issued by the United Nations Security Council.

However, drug trafficking is a controversial issue that has generally been assumed on the contemporary scenario as associated with the security sector and has been crucial to the structuring of central and peripheral agendas as a strategic urgency to mitigate its transversal effects. These central-peripheral international relations are characterized by their asymmetric condition. Thus, states that are weak in political power relations generally give in diplomatically to the recommendations coming from their respective political hegemons.

In Colombian case, it is not a surprise that the hegemony of the United States of America has been established, especially in the diagnosis and design of anti-narcotic policies. The doctrine has described it as a model where the paradigmatic rules of the realist school are established, where the world is anarchic and where disputes are solved under the law of the jungle or of the strongest.

Both Europe and the United States have cooperated since the 1980s on military and financial issues to combat drug trafficking (MONTENEGRO RINCO; DURÁN ESTUPIÑÁN, 2008). It has been decreed that legitimate force is necessary to combat this threat (BUZAN; WÆVER; WILDE, 1998). A very important issue of national security.

With the passage of time, more positive elements have been incorporated from the constructivist schemes, and we even find central States with policies that are beginning to be progressive in the delimitation of the legal framework related to the controlled consumption and sale of drugs that we can consider traditional, especially in the case of marijuana, as is the case of the United States of America specifically. Other drugs are imported by the demands of

local consumption, such as synthetic drugs, whose underground or illegal enterprises are mostly in cyberspace.

The wrongly named *war on drugs* does not respond to the theoretical postulates to classify it in this manner. It is not a regular confrontation of the Armed Forces of a state against another drug state, is it?

### 1.1 Armed conflict, post-conflict and drug trafficking

For the development of our objective, we allow ourselves to explore in depth the doctrinal concepts related to armed conflict, post-conflict and drug trafficking.

The scope of the Colombian armed conflict and its deep roots in the culture of structural political violence experienced before and after the independence of the State go beyond the strictly legal and sovereign limits.

The legal nature according to which the Colombian armed conflict has been classified is of an internal or non-international type, composed of endogenous armed actions that incite “hostilities directed against a legal government, which present a collective character and a minimum organization. Situations of political or social tension within a State cannot technically be considered an internal armed conflict” (CRUZ ROJA ESPAÑOLA, [2019?], our translation).

Internal armed conflict carries with it many elements common to classical wars but these are developed within a state. An internal armed conflict is in theory strictly internationalized when “one or more foreign states intervene with their own armed forces in favor of one of the parties” (VERRI, 1998, our translation). The official legal definition is:

conflict taking place [...] on the territory of a high Contracting Party between its armed forces and dissident armed forces or organized armed groups which, under the leadership of a responsible command, exercise control over a part of that territory such as to enable them to carry out sustained and coordinated military operations and to implement the current Protocol (UNITED NATIONS, 1977, our translation).

The proliferation of internal or non-international armed conflicts has given rise to the content of the third provision common to the Geneva Conventions, which covers non-international conflicts that occur in the territory of a state party. The rule specifically covers non-international armed conflicts, civil wars, internal conflicts with international consequences, internal conflicts with international intervention, etc. Common Article 3 “extends the principles of the Geneva Conventions to non-international armed conflicts and sets aside some obstacles of national sovereignty” (SPOERRI, 2009, n.p., our translation). It is a mini-agreement that the International Court of Justice referred to as a compendium of elementary considerations of humanity.

In the event of an armed conflict not of an international character, arising in the territory of one of the High Contracting Parties, each Party involved shall have the obligation to apply at least the following provisions:

1. Persons not taking a direct part in the hostilities, including members of the armed forces who have laid down their arms and persons placed hors de combat by sickness, injury, detention or any other cause, shall in all circumstances be treated humanely, without any adverse distinction based on race, color, religion or belief, sex, birth or wealth, or any other similar criteria.

In this sense, it is prohibited, at any time and in any place, with respect to persons mentioned above:

- a. attacks against life and body integrity, in particular murder in all its forms, mutilation, cruel treatment, torture and physical abuse
- b. taking of hostages
- c. attacks against personal dignity, humiliating and degrading treatment
- d. sentences passed and executions carried out without previous judgement by a regularly constituted court, with judicial guarantees recognized as indispensable by civilized peoples

2. The wounded and sick will be collected and assisted.

An impartial humanitarian agency, such as the International Committee of the Red Cross, may offer its services to the Parties involved in the conflict... (ARIAS, 2019, p. 83).

The minimum steps (ÁNGEL, 2012) to be taken by a state in the course of armed conflict are as follows:

- Before the Armed Conflict: States must implement preventive measures that guarantee compliance with IHL: multiply the normative content and the sanctions to the compliance gives rise.
- During Armed Conflict: Regulatory frameworks must be respected from their inception to their formal end.
- Post-Armed Conflict: The state must take the respective actions to achieve conditions as close as possible to the *status quo ante*. In addition, it must implement normalization procedures such as the release of prisoners, the repatriation of foreigners, the return of victims to their places of origin, the monitoring of medical treatment, the clearing of minefields and the psychological support required to overcome the traumas generated by the development of armed conflicts.

Now, with the controversial Peace Agreement signed with the Farc-Ep, a guerrilla group that after several failed historical-political attempts, gave up its weapons in an implementation process that began in 2016.

2018 was the most violent year against social leaders and ex-combatants of the Farc-EP. Between 2016 and May 2019: 837 deaths. Assassinations that have geographical characteristics: 71.08% of those killed defended the territory and natural resources. Deaths related to coca crops, either substitution or forced eradication pacts total 77 since the signing of the Agreement: 2 in 2016, 20 in 2017, 44 in 2018 and 5 in 2019 (GARAVITO, 2019).

In 2018 the homicide rate per 100,000 inhabitants was 24.3% for a total of 12,130, according to the Forensis Report: Data for Life, which stands out as the highest in the last four years in Colombia, according to the entity, due to the violence of the groups that emerged or grew stronger after the disarmament of the ex-guerrilla FARC. It warned about the new emerging violence that is coming back with all force, especially in the municipalities where the Gulf Clan, the largest drug trafficking organization formed by demobilized paramilitaries in 2006, the ELN guerrillas and FARC dissidents, operates in Bajo Cauca, Catatumbo, Putumayo, Cauca and Nariño, where drug plantations are concentrated and illegal mining is a source of resources for armed organizations (TASA..., 2019).

There are 8,944,137 victims reported up to now from the armed conflict (UNDAD..., 2020), since 1985, given that since that year they are considered as victims by the legal system. However, the contemporary conflict is much older, and the violence it represents is a small proportion of that which occurs outside it. The risk of Farcim's multiplication is more latent than ever. Because all attention is focused on peace, one of a partial kind. While the other types of violence continue to make up their vicious circles. Peace is everyone's responsibility, even if a few are responsible for the conflict. Peace is built from the inside out, from the rural to the urban and with the prevalence of national, not foreign, identities (ARIAS, 2016). Adding the foundations that proclaim respect for multicultural scenarios from which diverse post-contemporary identity patterns arise, well explained by Huntington (1996).

By 2020, the vast majority of those reintegrated into the FARC-Ep have complied with what was agreed and they are developing productive projects supported by the State and the international community. Other leaders returned to arms, grossly violating and wasting their qualities as congressional representatives. This special process is often called the Colombian post-conflict process.

The Colombian post-conflict is partial, with a negative peace according to Galtung's postulates. It theoretically obeys to a:

period of time following the total or partial cessation of armed conflict. It can be understood as a single-attribute concept: the reduction of the number of homicides related to the conflict below a certain threshold, which gives or denies it the status of active conflict. (POSTCONFLICTO, [2019?], n.p., our translation).

To understand the post-conflict with the FARC as the end of the Colombian internal armed conflict is an exaggerated understanding since the post-conflict is in this case defined according to the particular conflict mentioned and does not include all the elements of the conflict.

Many people have thought that the appropriate term is post-agreement, since it is not about the end of the conflict but the implementation of a peace agreement, which has the following stages:

1. Stabilization (36 months after the signing of the peace agreement), seeking to reduce the indicators of violence and preventing the resurgence of new waves of terror; and 2. Normalization: consolidate the exit of criminal actors

and illegal economies, making the transitional justice model effective in order to guarantee the non-repetition of such acts. (FUNDACIÓN PAZ Y RECONCILIACIÓN, 2018, our translation).

Finally, drug trafficking was considered a political crime:

is spatially fragmented, so that the members of this productive chain demand a wide range of goods and services from the legal economy, whose operation is complex and costly, forcing reductions in operating costs through the formation of criminal enterprises that operate with a high level of subcontracting. (VARGAS, 2005, p. 138, our translation).

This legal classification makes it clear that drug trafficking is a transversal issue that integrates several actors that must restructure themselves in order to continue with the narcotic activities, after the departure of one of the main actors in the sector, such as the Farc, mixing the condition of the drug traffickers that is blurry by the discourse:

[...]the main threat [...] influencing territorial control... do not have a defined political identity, they carry out actions in exchange for economic interests, with no interest in affecting national security, they sell themselves to the highest bidder but intimidate and control areas where the marginalized population and the territorial spaces whose topography makes the work of the authorities difficult and facilitates criminal action. (ESDEGUE, 2017, p. 275, our translation).

Drug trafficking takes advantage of the differentiated characteristics of the national geography (Ortíz, 2007). Since 2006, the subterranean company merged with other criminal groups. According to Haesbaert (2007), territoriality implies dominion and appropriation, dominion from the strictly functional and appropriation from the territorial, the symbolic and cultural things. The very multidimensionality of the threats means that national borders cannot be recognized when talking about a security system (NATIONAL DEFENSE UNIVERSITY, 2000). The production of security has social spaces with permanent evolution of multiple forms of violence and their actors, and the lack of protection of the majority has contributed to increase the inequality and where failed solutions are recycled at the rate of the cycles of violence (LOADER; WALKER, 2007). Encouraging, as Clifford Shearing and Jennifer Wood (2007) note, “imagining other security, other governance practices and putting it in action” (ABELLO, 2012, p. 14, our translation).

Since 2017, the Prosecutor’s Office has reported that the crime that most impacts citizen security is “drug trafficking for internal consumption” (EL HERALDO, 2017, our translation). The UNODC<sup>1</sup>, reported in 2018 the increase in consumption of all substances in Latin America and the Caribbean (UNITED NATIONS, 2018).

So, drug trafficking has been historically linked to violence. However, as Francisco Gutiérrez Sanín explains, violence precedes the history of drug trafficking, especially linked

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<sup>1</sup> United Nations Office on Drugs and Crime.

to the Colombian political culture and the dispute for property rights in the midst of a continuing armed conflict, whose main characteristics are thus exposed:

1. militaristic orientation of the Farc that was finally based constantly on drug trafficking;
2. centrality of land with illegal *investments*; and
3. dispersion of paramilitary interests, which led to a situation of anarchy (GALLÓN, 2015).

Drug trafficking has contributed to maintaining Colombia's traditional political violence and to the continued inequity of the political system in a paper democracy that functions in a semi-repressive regime (GUTIÉRREZ SANIN, 2001). The drug trafficking phenomenon has embodied the values, aspirations, hatreds and fears of a large part of Colombian society (CAMACHO GUIZADO, 1992)

The traditional drug trade was equipped with a good team of weapons to carry out its imposed social transactions and its expansionist mission (DUNCAN, 2005). However, over the years and after its narcotic journey in contemporary political history, we can affirm that its greatest capacity is not that of weapons but its power of infiltration into conventional economic, social and political circuits (MEDINA, 2012). A balloon effect was unleashed when the traffickers became associated with guerrillas and paramilitaries (CALVANI, 2006).

The power of the drug trade lies in the illegality that raises the prices of commercialized drugs, quickly assumed by both intermediaries and consumers, and by all legal and illegal subjects and actors. Assuming the weakness of the state and the inefficiency of the judicial systems as common denominators (NÉMOGA, 1995, p. 107). Weakness manifested in "the use of privatized violence [...] largely promoted by the Occident" (AZZELINI, 2005, our translation). Thus, we can start from the statement that: "the international fight against drugs led by the United States has been wrongly focused on Colombia and other countries in the region, when it is possible that it will be the first global conflict" (RAMÍREZ, 2011, p. 22, our translation). Not to mention the non-traditional drugs traded on the Dark Web.

## 1.2 Anti-drug policies and non-traditional markets

The main philosophical ideas that have structured the classical paradigms of international relations frequently used in the designs of public policies of the States to combat the phenomena associated with drug trafficking, can be classified as follows: the "traditional, realistic or statocentric...; 2. Of the dependence... neo Marxist or structuralist...; 3. The paradigm of the global society, transnationals or of the interdependence" (ARENAL, 2010, p. 29, our translation). Also called: realism, rationalism and revolutionism or functionalism.

A world that is "irreversibly globalized" (BESIO, 2003) offers the possibilities for development to drug trafficking. Comparative studies corroborate that repressive measures related to seizures and detentions, and greater penalties, do not affect either prices on the black market or the control of consumption (POLLACK; REUTER, 2014).

In 2019, coca cultivation increased by 212,000 hectares, a slight increase from 208,000 hectares in 2018, according to the White House Office of National Drug Control Policy. Duque accepts the pressure to reduce cultivation by promising to eradicate 130,000 hectares of coca in 2020, including the possibility of reinstating aerial glyphosate spraying, suspended in 2015 on the recommendation of the WHO, given its carcinogenic effects, among other damages to health and the environment. The interstate goal is a 50% reduction until 2023. (INFOBAE, 2020a).

In 2015, the National Environmental Licensing Authority (ANLA) suspended the aerial spraying of glyphosate, complying with the recommendations of the WHO and the considerations of the Constitutional Court of 2014, but in 2020 it is intended as we saw, to return to spraying it following the U.S. policies (PAZ CARDONA, 2020), who have moved away from this health agency because of its measures in the Covid-19 Pandemic.

After four decades of frontal fight against drug trafficking in the Colombian territory, with great contributions from the international cooperation, Colombia broke its own record in the cultivation of the raw material of cocaine: the coca leaf. This is due to the calculation of crop eradication figures. The manual eradication of 94,000 hectares of 100,000 hectares destroyed in different ways was reported, not determined, given the political controversy regarding the use of glyphosate. Just as Colombia remains the world's largest cocaine producer, the United States remains the largest consumer. Seventy percent of the world's coca is Colombian, and transnational networks are moving in after the disarmament of the Farc, especially the national armed groups and Mexican cartels, such as Sinaloa, mainly (INFOBAE, 2020b).

Other violent actors interested in the drug business have recaptured the territories cleared by the FARC-EP. All this process of adaptation and change of the criminal organizations because of an intervention, far from ending the micro-trafficking dispersed, just strengthened it. They learned to reinvent themselves, because once detected by the authorities, criminal organizations tend to disperse and rearrange themselves into new, smaller organizations that allow them to become invisible to the state (DUNCAN; VELASCO, 2014).

Illegals must compensate in their markets for the impacts of the actions of the authorities that cause the decentralization of crime, including towards the periphery of the city. The panorama is clearly aggravated if the current objective of Colombia's anti-narcotics policies is analyzed (FUNDACIÓN IDEAS PARA LA PAZ, 2017). The problem simply spread to nearby areas (FUNDACIÓN IDEAS PARA LA PAZ, 2017). Similarly, the drug trades in their transnational expansion seek to lower export prices by processing larger quantities (ROCHA, 2011). Common logic in any market.

Colombian drug traffickers since 1993 have seen their strategic powers in the drug business seized like their submarines carrying coca. Just when it was being demonstrated to the world that the dismantling of the big cartels would bring the war on drugs to an end, after the murder of Pablo Emilio Escobar Gaviria. Since they have appropriated from the media that the groups dedicated to drug trafficking preferred to use the submarines to

avoid the easy detection of the speedboats. These submersibles can cover about 3 thousand km, floating and navigating with GPS and GNSS satellite system, as well as being coated with lead avoid detection by infrared viewers (SAUMETH, 2006). The DEA and the Police report that these semi-submersibles are assembled in southwestern Colombia, in territories controlled by the Farc and Los Rastrojos, among the main (SAAVEDRA, 2011).

Drug trade must be suppressed with regulatory equity against the various key links in the illicit trade chains (BLUMSTEIN, 2003). Addressing serious crimes, such as conspiracy to commit a crime, homicide, or the carrying of weapons, first (UPRIMNY YEPES; CHAPARRO-HERNÁNDEZ; CRUZ OLIVEIRA, 2017), not just continuing to persecute the employees of these organizations, who subsist on micro-trafficking, and attacking the consumers making them look like criminals.

In addition, traditional drugs are almost exclusively prosecuted by dismissing the wide variety of substances that come from abroad and many others that are consumed legally in Colombia. The vast majority of the catches are associated with domestic consumption (TOBÓN; GUTIÉRREZ, 2015), neglecting the nets that come from Europe and the United States, such as cryptomarkets.

Cryptomarkets have not escaped of the effects of the economic and financial globalization and of the technological revolution brought by the commercialization in the Internet in the nineties of the 20th century. Likewise, transnational networks dedicated to the production, distribution and sale of drugs have been innovating their markets using virtual portfolios.

The online drug shops are a revolution that is not very well known in 2020, but they are more profitable than the traditional drug trade. There is a latent existence and daily use of illegal electronic platforms that use regulatory gaps in the telecommunications sector to offer greater advantages to their users than the largest and most successful legal online stores in the world in the twenty-first century such as eBay, Amazon and PayPal. Comparative advantages reported by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), such as not completing electronic transfers until the product is delivered, because it is sometimes seized by the authorities. With respect to their illegal competitors with physical or traditional sales, they offer better products and better prices, understanding that their users must also make an effort to understand the purchase and sale platforms and accept that the products are not for immediate delivery (LERENA, 2017).

Additionally, cryptomarkets offer via their platforms the clandestinity of buyer's data. Tor, for example, is one of those electronic platforms that carry out a varied trade, legal and illegal, on the dark web or dark network, which uses virtual currencies or cryptocurrencies such as bitcoin (OLLERO, 2017).

There are already guilty sentences in the United States for this type of online store. In 2015, Ross William Ulbricht was condemned to life sentence. Ulbricht directed Silkroad, a virtual illegal company that earned in three years more than 1 billion dollars from its more than 200,000 clients from all over the world for its portfolio of 14,000 illegal products and providing illicit employment to almost 41,000 salespeople. The FBI, DEA and Europol, in a joint operation, shut down two illegal virtual platforms: AlphaBay and Hansa.

However, the buyers quickly migrated to new sites in cyberspace. These markets have been shown to grow by an average of 200% per year (OLLERO, 2017).

Advertising is done in dynamic, closed groups via YouTube, WhatsApp and social networks, which makes the detection work of the authorities almost impossible. However, compared to traditional markets, virtual drug trafficking is a peaceful illicit activity. It shows that violence in this context is linked to the declared illegality of the substances. Since it is no longer necessary to have a dispute between gangs to take over traditional or physical distribution and sales areas (OLLERO, 2017).

These obscure platforms of course are not indexed in Internet search engines (CASTELLS, 2017). They are a new form of representation of asymmetrical globalization that goes unnoticed by the weak controls of cyberspace. If it has not been possible to control physical space, think of the virtual space. These are the challenges that must be faced and dynamically accepted by the security schemes of post-contemporary states.

Meanwhile, the United States, with Colombia's permission, has been present with a new military anti-drug mission since June 2020, in the midst of a pandemic and civil disobedience in its confederate states because of the murder of an African descendant under the knee of a police officer. Nerveless is also deploying an international operation against the Venezuelan government as a narcotics threat, intervening Venezuela because of a narcotic reality that has been the daily bread of Colombia for several decades. However, Colombia is still cooperating with the world to confront a reality difficult to control and that every day becomes more and more inserted in its society and state.

### 1.3 Consumption of illicit substances in Colombia

The Colombian Drug Observatory, which is part of the Vice-Ministry of Justice, estimated in 2019 that the consumption of almost all illicit substances in the country has been increasing for six years:

**Chart 1 – Students' consumption**

12.4 % of marijuana users tried it before their 10th year.
11.7 % of Colombian schoolchildren have used marijuana.
adds Deputy Minister Espinosa Palacios– because they used it as glues or cleaners for electronic equipment.
School consumption increased as follows: marijuana 156.4%, cocaine 53.3, basuco 44.4 and ecstasy 112.8%.
Increase in university use: 38%; cocaine 28%; amphetamines 125%.
69% of coca users are dependent
Between 2008 and 2018, coca cultivation doubled and manual eradication fell by 35%.

Source: Own elaboration with information of Gossaín (2019).

Making a brief overview of the essential regulations on consumption in the Colombian State, we can highlight the following moments of specific public policies applied at the national level:

Chart 2 – Public policies for drug consumption

1994 – Sentence C-221 of the Constitutional Court	Allowed personal doses – possession of 20 grams of marijuana; 1 gram of cocaine and its derivatives; no other substances specified. – Impossibility of detention	No penalty for the minimum dose. Justification: right to free development of personality. The minimum dose does not have a significant effect on consumption.
2016 – Sentence 2940 – Supreme Court of Justice	Allowed the supply dose – did not specify quantities. An <i>intuitio personae</i> case study should be done. Considering the carrier as a disease-addict. It has not been specified who is the owner of the object of evidence	The dose of supply does not significantly affect the increase in drug consumption
1998 – Andrés Pastrana – President	<i>Programa Rumbos</i> (Program Ways) – Coping with Consumption (Decree 127, 2001)	First time that consumption became part of a government platform. Objectives: <ul style="list-style-type: none"> <li>• reduction in demand</li> <li>• international cooperation (management of endogenous and exogenous resources)</li> <li>• Generation of preventive consumption strategies</li> <li>• Promotion of research and practical strategies in selected territories.</li> </ul>
2003 – Álvaro Uribe – President	Cancelled the <i>Programa Rumbos</i>	
2006 – Álvaro Uribe – President	Created the Commission National Drug Demand Reduction, with 15 national entities and UNODC.	
2007 – Ministry of Health and Social Protection with the commission National Drug Demand Reduction and UNODC	Creation of the National Policy for the Reduction of Drug Consumption and its Impact.  This is a public health issue, not a criminal one	Suppression of the competence of the National Directorate of Narcotics of the Ministry of Justice and Law
2012 – Juan Manuel Santos – President	Rule 1566, 2012	Guidelines to guarantee comprehensive attention to drug users
2015 – Juan Manuel Santos – President	National Plan for health promotion, prevention and care of psychoactive substance use 2014 – 2021  5 axes: i) institutional strengthening; ii) promotion of coexistence and mental health; iii) prevention; iv) risk and damage reduction and v) treatment.	Creation of the National Technical Commission for Drug Demand Reduction

continued

Chart 2 – Continuation

2018 – 2nd Government of Juan Manuel Santos Calderón	Future Route: i) development of protective environments for consumption; ii) prevention of risk factors for the consumption of these substances; iii) comprehensive treatment; iv) social inclusion and v) management, articulation and sectoral and intersectoral coordination.	Public health and human rights approaches for consumers
2019 – Government – Iván Duque	Resolution 0089-2019	Integrated policy for the prevention and care of the consumption of psychoactive substances Not implemented National Plan 2014 – 2021

Source: Own elaboration of information of the *Comisión Asesora para la Política de Drogas en Colombia* (2015).

It is worrying that of 793 new psychoactive substances detected in Colombia between 2009 and 2016, only the personal dosage of traditional marijuana and cocaine will continue to be regulated. Likewise, the National Statute of Narcotics (Law 30 of 1986) dedicated only two articles to the control of demand (COMISIÓN ASESORA PARA LA POLÍTICA DE DROGAS EN COLOMBIA, 2015).

In 2019, the Government announced the appearance of 33 new drugs of chemical or vegetable origin and the application of a technique for rendering the drugs with other substances in order to increase their profits in their sale to the public. Finally, consumers do not know what they are using (GOSSAÍN, 2019). This is a direct problem for the health of the consumers and one of the main irresponsibility of the illegality of these substances.

Another aspect where the lack of responsibility of the state and the great majority of states in the post-contemporary international system is perceived, by making this type of substance of permanent consumption illegal. The problem is that the contents do not have any type of control, which means that the consumers do not know for sure the content of the drugs they use, which is usually one of the greatest causes of death by overdose. People do not die by using drugs, but because of the content of them, or the abusive use of different ones that generate intoxication. Deaths are used to demonize consumption and avoid investment and research in health and education, following the issue of drugs from the mere perspective of security.

There is an urgent need to legalize and regulate the consumption of psychoactive substances in order to reduce the risks to the health and safety of the population and to minimize the damage associated with illegal trade. It is necessary to be responsible and consistent with legal and factual reality, which would allow individuals to regulate their personal and private activities in the way they are now, that is, using drugs. This would generate, in the long term, a responsible and favorable scenario for dealing with chronic cases of dependency, if it is the same individual who asks for state aid (GLOBAL COMISSION ON DRUG POLICY, 2014).

The new generations of Colombians are particularly concerned, since school victimization rates are increasing, in line with the impact of the presence and sale of psychoactive substances on education centers in Bogotá, the largest proportion is marijuana, followed by ecstasy pills, glue and other types of psychoactive substances:

**Chart 3 – Percentages of the increase in school consumption**

Public schools – 37.5%
Concessionary schools – 29.4%
Contracted schools – 26.3%
Private schools – 22.9%

Source: Own elaboration of information obtained from the Mayor's Office of Bogota (2015).

In the capital, homicides are largely concentrated in areas where seizures of psychoactive substances are common, but a causal relationship cannot be assured (BULLA et al., 2016).

Just as Pablo Emilio Escobar Gaviria used minors as hitmen so that if they were captured they could not be imprisoned and he would not lose his armed forces, criminal networks also use minors to distribute their micro-markets. Between 2012 and 2018, 50,742 children and adolescents were reportedly apprehended for the crime of trafficking, manufacturing or carrying drugs (EL ESPECTADOR, 2019).

One of the possible negative trends is to continue applying the "Streetlight effect," focusing the attention of the authorities where is lighter, or in other words, where there is more noise. Under this justification, there was a regression in jurisprudence regarding the deregulation of personal dosage in Colombia, after the issuance of the Decree 1844 in 2018, persecuting consumers and those who make supplies for permanent consumption.

Decree 1844 of 2018 regulated the National Code of Police and Coexistence, and with respect to the regulation and penalization of the consumption and carrying of psychoactive substances, we must highlight the following articles:

**Chart 4 – Behaviors contrary to proper coexistence**

33: Behaviors that affect people's tranquility and respectful relationships between people... Use of substances ... psychoactive or prohibited ...
34: Behaviors that affect coexistence in educational establishments... Drug use... Having, storing, facilitating, distributing, or selling... drugs...
39: Prohibitions on children and adolescents... Selling, distributing, possessing, storing, carrying or consuming psychoactive substances...
59: Behaviors that put the life and integrity of persons at risk in... non-complex public gatherings... 9. Those who, when travelling to an act or event, or during its development, in the event or in its surroundings, carry, consume, or are under the influence of psychoactive substances...
140: Behaviors contrary to the care and integrity of public space... 7. Consumption... of psychoactive substances...

Source: Own elaboration (2020).

It is important to note that in the temporary cut between 2010 and 2016, the apprehending that were recorded, consolidated 94% of the apprehending in situation of concomitant flagrance and the retained ones did not have significant amounts of weight superior to personal dose (COLOMBIA, 2016a). At the same time, the highest percentage of those arrested were released for lack of evidence linking them to a distribution network. It should be noted that significant interventions against large retail networks have generally identified the involvement of members of the police in this illegal market (BORRADOR DOCUMENTO CONPES, 2017).

Between January, 31 2017 and February, 26 2019, 1,733,727 types of behavior were reported, 45% corresponded to three types of behavior: the consumption of alcohol and psychoactive substances in public spaces, which is the most recurrent (22%), followed by the possession of sharp weapons (15%), and fights (7%) (FUNDACIÓN IDEAS PARA LA PAZ, 2019).

Duque emphasizes the realistic and neo-realistic tendencies that have empowered right-wing security analysts, and in the midst of a post-conflict scenario, where the FARC left promising territory for drug-trafficking entrepreneurs in Colombia, the region and its transnational networks, the *El que la hace la paga* (The one who makes it pays it) plan was created. Through this plan, it is intended to dismantle the centers of collection and massive consumption of psychoactive substances, attacking the micro-traffic and recovering the public space from the practices of personal dose consumption (PRESIDENCIA DE LA REPÚBLICA, 2018).

Certainly, consumption is not a uniform phenomenon, but suffers from several variations depending on the substance in question. Colombia is beginning to be classified not only as a producer and distributor but also as a consumer (NATIONAL PLANNING DEPARTMENT, 2016), losing its category of insignificant consumer despite abundant supply given in 2013 (PÉREZ GOMEZ, 2013).

Likewise, there are no patterns of consumption or forms of distribution, of their links, of profits, of the forms of associated violence, or of their levels. The size of the markets and their territorial deployment also varies, changing depending on the substance and in each particular context (BOYUM; CAULKINS; KLEIMAN, 2011).

The Report on Drug Use in the Americas of the Inter-American Drug Abuse Control Commission (CICAD) of 2019 determined that there are still difficulties at the regional level to identify for sure trends related to the consumption of psychoactive substances, so it can be concluded that there is no consistent pattern in Latin America (ORGANIZACIÓN DE LOS ESTADOS AMERICANOS, 2019).

Consequently, “the military intelligence structures are only innovating in attending to cultural aspects as a guide to understanding the changing dynamics of the drug market...They are comprehending as a novelty that, in order to understand the drug markets, they must particularly approach the cultural bases that represent a working link in large transnational networks” (ARIAS, 2019, p. 13, our translation).

The United States, far from controlling drug use, approved US\$448 million in cooperation with Colombia for 2020. 30 million more than was granted in 2019. The sum in millions must be arranged in this way:

**Chart 5 – International Cooperation concerning Drug Use**

61 – Development assistance
146 – Economic Support Fund – Peace, Indigenous, NGO, training of ex-combatants, rural development and Prosecutors, among the main
180 – Fight against drug trafficking, terrorist organizations and criminal groups – conditioning the state to report to the United States on the progress so that it can certify Colombia or not.
21 – demining
38.5 – military programs
1.4 – military training and education

Fuente: Own elaboration of information obtained from Gomez Maseri (2020).

This is in clear conflict with the legal sales practices of the United States with regard to marijuana, which, in many of its states, is already legal, not only for medical purposes but also for recreational purposes. In this respect, Colombia as usual is following the example in a slow-moving manner, but in the same direction.

Clearly, it is the illegality of substances and the dangers associated with their sale that raise profits and stabilize narcotics sellers, and even generate alliances with other sectors of illegality that manage to permeate many legal sectors, using the illicit fronts commonly for the execution of criminal acts (MORENO HERNÁNDEZ, 2012).

Perhaps the lack of resources directed to consumption, and favoring repression, is not capable of reducing the use of psychoactive substances, which are in oversupply. The DNP estimates that, of the total budget allocated to drug policy, only between 3% and 5% is invested in reducing drug consumption in the country, since most of the resources are used to reduce the offering (DEPARTAMENTO NACIONAL DE PLANEACIÓN Y MINISTERIO DE JUSTICIA Y DEL DERECHO, 2012).

Studies corroborate that communities can play a fundamental role in dynamics such as drug consumption, regulating their uses and risks with social norms (OKOLIE et al., 2017).

The United States remains the world's largest consumer of cocaine, and additionally, takes over the podium of the world's largest cannabis producer.

California leads the legal marijuana market in the international system and is the first state in the country to legalize medical marijuana use by the Proposal 64. In 2019, there were 538 reported marijuana shops and 263 reported marijuana companies in California. Curiously, this state is in the illegal or black market, which it fights through international cooperation outside, like a great problem in its new marihuana industry, since in the legal scenario the prices of the gram increase due to taxes. Its sales increased by \$2.5 billion in 2018, a growth rate of 23%, despite losses in the first two years. In turn, regulated cannabis sales in California are projected to grow to \$7.2 billion in 2024, but illegal sales will still be \$6.4 billion in the same year (MCGREEVY, 2019).

California's marijuana laws in 2020, unlike other drugs, allow possession, use and cultivation for recreational purposes. After possession of marijuana in small quantities was legalized, since 1996 cannabis is legal in the state for medical use. In 2018, recreational use was authorized by the Proposition 64 approved in 2016. The law allows people over 21 years old to purchase, possess and use up to 28.5 grams of marijuana. It must be done in the person's own residence or in a licensed facility. The sale, distribution, and trafficking of marijuana is punishable (LEYES..., 2020).

It is paradoxical that for a significant sector of the United States it is more important to think about how to reduce taxes in order to have more legal marijuana distribution shops than the black sector that takes customers away for cost convenience. It is paradoxical because the United States has spent and continues to spend billions of dollars in the fight against drug trafficking in Colombia and other parts of the world. Even at the universities of Davis and Berkeley, cannabis law is already taught<sup>2</sup>.

<sup>2</sup> Tamar Todd, university teacher of the subject.

In Colombia, legal operations and competencies to obtain marijuana related licenses have been legalized: when the responsible for cultivation is the Ministry of Justice and Law and when marijuana derivatives are produced by the Ministry of Health and Social Protection.

Since 2016, production for domestic use, medical and scientific purposes as well as export, as well as psychoactive cannabis, production of seeds and marijuana products has been regulated by the following main rules:

1. Law 1787 of 2016
2. Decree 613 of 2017
3. Ruling 2891 a 2892 of 2017 (MINISTERIO DE SALUD, 2017).

Regarding the recreational uses of marijuana in Colombia, in May 2019 a project was presented and will be defined in 2020, which would completely change the focus on a specific substance, from public drug policy (EL ESPECTADOR, 2019).

The Ministry of Justice and Law granted, for the first time in Colombia, with the support of the Single Window for Foreign Trade (VUCE of MinCIT), an authorization for the export of 100,000 cannabis seeds to Denver, Colorado, in the United States of America. Santa Marta Golden Hemp is in charge and now the Colombian government states that while in the Covid19 many companies are in crisis, this new sector fulfills important commercial objectives (CÁRDENAS, 2020).

These contradictions show that in relation to drugs it is impossible to speak about a union or a compact scenario, but on the contrary, that each one of the substances must be analyzed, attending to its own contexts, if we wish to make an accurate diagnosis for the production of effective and glocal public policies.

For example, in the United Kingdom, the method known as Drug Harm Index is used, diagnosing the damage associated with drug use by calculating the effects in relation to the socio-economic costs and those relating to the state, avoiding isolated analyses (MACDONALD et al., 2005).

Likewise, the Police Department of Canada created in 2008 a scale of prioritization about the damage caused by criminality: allowing classifying the degree of damage of each criminal activity for societies. It allows a prioritization for the action of the public force (JOHNSTON et al., 2010). It would help to see actions against consumption as a part of the *ultimate ratio of criminal law*.

## 2 Results

- The Colombian post-conflict, which reveals a negative peace scenario, in terms of the demobilization of the Farc-Ep, moves the scenarios of production and distribution of traditional drugs in the endogenous and exogenous system of drug trafficking.
- Drug trafficking is a multi-causal phenomenon historically regulated from a unilateral repressive security approach that seeks to satisfy, almost exclusively,

results in terms of objective security, as a complement to realistic public international law schemes.

- Repressive actions are necessary but not sufficient to solve issues related to narcotic activity.
- Anti-drug policies must stop treating the consumer as a criminal and illegal. And for this it is necessary to invest in public policies that seek to prevent consumption or, if consumption exists, to guarantee a responsible and safe consumption.
- Consumer policies have been government policies, not state policies.
- If the unconventional threat is dynamic, the security response must be dynamic and flexible.
- If the threat is multi-sectoral, the response must be multi-sectoral.
- Although Colombia in its narcotic history has not been a significant consumer with respect to consumption in other states, this trend is beginning to be reversed, with a continued increase in consumers of very young ages, and this is added to worrying contexts of violence and poverty. As well as the formation of new narcotic identities.
- There is a strong feeling of rejection and exclusion of drug users in Colombian society, given the violent impact that this sector has had on the contemporary history, present and future of Colombia. However, this trend is beginning to change. It is even proportionally reinforced in places where the state does not exercise eminent domain.
- Endogenous and exogenous contradictions are reflected in government policies regarding the reality of marijuana production and its use in the United States and other hegemonic world centers of political power. Requiring a system of control and comprehensive surveillance against all substances and not just against cocaine.
- Corruption is a central problem in Colombia. The drug trafficking sector is able to make associations with the legal systems and this allows them to expand behind the global consumer demand that is ready to pay increasingly better prices.
- The prohibition of drugs possession to personal consumption encourages the criminalization of the consumer and does not alter the transnational market of psychoactive substances.
- The post-conflict left drug trafficking routes free, but this is not a debt of the drug trade, but a general rule of the market.
- The absence of constructivist tools in international relations that focus their efforts on anti-drug security is evident.
- Non-traditional illicit and psychoactive substances that enter Colombia from Europe and even from United States and China do not seem to concern national and international authorities.
- Synthetic drugs are in cryptomarkets without major impact on criminal judgments and relative seizures. Endogenous and exogenous security structures do not put the same emphasis on combating postmodern drugs in the market as traditional drugs in it.

- The emergence of cryptomarkets in the international system has revealed that if drugs are sold virtually, violence decreases, and there are no longer invisible borders to protect between cartels or organized crime groups.

### 3 Conclusion

Marijuana is no longer a problem but a potential business. A business that has expanded beyond our lands. A business that has thousands of prisoners because of its sale to retailers and to big businessmen showing its medicinal purposes with enormous profits and exponential growth.

Peacebuilding must address the variables of democratic sustainability from an in-depth, comprehensive and long-term perspective, acting urgently in and with the most vulnerable populations of Colombian society before the contradictory international policies relating to the fight against cocaine trafficking.

One of the main social factors for its production is the exclusionary gap between rich and poor people, as well as the unequal income distribution in Colombia. There will be no successful national antinarcotics public policy without contemplating the conscience and all the actors to whom it is addressed.

Drug trafficking is understood as a uniform problem and treated from a policy mostly focused on qualitative security results. It is not a one-dimensional issue but a complex, dynamic one that cannot be encapsulated in cocaine trafficking.

Studies should be done separately from substances, but not in a disconnected way. Likewise, the particular contexts where illegal businesses occur are very important for making accurate diagnoses and not only political correctness ones. Moral conceptions do not serve to reduce the real damage generated by this type of market, especially its excessive violence.

The lack of homogeneous distribution of the tools of legal control determined in endogenous public policies that are generally aligned with those of their respective political hegemons, distort the effects of these policies in the areas described, activating illegitimate violence as a strategy for maintaining the power of subversive or illegal trades. Likewise, academic research about drug trafficking promote balance between good and bad and leaves aside the intermediaries of these opposites polarized by political considerations that tend to be camouflaged by moral conventions more than legal ones.

## References

ABELLO, C. Prólogo. *In: GÓMEZ R., H. C (comp.). Control Territorial y Resistencias: una lectura desde la seguridad humana.* Medellín: Universidad de Antioquia, 2012.

ÁNGEL, M. **Manual Básico de Doctrina y Protección Cruz Roja Colombiana.** Colombia: Dirección General de Doctrina y Protección, 2012.

ARENAL, C. **Introducción a las Relaciones Internacionales.** Madrid: Ed. Tecnos. Cuarta Edición.. 2010.

ARIAS, D. **Seguridad y narcotráfico en el Caribe:** hacia una política pública en el archipiélago de San Andrés, Providencia y Santa Catalina. Bogotá: Universidad Nacional de Colombia, 2019.

ARIAS, D. La internacionalización del posconflicto colombiano. **El Nuevo Liberal**, [S.I.], 30 enero 2016. Available at: [http://elnuevoliberal.com/la-internacionalizacion-del-posconflicto-colombiano/?fb\\_comment\\_id=817567141704485\\_817767031684496](http://elnuevoliberal.com/la-internacionalizacion-del-posconflicto-colombiano/?fb_comment_id=817567141704485_817767031684496). Access on: June 15, 2020.

AZZELINI, D. Introducción. *In: AZZELINI, D.; KANZLEITER, B. La privatización de las Guerras.* Cochabamba, BO: CEDIB, 2005. p. [3]. Versión para el Cono Sur de América Latina.

BESIO, F. Estructuración Multidimensional y Compleja de la Seguridad Hemisférica. **Resdal**, [S.I.], 2003. Available at: <https://www.resdal.org/Archivo/d00001d9.htm>. Access on: June 15, 2020.

BLUMSTEIN, A. Disuasión e incapacitación lecciones aprendidas en la guerra americana contra las drogas. *In: LLORENTE, M. V.; RUBIO, M. (comp.). Elementos para una criminología local:* políticas de prevención del crimen y la violencia en ámbitos urbanos. Bogotá: Alcaldía Mayor de Bogotá, 2003. p. 23-38.

BORRADOR DOCUMENTO CONPES. **Mercados internos de drogas.** Bogotá: CONPES DC, 2017.

BOYUM, D.; CAULKINS, P.; KLEIMAN, M. Drugs, crime and public policy. *In: WILSON, J. Q.; PETERSILIA, J. Crime and public policy.* New York: Oxford University Press, 2011.

BULLA, P.; RAMÍREZ, B.; GARCÍA, J. F.; LOVERA, M. P.; WIESNER, D. **Homicidios y venta de drogas en Bogotá:** una peligrosa dupla en Bogotá. Bogotá: FIP, 2016.

BUZAN, B.; WÆVER, O.; WILDE, J. **Security:** a new framework for analysis. Boulder: Lynne Rienner Publishers, 1998.

CALVANI, S. ¿Debería Colombia reducir aún más sus cultivos ilícitos, o al contrario, debería reducir el número de productores de cocaína, esclavos de los grupos de cocaína, esclavos de los grupos armados? In: CAMACHO GUIZADO, A. **Narcotráfico: Europa, Estados Unidos, América Latina**. Bogotá: Universidad de los Andes, 2006. p. 3-12.

CAMACHO GUIZADO, A. **Narcotráfico y sociedad colombiana**: contribución a un estudio sobre el estado del arte. Bogotá: Instituto de Estudios Políticos, 1992.

CÁRDENAS. Primera exportación de semilla de Cannabis autoriza Min Justicia. **Observatorio de Drogas de Colombia**, Bogotá, 6 mayo 2020. Available at: <http://201.217.213.202/INICIO/Noticias/ArtMID/2976/ArticleID/7233/Primera-exportaci243n-de-semilla-de-Cannabis-autoriza-MinJusticia>. Access on: June 12, 2020.

CASTELLS, J. P. Drogas por internet: formación y control frente a una globalización asimétrica. **El Debate de Hoy**, Madrid, 22 jun. 2017. Available at: <https://eldebatedehoy.es/ciencia/drogas-por-internet/>. Access on: June 12, 2020.

COLOMBIA. **Ley No. 1801 29 jul 2016**. Por la cual se expide el Código Nacional de Policía y Convivencia. Bogotá: Congreso de Colombia, 2016a. Available at: <https://www.policia.gov.co/sites/default/files/ley-1801-codigo-nacional-policia-convivencia.pdf>. Access: June 15, 2020.

COLOMBIA. Ministerio de Justicia y del Derecho. **Tendencias en la judicialización y alternativas al encarcelamiento para los delitos de drogas**. Bogotá: Ministerio de Justicia y del Derecho, 2016b. Available at: <http://www.odc.gov.co/Portals/1/publicaciones/pdf/alternativas-encarcelamiento/CR1522016-tendencias-judicializacion-delitos-drogas.pdf>. Access on: June 15, 2020.

COLOMBIA. Unidad para las Víctimas. **Reportes – RNI**. Bogotá: Unidad para las Víctimas, 2020. Available at: <https://cifras.unidadvictimas.gov.co>. Access on: June 15, 2020.

COMISIÓN ASESORA PARA LA POLÍTICA DE DROGAS EN COLOMBIA. **Lineamientos para un nuevo enfoque de la política de drogas en Colombia**: informe final. Bogotá: Comisión Asesora para la Política de Drogas en Colombia, 2015. Available at: [http://www.odc.gov.co/Portals/1/comision\\_asesora/docs/informe\\_final\\_comision\\_asesora\\_politica\\_drogas\\_colombia.pdf](http://www.odc.gov.co/Portals/1/comision_asesora/docs/informe_final_comision_asesora_politica_drogas_colombia.pdf). Access: June 12, 2020.

CRUZ ROJA ESPAÑOLA. **Conflictos armados internos o no internacionales**. [2019?]. Available at: [http://www.cruzroja.es/portal/page?\\_pageid=878,12647152&\\_dad=portal30&\\_schema=PORTAL30](http://www.cruzroja.es/portal/page?_pageid=878,12647152&_dad=portal30&_schema=PORTAL30). Access on: June 15, 2020.

DEPARTAMENTO NACIONAL DE PLANEACIÓN. **Narcomenudeo, un lucrativo negocio que mueve \$6 billones anuales**. Bogotá, DC, 2016. Available at:

<https://Pginas/Narcomenudeo,-un-lucrativo-negocio-que-mue-ve-6-billones-de%20pesos%20anuales.aspx>. Access on: June 15, 2020.

DEPARTAMENTO NACIONAL DE PLANEACIÓN Y MINISTERIO DE JUSTICIA Y DEL DERECHO. **Gasto del Estado colombiano frente al problema de las Drogas:** 2010. Bogotá: Departamento Nacional de Planeación, 2012. Available at: <http://www.odc.gov.co/Portals/1/publicaciones/pdf/otros/gasto-publico-drogas/GP0012010-gasto-directo-estado-colombiano-antidroga-2010.pdf>. Access on: June 15, 2020.

DUNCAN, G. Narcotraficantes, mafiosos y guerreros: historia de una subordinación. In: DUNCAN, G.; VARGAS, R.; ROCHA, R.; LÓPEZ, A. **Narcotráfico en Colombia:** economía y violencia. Bogotá: Fundación Seguridad y Democracia, 2005.

DUNCAN, G.; VELASCO, J. D. Los “Urabenos” y el narcotráfico en Colombia: historia que se repite. **Razón Pública**, Bogotá, 20 ene. 2014. Available at: <https://razonpublica.com/los-urabenos-y-el-narcotrafico-en-colombia-historia-que-se-repite/>. Access on: June 15, 2020.

EL ESPECTADOR. Marihuana recreativa, el punto de partida de una alianza en el Congreso. **El Espectador**, Bogotá, 23 mayo 2019. Available at: <https://www.elespectador.com/noticias/politica/marihuana-recreativa-el-punto-de-partida-de-una-alianza-en-el-congreso/>. Access on: June 15, 2020.

ESDEGUE. **El Control Territorial en el siglo XXI:** fundamentos teóricos. Bogotá, 2017.

FUNDACIÓN IDEAS PARA LA PAZ. **El Código Nacional de Policía y Convivencia y sus efectos sobre la convivencia y la actividad económica.** Bogotá: Fundación Ideas para la Paz, 2019. Available at: [http://ideaspaz.org/media/website/como\\_va\\_implementacion\\_codigo\\_policia.pdf](http://ideaspaz.org/media/website/como_va_implementacion_codigo_policia.pdf). Access on: June 15, 2020.

FUNDACIÓN IDEAS PARA LA PAZ. **Informe del gasto del Gobierno de Colombia en Lucha Antidrogas 2013-2015.** Bogotá: Fundación Ideas para la Paz, 2018. Available at: [https://www.repository.fedesarrollo.org.co/bitstream/handle/11445/3609/Report\\_Mayo\\_2018\\_Fedesarrollo\\_y\\_FIP.pdf?sequence=4&isAllowed=y](https://www.repository.fedesarrollo.org.co/bitstream/handle/11445/3609/Report_Mayo_2018_Fedesarrollo_y_FIP.pdf?sequence=4&isAllowed=y). Access on: June 15, 2020.

FUNDACIÓN IDEAS PARA LA PAZ. **Las revelaciones del Bronx. Intervención de zonas de alta complejidad:** Desafíos y alternativas. Bogotá, Febrero 2017.

FUNDACIÓN PAZ Y RECONCILIACIÓN. **Los datos de la violencia en la Colombia del postconflicto.** Bogotá: Fundación Paz y Reconciliación, 2018. Available at: <https://www.elespectador.com/noticias/paz/los-datos-de-la-violencia-en-la-colombia-del-postconflicto-articulo-826375>. Access on: June 15, 2020.

GALLÓN, G. El informe de Gutiérrez Sanín para la CHCV. **El Espectador**, Bogotá, 2 sep. 2015. Available at: <https://www.elspectador.com/opinion/el-informe-de-gutierrez-sanin-para-la-chcv-columna-583480/>. Access on: June 15, 2020.

GARAVITO, C. 702 líderes sociales y 135 excombatientes habrían sido asesinados desde firma del Acuerdo. **El Espectador**, Bogotá, 23 mayo 2019. Available at: <https://www.elspectador.com/noticias/judicial/702-lideres-sociales-y-135-excombatientes-habrian-sido-asesinados-desde-firma-del-acuerdo/>. Access on: June 15, 2020.

GLOBAL COMISSION ON DRUG POLICY. **Asumiendo el control**: caminos hacia políticas de drogas eficaces. Geneva: Global Comission on Drug Policy, 2014. Available at: [https://www.globalcommissionondrugs.org/wp-content/uploads/2016/03/GCDP\\_2014\\_taking-control\\_ES.pdf](https://www.globalcommissionondrugs.org/wp-content/uploads/2016/03/GCDP_2014_taking-control_ES.pdf). Access on: June 15, 2020.

GOMEZ MASERI, S. Congreso de EE. UU. aprueba millonario fondo para Colombia en 2020. **Portafolio**, Bogotá, 17 dic. 2019. Available at: <https://www.portafolio.co/economia/congreso-de-ee-uu-aprueba-millonario-fondo-para-colombia-en-2020-536630>. Access on: June 15, 2020.

GOSSAÍN, J. En Colombia, las mujeres jóvenes consumen más licor que los hombres. **El Tiempo**, Bogotá, 2019, 6 mar. 2019. Available at: <https://www.eltiempo.com/salud/cifras-sobre-el-consumo-de-drogas-en-colombia-a-2019-334834>. Access on: June 15, 2020.

GUTIÉRREZ SANIN, F. Inequidad y violencia política: una precisión sobre las cuentas y los cuentos. **Analís Político**, Bogotá, n. 43, p. 55-75, 2001.

HAESBAERT, R. Identidades territoriais: entre a multiterritorialidade e a reclusão territorial (ou: do hibridismo cultural à essencialização das identidades). In: ARAUJO, F.G.B de; HAESBAERT, R. (Orgs). **Identidades e territórios: questões e olhares contemporâneos**. Rio de Janeiro: Acess, 2007, 136 p.

HUNTINGTON, S. **EL choque de las civilizaciones y la reconfiguración del orden mundial**. Barcelona: Paidos, 1996.

INFOBAE. Una brigada del Ejército de EEUU llegará a Colombia para apoyar lucha contra el narcotráfico. **Infobae**, [S. l.], 20 mayo 2020a. Available at: <https://www.infobae.com/america/colombia/2020/05/28/una-brigada-del-ejercito-de-eeuu-llegara-a-colombia-para-apoyar-lucha-contra-el-narcotrafico/>. Access on: June 15, 2020.

INFOBAE. Colombia dice haber batido récord en erradicación de narcocultivos en 2019. **Infobae**, [S. l.] 9 ene. 2020b. Available at: <https://www.infobae.com/america/agencias/2020/01/09/colombia-dice-haber-batido-record-en-erradicacion-de-narcocultivos-en-2019/>. Access on: June 15, 2020.

JOHNSTON, P. **Developing and applying and organized crime harm index: a scoping and feasibility study.** Ottawa: Public Safety Canada, 2010.

LERENA, V. Nacen los «criptomercados», tiendas online de drogas en internet. **ABC Redes**, Lisboa, 25 sep. 2017. Available at: [http://www.abc.es/tecnologia/redes/abci-nacen-criptomercados-tiendas-online-drogas-internet-201602111745\\_noticia.html](http://www.abc.es/tecnologia/redes/abci-nacen-criptomercados-tiendas-online-drogas-internet-201602111745_noticia.html). Access on: June 15, 2020.

LEYES sobre la marihuana en California. **Lluis Law**, Los Ángeles, 22 mayo 2020. Available at: <https://www.lluislaw.com/es/leyes-sobre-la-marihuana-en-california/>. Access on: June 15, 2020.

LOADER, I.; WALKER N. **Civilizing Security**. Cambridge: Cambridge University Press, 2007.

MACDONALD, Z.; TINSLEY, L.; COLLINGWOOD, J.; JAMIESON, P.; PUDNEY, S. **Measuring the harm from illegal drugs using the Drug Harm Index**. Colchester: Institute for Social and Economic, 2005. Available at: <https://www.iser.essex.ac.uk/research/publications/508483>. Access on: June 15, 2020.

MCGREEVY, P. California es el mercado legal de marihuana más grande del mundo, pese al enorme sector del mercado negro que aún opera. **Los Angeles Times**, El Segundo, 16 ago. 2019. Available at: <https://www.latimes.com/espanol/eeuu/articulo/2019-08-16/californias-mercado-legal-de-marihuana-mas-grande>. Access on: June 15, 2020.

MEDINA, C. Mafia y narcotráfico en Colombia: elementos para un estudio comparado. In: VARGAS, A. **El prisma de las seguridades en América Latina**: escenarios regionales y locales. Buenos Aires: Clacso, 2012.

MINISTERIO DE SALUD. **Cannabis de uso medicinal**. Bogotá: Ministerio de Salud, 2017. Available at: <https://www.minsalud.gov.co/salud/MT/Paginas/cannabis-uso-medicinal.aspx>. Access on: June 15, 2020.

MONTENEGRO RINCO, L.; DURÁN ESTUPIÑÁN, P. Lucha contra el narcotráfico: transferencia de una experiencia. **Criminalidad**, v. 8, n. 5, p. 57-70, 2008.

MORENO HERNÁNDEZ, M. Política criminal frente a la delincuencia organizada en México. In: GARCÍA RAMÍREZ, S.; VARGAS CASILLAS, L. A. (coord.). **Las reformas penales de los últimos años en México (1995-2000)**. México, DF: Universidad Nacional Autónoma de México, 2012. p. 148-167.

NATIONAL DEFENSE UNIVERSITY. **Strategic Assessment, 1999**. Washington, DC, 2000.

NEMOGA, G. (1995). Crisis judicial: enfoques diferentes y elementos constantes. **Revista Foro**, Bogotá, DC, n. 27, p. 107-130, jul. 1995. Available at: [http://www.bdigital.unal.edu.co/797/6/272\\_-5\\_Capi\\_4.pdf](http://www.bdigital.unal.edu.co/797/6/272_-5_Capi_4.pdf). Access on: June 15, 2020.

OKOLIE, C *et al.* Community-based interventions to prevent fatal overdose from illegal drugs: a systematic review protocol. **BMJ Open**, London, v. 5, n. 11, 2017. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4636603/>. Access on: June 11, 2020.

OLLERO, D. J. Así funciona el mercado de la droga en Internet. **El Mundo**, Madrid, 21 jul. 2017. Available at: <https://www.elmundo.es/tecnologia/2017/07/21/5970fab5268e3e5c3d8b471b.html>. Access on: June 15, 2020.

ORGANIZACIÓN DE LOS ESTADOS AMERICANOS. **Informe sobre el consumo de drogas en las Américas 2019**. Washington, DC: Organización de los Estados Americanos, 2019. Available at: <http://www.cicad.oas.org/main/pubs/Informe%20sobre%20el%20consumo%20de%20drogas%20en%20las%20Am%C3%A9ricas%202019.pdf>. Access on: June 15, 2020.

PAZ CARDONA, A. J. Fracking y glifosato: los dos polémicos decretos con los que inicia el 2020 en Colombia. **Mongabay**, Menlo Park, 20 ene. 2020. Available at: <https://es.mongabay.com/2020/01/fracking-en-colombia-y-aspersion-aerea-glifosato/>. Access on: June 15, 2020.

PÉREZ GOMEZ, N. Nuevo Estatuto Nacional de Drogas: mucho ruido y pocas nueces. **Razón Pública**, Bogotá, 4 feb. 2013. Available at: <https://razonpublica.com/nuevo-estatuto-nacional-de-drogas-mucho-ruido-y-pocas-nueces/>. Access on: June 5, 2020.

POLLACK, H.; REUTER, P. Does tougher enforcement make drugs more expensive? **Addiction**, Northhampton, v. 109, n. 12, 2014. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/add.12497>. Access on: June 15, 2020.

POSTCONFLICTO. Universidad del Rosario. Bogotá, [2019?]. Available at: <https://www.urosario.edu.co/jurisprudencia/jurisprudencia-reconciliacion/ur/Postconflicto/>. Access on: June 15, 2020.

PRESIDENCIA DE LA REPÚBLICA. **Presidente Duque lanza plan de choque: 'El que hace la paga' para los próximos 100 días**. Bogotá: Presidencia de la República: 16 ago. 2018. Available at: <https://id.presidencia.gov.co/Paginas/prensa/2018/180816-Presidente-Duque-lanza-plan-de-choque-El-que-hace-la-paga-para-los-proximos-100-dias.aspx>. Access on: June 15, 2020.

RAMÍREZ, C. **Mexican Drugs**: cultura popular y narcotráfico. Madrid: Ediciones Lengua de Trapo SL, 2011.

ROCHA, R. Efectos colaterales. In: ROCHA, R. **Las nuevas dimensiones del narcotráfico en Colombia**. Nueva York: Oficina de las Naciones Unidas contra la Drogas y el Delito, 2011.

SAAVEDRA, A. M. La tecnología de los submarinos al servicio del narcotráfico. **El País**, Cali, 6 mar. 2011. Available at: <https://www.elpais.com.co/judicial/la-tecnologia-de-los-submarinos-al-servicio-del-narcotrafico.html>. Access on: June 15, 2020.

SAUMETH, E. **Narco semi-sumergibles y sumergibles**. Juiz de Fora: Universidade Federal de Juiz de Fora, 2006.

SHEARING, C.; WOOD, J. **Imagining Security**. Philadelphia: Universidad de Pensilvania, 2007.

SPOERRI, P. **Los Convenios de Ginebra de 1949**: orígenes y pertinencia actual. Available at: <https://www.icrc.org/es/doc/resources/documents/statement/geneva-conventions-statement-120809.htm>. 12 ago. 2009. Access on: June 15, 2020. Ceremonia para celebrar el 60º aniversario de los Convenios de Ginebra. Discurso pronunciado por Philip Spoerri, director de Derecho Internacional del CICR.

SEGÚN la Fiscalía, el microtráfico es el delito que más impacta la seguridad ciudadana. **El Heraldo**, Barranquilla, 20 dic. 2017. Available at: <https://www.elheraldo.co/colombia/segun-la-fiscalia-el-microtrafico-es-el-delito-que-mas-impacta-la-seguridad-ciudadana>. Access on: June 15, 2020.

TASA de homicidios en Colombia repunta en 2018 y registra cifra más alta en cuatro años. América Economía, [S.l.], 26 Junio 2019. Available at: <https://www.americaeconomia.com/politica-sociedad/politica/tasa-de-homicidios-en-colombia-repunta-en-2018-y-registra-cifra-mas-alta>. Access on: June 15, 2020.

TOBÓN, S. GUTIÉRREZ, I. Política de drogas en Colombia: congestión y corrupción, otras caras del fracaso. **Razón Pública**, Bogotá, 1 mar. 2015. Available at: <https://razonpublica.com/politica-de-drogas-en-colombia-congestion-y-corrupcion,-otras-caras-del-fracaso/>. Access on: June 15, 2020.

UNIDAD PARA LA ATENCIÓN Y REPARACIÓN INTEGRAL A LAS VÍCTIMAS (Colombia). **Víctimas Conflicto Armado**. Bogotá, 2020. Available at: <https://www.unidadvictimas.gov.co/es/registro-unico-de-victimas-ruv/37394>. Access on: June 15, 2020.

UNITED NATIONS. Office of the High Commissioner for Human Rights. **Protocolo adicional a los Convenios de Ginebra del 12 de agosto de 1949 relativo a la protección de las víctimas de los conflictos armados sin carácter internacional (Protocolo II)**. United Nations: Geneva, 1977. Available at: <https://www.ohchr.org/SP/ProfessionalInterest/Pages/ProtocolIII.aspx>. Access on: June 15, 2020.

UNITED NATIONS. Office on Drugs and Crime. **World Drug Report 2018**. Vienna: United Nations Office on Drugs and Crime, 2018. Available at: [https://www.unodc.org/wdr2018/prelaunch/WDR18\\_Booklet\\_2\\_GLOBAL.pdf](https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_2_GLOBAL.pdf). Access on: June 15, 2020.

UPRIMNY YEPES, R.; CHAPARRO HERNÁNDEZ, S. C.; CRUZ OLIVERA, L. F. C. **Delitos de drogas y sobredosis carcelaria en Colombia**. Bogotá: Centro de Estudios de Derecho, Justicia y Sociedad, 2017. Available at: <https://www.dejusticia.org/wp-content/uploads/2017/07/Delitos-de-drogas-y-sobredosis-carcelaria-en-Colombia-Version-final-PDF-para-WEB.pdf>. Access on: June 15, 2020.

VARGAS, R. **Cultivos Ilícitos en Colombia**: elementos para un balance. [S.L.: s.n], 2005.

VERRY, P. **Diccionario de Derecho Internacional de los conflictos armados**. Bogotá, Colombia: Tercer Mundo Editores, 1998.

# The Falklands/Malvinas conflict from the perspective of the Geopolitics of Natural Resources

*El conflicto de las Malvinas a través del prisma de la Geopolítica de Recursos Naturales*

**Abstract:** The objective of this exploratory, qualitative research is to provide a geopolitical view of the Falklands conflict, from the perspective of Strategic Natural Resources, to infer essential elements of analysis that may mark the course of the conflict in the coming years. The Falklands issue and its consequent projection towards the Antarctic continent may present new perspectives for South America in general, but mainly for Argentina, considering that the South Atlantic is prodigiously endowed with nature, with abundant and varied fishing, rich in minerals and hydrocarbons, and that, at the same time, the existence of overlapping demands of maritime jurisdictions by Argentina and Great Britain.

**Keywords:** Malvinas. Natural Resources. Antarctica. Exclusive Economic Zone. Maritime Jurisdictions.

**Resumen:** El objetivo de esta investigación cualitativa, exploratoria, es proporcionar una visión geopolítica del conflicto de Malvinas, desde la perspectiva de los Recursos Naturales Estratégicos, para inferir elementos esenciales de análisis que pueden marcar el derrotero del conflicto en los próximos años. La cuestión Malvinas y su consecuente proyección hacia el continente antártico pueden presentar nuevas perspectivas para América del Sur en general, pero principalmente para Argentina, teniendo en cuenta que el Atlántico Sur está prodigiosamente dotado de naturaleza, con una pesca abundante y variada, rica en minerales e hidrocarburos, y que, al mismo tiempo, existen demandas superpuestas de jurisdicciones marítimas por parte de Argentina y Gran Bretaña.

**Palabras clave:** Malvinas. Recursos Naturales. Antártida. Zona Económica Exclusiva. Jurisdicciones Marítimas

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## 1 Introduction

Under the auspices of the United Nations Convention on the Law of the Sea – UNCLOS (Montego Bay, 1982), the value of natural resources and ocean spaces have not only increased their strategic importance, but also represent an essential contribution to national interests, starting with the economic development they provide (GANEAU, 2019).

In this sense, after that year, which coincided with the end of the War between United Kingdom and Argentina, the extension of the jurisdiction of the Exclusive Economic Zone (EEZ) to 200 nautical miles, further increased the geopolitical and strategic value of the Malvinas Islands<sup>1</sup>, South Georgia y South Sandwich. (KOUTOUDJIAN, 2011, p.72).

Terríbile (2018, p. 97) states that it has been in the interest of the parties in conflict to privilege certain objectives that can be framed from a geostrategic perspective. Examples of this are the conservation of natural resources and biodiversity, the increase in exports, the development of the fishing industry, occupation, activation of regional ports and the strengthening of the presence at sea. Koutoudjian (2019, p. 11) adds that the situation of hydrocarbons in the Falkland Islands is becoming increasingly relevant, with the growing increase of the underwater section as a source of oil resources at a global level, and specifically with the intense explorations that are financed by the British government.

Battaleme *et al.* (2011, p. 103-104) states that each country, depending on its geographical location, its neighbors, its needs and its possibilities, will consider a given resource as strategic. Considerations on the relevance of a resource allow us to see that wherever it is found, there will be competition, either to keep that resource available or for the intention of obtaining the benefits of its control and exploitation.

In this context, the objective of this article **is to determine, from the particular approach of the Geopolitics of Natural Resources, which are the essential elements of analysis to be considered, in order to understand the Falklands Conflict until the end of the Antarctic Treaty (in 2041)**. Starting from the hypothesis that, until that moment, Great Britain was not interested in modifying the prevailing *Status Quo*, reason why Argentina can achieve an indirect approach to the treatment of the sovereignty, starting from a geostrategic maneuver based on the existing interests about the natural resources, present in the conflict zone.

For this reason, the paper analyses the situation of resources in the maritime areas of the Falkland Islands, South Georgia and South Sandwich Islands, and how these are present in both Argentinean and British interests.

For the strategic analysis, the protagonist, the perspective of the analysis, starts from the Argentine Republic. The data that support the analysis correspond to the first two decades of the 21st century. The exploratory method was used (in terms of the purpose), documentary and bibliographic (in terms of the resources) (VERGARA, 2008, p. 44-45). The study was based on the debates about the origin of inter-state conflicts in South America: Long Peace versus Violent Peace (BATTAGLINO, 2008, 2012; CENTENO, 2002; FRANCHI; GLASER;

<sup>1</sup> The Malvinas Islands are also known as the Falkland Islands. For this study, it was agreed to use only the term Falkland Islands.

VILLARREAL, 2017; KAKOWICZ, 1998; MARTÍN, 2006); and geopolitical disputes involving natural resources (ARNAUD, 2014; BLACKWILL; HARRIS, 2016; KLARE, 2003; KOUTOUDJIAN, 2019; SENHORAS; MOREIRA; VITTE, 2009; WIKTER, 2012, among others). To address the definition of actors and their interest within a conflict, the work relied on the definitions by Cal et al. (2016) and Frischknecht & Lanzarini (2015).

As sources, documents of treaties and agreements signed between Argentina and England under the framework of the UN; the Shackleton Report (1976) and international conventions on the use of resources and maritime spaces, mainly the UNCLOS (1982); scientific and technical guidelines of the CLCS<sup>2</sup> and the Antarctic Treaty (1961) were studied. Authors from different countries were used to give a historical support to the research about the Falklands War: Argentineans (AYUSO; ANGUERA; PÉREZ SEOANE, 1985; DELGADO, 2012; RODRÍGUEZ, 2005; RUDA, 1964); English (BECK, 1983, 1988; FRANKS, 1983; FREEDMAN, 2005a, 2005b) and Brazilians (MARTINS, 2016; VALÉRIO; HENTZ, 2013).

## 2 The Geopolitics of Natural Resources

Michael Klare (2003, p. 24) says that since the end of the Cold War, resource issues have regained a central place in countries' planning. The author presents three factors related to disputes in the area of natural resources: increased demand, increased scarcity, and competition and tension to dominate resources. As resource consumption increases, scarcity will also increase more rapidly and governments will be under more pressure to solve the problem in any way they can (KLARE, 2003, p. 23).

Klare adds that when the U.S. Navy claims about the safety of "lines of maritime communication" in the United States (referring specifically to intercontinental trade lines), their argument generally derives from that presented by Admiral Mahan in the late nineteenth century. However, the current approach represents more than just a return to the past; above all, it reflects the growing importance of industrial energy, the economic dimensions of security and natural resources.

Specifically regarding resources, the author, a reference in terms of the Geopolitics of Natural Resources, points out:

While water, oil and natural gas cause more intense competition, there are other latent conflicts over minerals, precious stones and sawn timber, especially in developing countries that do not have many other domestic sources of wealth. Ethnic and political factions trying to exploit a lucrative resource, in a highly productive copper mine, for example, a diamond field or a wood plantation, are often drawn into bloody infighting that lasts several

2 The CLCS is the body responsible for considering claims with a view to the extension of coastal States beyond 200 nautical miles. It is an autonomous body composed of twenty-one members, experts in geology, geophysics and hydrography, elected by the States Parties to the Convention. The task of the Commission is twofold: on the one hand, to examine the submissions made by coastal States and make recommendations accordingly and, on the other hand, to provide scientific and technical advice for the formulation of submissions.

generations. As the demand for such resources increases and many poor countries are in an uncertain situation. The intensity of conflict over these disputed areas can only increase (KLARE, 2003, p. 15, our translation).

Entering the second decade of the 2000's, Klare (2008) highlights a common denominator that, for him, will be present in the coming wars: the search, hunting and appropriation of natural exhaustible resources: gas, oil, coal, forest reserves, minerals such as uranium, titanium, cobalt, copper, nickel, platinum and tin.

Authors like Blackwill and Harris (2016) say that the tendency to use energy and resources with geopolitical sense is not new. The authors argue that states use energy and commodities to help themselves out of geopolitical needs and that resource scarcity is a crucial factor in global politics in the post-Cold War era (BLACKWILL; HARRIS, 2016, p. 85-86).

Senhoras, Moreira and Vitte (2009, p. 3) suggest that from the moment natural resources became "fields of attraction and gravitation of human intervention for systematic exploration," they have acquired a geopolitical and strategic connotation. Therefore, a strategic natural resource is essential for the functioning of the capitalist production system and the maintenance of regional and global hegemony.

This perspective also allows the Falklands conflict to be approached in the light of the regional (South American) vision of the conflict. An international consensus on the literature argues that South America is an area marked by a 'long peace' (BATTAGLINO, 2008, 2012; CENTENO, 2002; KACOWICZ, 1998; MARTÍN, 2006), compared to the magnitude of events in the rest of the world in the twentieth century, mainly the two world wars in 1914-1918; 1939-1945, or the intensity of the wars against Iraq in 1991 and 2003 (FRANCHI; GLASER; VILLARREAL, p. 8). The specialized literature suggests that inter-state conflicts in South America are of lesser importance, both in terms of their duration and the equipment and technology used. Therefore, according to Centeno (2002, p. 37, our translation), "the last two centuries did not see the level of warfare that was common in other regions."

However, the Falklands conflict, which had its peak of violence with the 1982 War, but which continues to be unresolved, appears in an opposite line of argument to that of the South American "long peace" (FRANCHI; GLASER; VILLARREAL, 2017, p. 12). Referring to the Falklands conflict, among others, David Mares (2001, p. 255, our translation) notes: "the affirmation that Latin America is the most peaceful region in the world is empirically incorrect." The present, and coming, dispute over the world's natural resources (KLARE, 2003) seems to correspond to this line of thought ("Violent Peace") (MARES, 2001), especially regarding the natural wealth present in South America in general, and the specific situation in the Southwestern Atlantic.

### **3 Brief historical approach to the conflict: the perennial presence of natural resources**

From 3 January 1833, when Great Britain took possession of the Falkland Islands, the conflict began and it is about to complete 200 years (AYUSO; ANGUERA;

PÉREZ-SEOANE, 1985; DELGADO, 2012, p. 25; FREEDMAN, 2005a, p. 7; RUDA, 1964). Until the definitive political and territorial consolidation of Argentina, already begun in the second half of the nineteenth century, except for some formal diplomatic protests (six in total) presented to the government of the United Kingdom, the Falklands question was largely absent from the Argentine agenda.<sup>3</sup>

Even since the origins of the conflict, Arnaud (2014) adds that every year, many English and American ships fished around the Falkland Islands and the Patagonian coast which they considered uninhabited. There was a depredation of fish stocks and an “abusive hunt for the whales from which they extracted the oil for the lighting in Europe and the United States; of the elephant seals; sea lions and seals” (ARNAUD, 2014, p. 7, our translation).

After 1880 and until practically 1945, with the accession of Perón to the Argentine presidency, the country became highly dependent on European, and mainly British, investments. This places Argentina, around 1920, among the most developed countries in the world Rodríguez (2005, p. 27, 29), Fiel (1973, p. 247) and Phelps (1938, p. 99). This reason (the dependence), can explain in some way why the Falklands question, in that period, did not occupy a central role in Argentine politics either, even in the vision of the main Argentine geopolitical of the first half of the 20th century: Admiral Storni (MARTINS, 2016a, p. 4, 10, 2016b, p. 49).

With the Perón presidencies (1946-1955), there was a change in that vision. The Argentine president not only enhanced the rights of Argentine sovereignty, thus representing its geographical position, and the resulting geostrategic importance, but also started to glimpse the importance that “food and raw material reserves” would have in the future (PERÓN, 1953).

Since 1960, with the approval by the United Nations of Resolution 1514, which established, on the one hand, the rapid end of colonialism, but at the same time, that all peoples have the right to self-determination, a period of two decades of diplomatic negotiations regarding the conflict began, which would end abruptly with the war, in 1982.

Precisely one of the most important turning points in that period of negotiations was the “Shackleton Report” (1976), directly linked to the natural resources surrounding the Falklands. The document estimated that the world’s largest unexploited protein resources could be located on the islands. This is true for fishing, as well as for seaweed and coastal shellfish harvesting. In relation to fisheries, it held that much of the fishing grounds in the southwest Atlantic were within a 200-mile radius of the islands. However, in addition, the expert Richard Johnson, who was part of the selected team of six specialists who accompanied Lord Shackleton<sup>4</sup>, based on the studies carried out in the region, assumed the existence of large oil deposits in the South Sea, near the Falkland Islands (VELASCO, 1977, p. 31-32).

3 The full texts of these “protests” are in “The Falkland Islands Dispute in International Law and Politics: A Documentary Sourcebook,” written by Raphael Perl in 1983.

4 English geographer. Since 1971, Shackleton was president of the Royal Geographic Society and later named Knight of the Order of the League in 1974. From 1976 to 1992, he was Chairman of the Joint Committee on Honors and Political Scrutiny. Lord Shackleton’s report, commissioned by James Callaghan, described the economic future of the Falkland Islands. That mission was described by the Argentine Government as a “unilateral action,” increasing tensions between the two countries (BECK, 1983).

The result of this report, added to a series of political events in both countries (renewal of authorities in the governing Military Council in Argentina and return of the Conservatives with Margaret Thatcher in the United Kingdom), produced a strong increase in tensions between both countries (BECK, 1983; FRANKS, 1983).

After the end of the war, and after a period of stagnation in the negotiations. Following the Madrid agreements (1989 and 1990), there was a rapprochement that led to bilateral negotiations, promoted by the United States (BECK, 1988), where the importance of natural resources in the region would return to the agenda of both countries, being one of the main elements to be considered in the continuity of the negotiations.

#### 4 The actors in the conflict

According to Cal et al. (2016, p. 75), we should consider as an actor every entity that has an interest in a conflict. The structure of interests of an actor within a given conflict allows us to understand the plot of the conflict (CAL et al., 2016, p. 76).

While it is true that the Falklands conflict is a sovereignty dispute between Argentina and the United Kingdom of Great Britain and Northern Ireland, Martin (2015, p. 296) states that, in the South West Atlantic, Brazil's presence is also noteworthy for having the longest coastline and military capacity to exercise presence and influence in the region (ESPÓSITO NETO, 2006). He adds that, naturally, the United States also has interests in the South Atlantic since, in addition to being a strategic ally of the United Kingdom of Great Britain and Northern Ireland. A fact that confirms the interest of this actor is the reactivation of the IV American Fleet (2008), with a seat and primary influence in the Caribbean, but with clear projection towards the South Atlantic.

On the other hand, as Zurutuza (2017, p. 61) states, it must join China, with an increasing presence in the South Atlantic, in principle developing an intense fishing activity, not always in international waters, and with a growing global projection.

To delimit and better focus on the work, the interests of the two main actors in the conflict will be analyzed.

#### 5 Argentine and British interests in the Falklands Issue

An interest is an object that has a certain value (CAL et al., 2016, p. 62). At the same time, these objects can be ideal (intangible) or real (tangible). However, it is important to understand that, on these valued objects, the wish of the actors are present and it becomes an interest of each one (FRISCHKNECHT; LANZARINI, 2015, p. 24-26).

##### 5.1 Argentinean interests

Based on the work of Vaca (2017, p. 7), Terribile (2018); Zurutuza (2017) and Ganeau (2019), and on the bibliographical analysis and interviews conducted for this work, the following structure of interests of the Argentine Republic is inferred, within the framework of the Falklands issue:

**Table 1 – Argentine interests in the Falkland Islands Issue**

Interest (valuable object)	Description
National Sovereignty	Full exercise of sovereign rights over land and sea areas occupied by Great Britain.
Territorial Integrity	Indivisibility of the territories and maritime spaces claimed from the rest of the Argentine territory.
Continental Shelf	Natural extension of the continent according to the definition of the UNCLOS, as presented by Argentina to the External Commission of the Continental Shelf (CLCS), intended by the United Kingdom.
Exclusive Economic Zone (EEZ)	Maritime Space, intended by the United Kingdom, in accordance with the definition of the UNCLOS and Argentine submission to the CLCS.
Fishing	Fish resource in the EEZ intended and marketed by the United Kingdom.
Hydrocarbons	Oil and gas reserves in maritime and terrestrial areas held by the United Kingdom.
Presence in the South Atlantic	Influence of the Argentine state in the South Atlantic
Antarctic Projection	Relatively favorable position to influence future claims of sovereignty over Antarctica.
Kelper's	Inhabitants of the Falkland Islands.
International Public Opinion	International Public Opinion favorable to the Argentine cause.
Naval Forces	Components of the Argentine Naval Power (current and potential capacities) in conditions to control the maritime space.

Source: The author, based on data from Vaca (2017), Terribile (2018); Zurutuza (2017) and Ganeau (2019).

## 5.2 British interests

On the basis of the work of Vaca (2017, p. 11) and Pansa (2015), the following structure of interests of the United Kingdom of Great Britain and Northern Ireland can be inferred in the context of the Falklands issue:

**Table 2 – British interests in the Falklands issue**

Interest (valuable object)	Description
British Strategic Stature	A determined attitude of the British state to maintain its rigid position on sovereignty and to protect its interests.
Kelper's	Inhabitants, British citizens of the Falklands/Malvinas
Sovereignty	Full exercise of sovereign rights over land and sea.
Right to Self-Determination	Kelper's right to decide their own form of government and to structure themselves freely without outside interference.
Exclusive Economic Zone	Maritime Space, claimed by the United Kingdom, in accordance with the UNCLOS definition for archipelagic states.
Fishing	Fishing as a resource and in the process of commercialization.
Continental Shelf	Natural extension of the archipelago according to the definition of the UNCLOS, as presented by the United Kingdom to the CLCS. <sup>5</sup>
Hydrocarbons	Resources that are being analyzed as part of an exploration process.
Antarctic Projection	Island position in the South Atlantic that favors its future territorial claims on the Antarctic continent.
Armed Forces	Military forces in the Falkland Islands and in the other overseas islands (in the Atlantic), in reinforcement capacity.

Source: The author, based on data from Vaca (2017) and Pansa (2015).

<sup>5</sup> The United Kingdom occupies 438,000 km<sup>2</sup> around the Falklands; 1,200,000 km<sup>2</sup> around South Georgia and South Sandwich Islands; claims before the UN a continental shelf of 350 miles around the southern islands (several million km<sup>2</sup>); claims as its own part of Antarctica and consequently the Southern Ocean which is more than 3,500,000 km<sup>2</sup> (PANSA, 2015, p. 13)

## 6 The Scenario

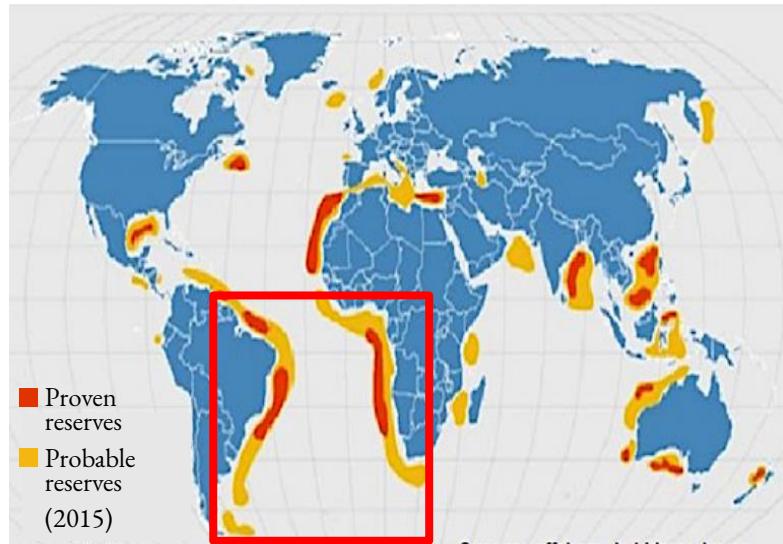
### 6.1 The Southwest Atlantic and Natural Resources

The Southwest Atlantic is an almost empty ocean of human presence that tends to densify very slowly, far from the alterations of the seas of the northern hemisphere (KOUTOUDJIAN, 2019). For Koutoudjian, in the South Atlantic there are no longer geopolitical games, but geo-economic interests, due to its energy, food and mining potential. It makes this geographic space a board of particular global attention.

In the same line of thought, Arnaud (2014, p.7) argues that countries are governed by need, interest and greed. However, he finds nothing new when talking about the wealth of the South Atlantic. In fact, he asserts that at the beginning of the 19th century there was a great interest in the region, motivated by “the same objectives, with their variants, that exist today: strategic, food and energy sources.”

For Witker (2012, p. 7), the main axis around which the Falklands conflict revolves is the existence of offshore oil fields and the technological possibility of exploiting them profitably (unlike in the 1980s). This central axis has in its vertex another element that was absent in 1982, a Brazil that possesses one of the “largest oil mantles in the world and that puts that country in a very expectant position in the world market of hydrocarbons.”

Figure 1 – Graph of verified and probable offshore oil reserves

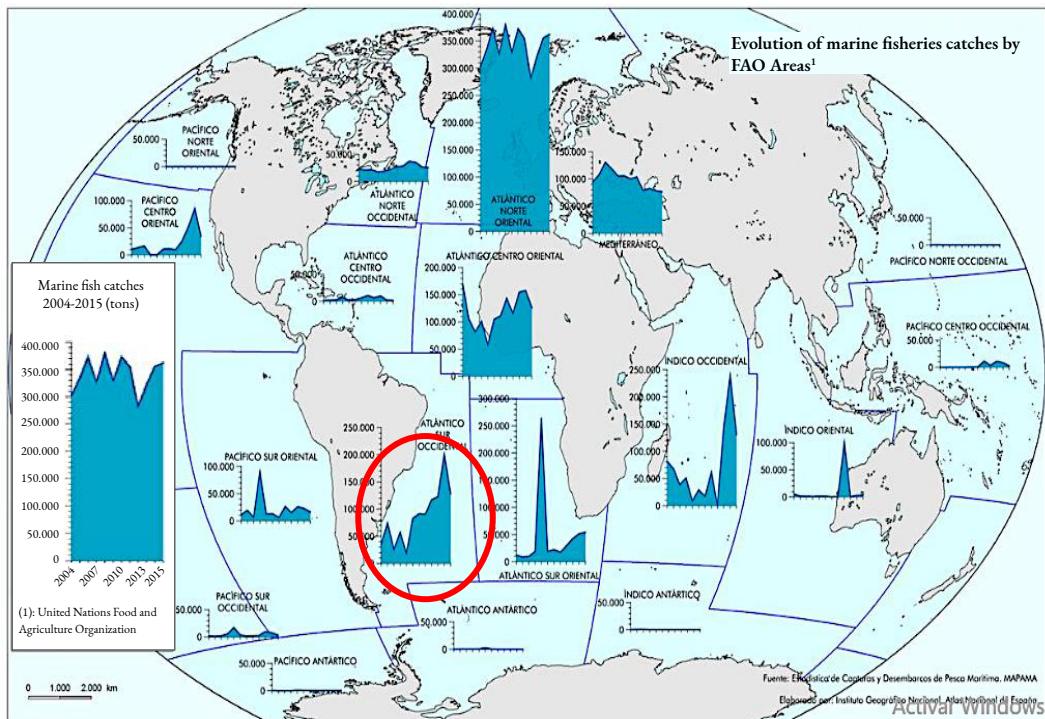


Source: Dupuy et al. (2015, p. 7).

Another aspect, not less important for the aforementioned author, lies in the region's fish farming wealth, which has gradually become a preponderant part of the economic life of the inhabitants of the Falklands and has aroused the interest of companies from several countries, in view of the emergence of a large business which, although not negligible at present,

has even greater potential. It is in the data provided by the National Atlas of Spain (2020) (based on information from the FAO for the period 2004/2015), where the South West Atlantic is located as the region with the greatest sustained growth in catches in the world, rising from 50 thousand tons (2004), to a peak of 200 thousand tons in 2014.

Figure 2 – Evolution of fishing catches in the world (period 2004-2015)

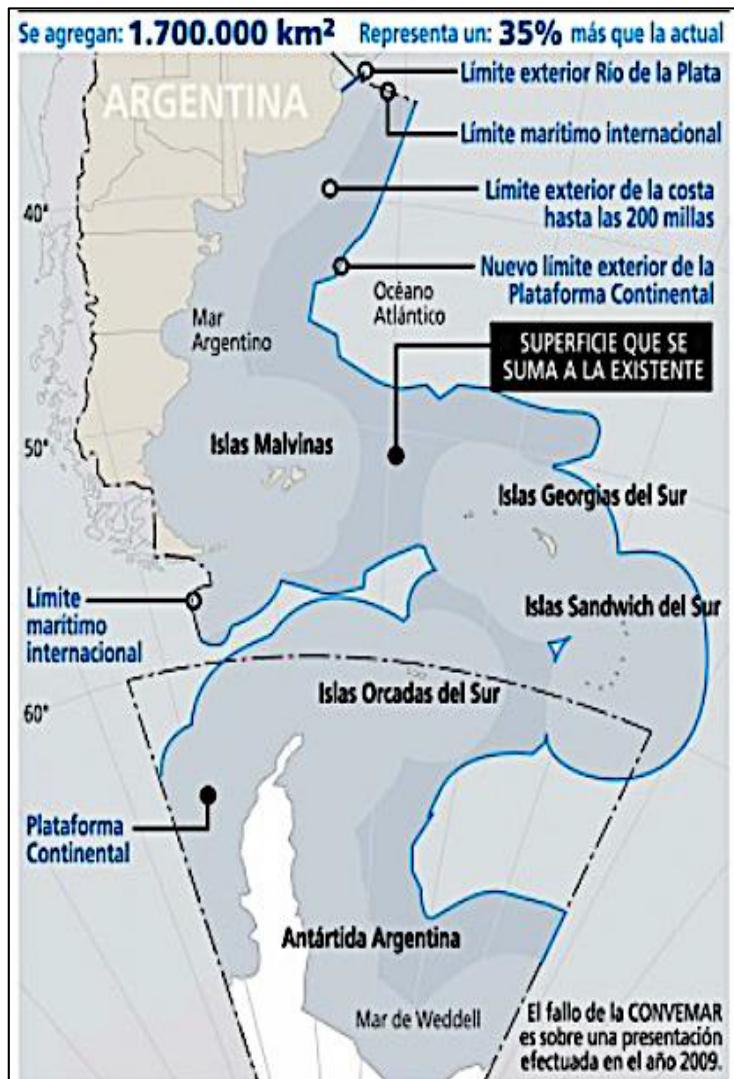


## 6.2 The Argentine Sea and the Falkland Islands

Altieri (2015, p. 14, our translation) quotes Koutoudjian (2011, p. 25) for an approach to the definition of the Argentine Sea:

It is the defensive glacis of central-southern Argentina, especially the main geo-economic and political nucleus of the country, located in the estuary of the Plata and in the peninsula of Patagonia. The Argentine Sea, in the Southwestern Atlantic, is the link of projection towards Antarctica. In addition, in the geographical center of our sea, the Falkland Islands are located, with their legal and administrative extension towards the South Georgia and South Sandwich Islands, which constitute the main geopolitical and strategic problem of the Argentine Republic.

Figure 4 – Argentinean Sea Nowadays



Source: Telam (SE PRESENTÓ..., 2016)<sup>6</sup>.

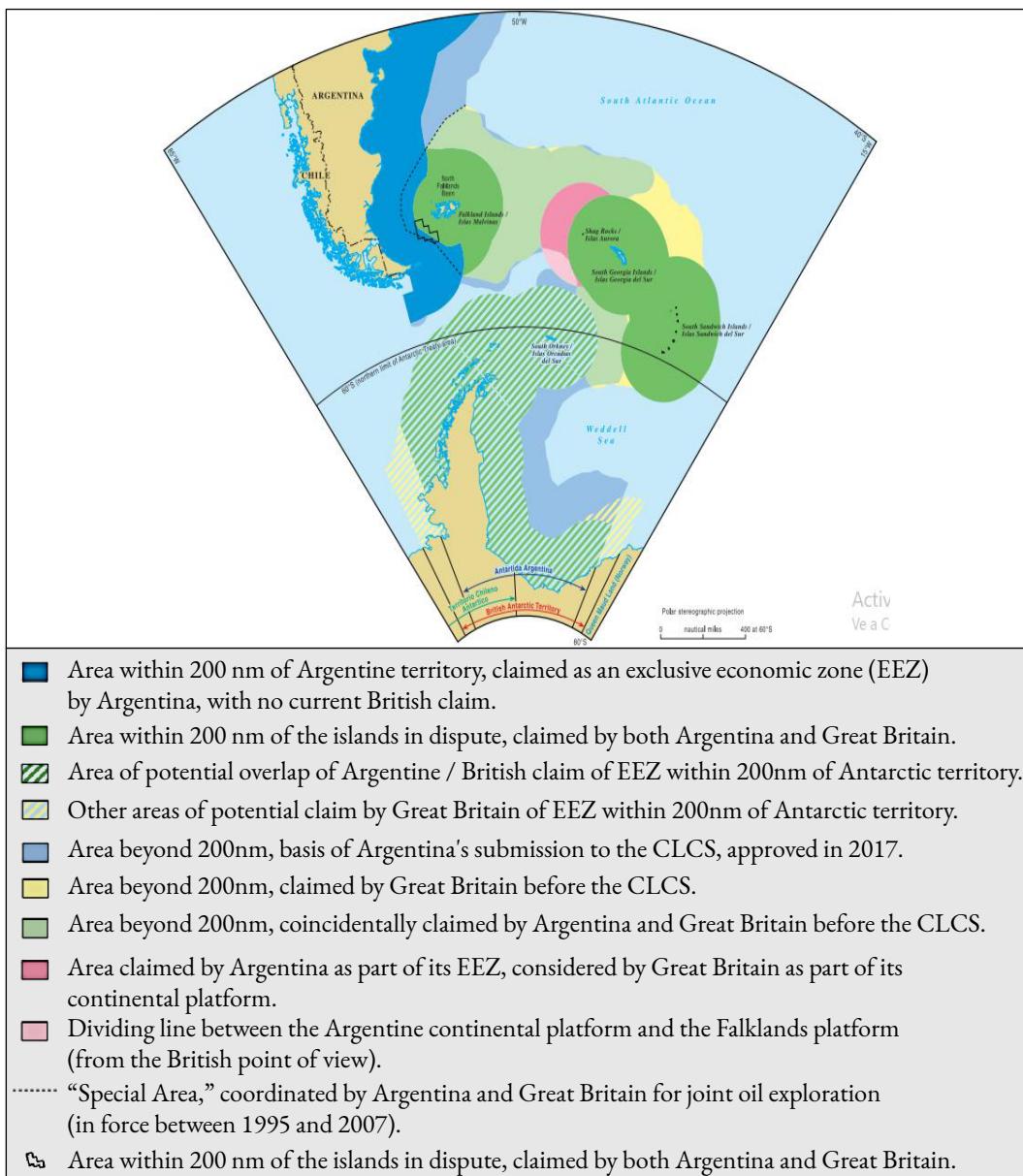
This definition allows us to address two central issues in relation to the geographical space in which the Falklands issue is developed: the economic aspects (based on natural resources) and the projection from the Islands to the Antarctic continent, which, in short, also revolves around the natural resources that exist there.

In relation to space and economic impacts, with the advent of the Sea Convention in 1982 and the recent extension of the Argentine continental shelf, as shown in Figure 4, there is an overlap of sovereign claims between Argentina and the UK. This implies a discussion on the control and usufruct of approximately 2,600,000 Km<sup>2</sup> including the islands and adjacent maritime spaces (GANEAU, 2019). The author adds that:

<sup>6</sup> According to data from Argentina's final presentation in 2016 (the first was submitted in 2009) to the Commission on the Limits of the Continental Shelf, approved by the UN in 2017, from which an increase of 1,700,000 km<sup>2</sup> to Argentina's maritime surface is recognized.

The value of island and maritime jurisdiction [of Falkland Islands and adjacent maritime areas] increased as the “law of the sea” expanded the sovereignty and the sovereign and economic rights of coastal countries with increasing distances from baselines. In the last century the rights were within the range of a cannon shot, but since the 1982 Convention on the Sea the economic limits have been extended to 200 nautical miles and, with the recognition of the extended continental shelf, the jurisdiction can be extended to distances close to 350 nautical miles. Thus, the value of the disputed Southwest Atlantic island jurisdictions, their adjacent maritime spaces and the maritime interests therein increased exponentially with the increase in maximum distances. (GANEAU, 2019, p. 7-8, our translation)

**Figure 4 – Overlapping British and Argentine territorial claims in the Southwest Atlantic**



Source: International Boundaries Research Unit (2010).

Beyond the geopolitical focus on natural resources, the Falkland Islands, South Georgia and the South Sandwich Islands cannot be ignored as a strategic point, since they are located opposite the Magellan section and next to the Drake Passage and the Beagle Channel, giving rise to the control of the bioceanic Atlantic-Pacific passes through the South. This is important both in the control of the islands, which allows the dominance of maritime traffic from South Africa and South America to the North Atlantic, as well as in the communication of the Indian Ocean with the South Atlantic and the South Pacific, a commercial shipping route that is becoming increasingly important (FORMENTO et al., 2017, p. 3). From the logical interpretation of Figure 3, the projection to the Antarctic continent is added, which provides, as can be seen in Figure 4, the overlapping of territories on that continent claimed by both countries, based on the geographical position of the Falkland Islands, South Georgia and the South Sandwich.

## 7 The analysis of interests related to Natural Resources

The interests, as ideal or real objects, acquire different value given by each actor and it is from them that the situation can be defined as a conflict. Thus, the relationship that is generated between the actors to control related interests is the cause of the existence of the conflict. Therefore, the conflict is idealized, represented, painted in the minds of the actors by interests (CAL et al., 2016; FRISCHKNECHT; LANZARINI, 2015).

For Ganeau (2019, p. 3), marine resources can be living or non-living, renewable or non-renewable, such as hydrocarbons, minerals or fisheries, among others. According to the above interpretation of the meaning of interest, “value” is the measure of the importance that an actor attaches to the object under attention. Under this interpretation, different criteria can be considered to represent the value of the uses and resources mentioned, which goes considerably beyond the known economic value.

The analysis of the value of maritime interests must consider a “maritime scenario” that includes the seabed, the water body, its surface and the atmospheric mass that interacts with the water, as well as the coasts that are the transition between land and water. Hence, a mind usually located in large continental spaces has difficulty in fully interpreting the complexities and needs of the sea (GANEAU, 2019, p. 3, our translation).

The analysis will focus on hydrocarbons and fisheries, as well as on the Antarctic projection, due to its interests from the geopolitical vision of natural resources.

### 7.1 Hydrocarbons

Because of the growing importance of the undersea section as a source of oil resources (offshore watersheds), the Falklands region began to be explored in the mid of 1970s (Shackleton mission)<sup>7</sup>. At a global level, it had an exponential increase from 1980, going from 4% of the total oil extracted in the world, to more than 22% at

<sup>7</sup> By 1975, the Falklands began to be considered as a hydrocarbon export pole by the British crown. As the biotechnologist Federico Bernal points out, “the clear turning point in British diplomatic strategy regarding the islands, moving from ambiguity to increasing intransigence, is from 1975” (PANSA, 2015, p. 77, our translation).

present, thus contextualizing the situation of hydrocarbons in the South West Atlantic (KOUTOUDJIAN, 2019, p. 11).

The exploration process in the adjacent seas of the Malvinas Islands started in 1993 but did not last until 2008. Based on new studies, that the theoretical possibility of obtaining 60 billion barrels offshore was visualized, which meant potential stocks greater than the reserves that the United Kingdom has in the North Sea (WITKER, 2012, p. 7). It led the British authorities in February 2010 to authorize the Desire, Falklands Oil and Rockhopper to carry out new studies focused on the north coast of the islands, the sector that appeared to be most promising. A year later, Rockhopper Exploration announced that, in the four areas awarded, in the north of the islands, there would be more than 400 billion barrels, equivalent to 15% of the British availability in the North Sea. The most important deposit in the northern watershed is the "Sea Lion" (KOUTOUDJIAN, 2019). Currently, the area where drilling is taking place is close to starting to produce oil.

Figure 5 – Location of Sea Lion Oilfield (North Falkland Islands watershed)

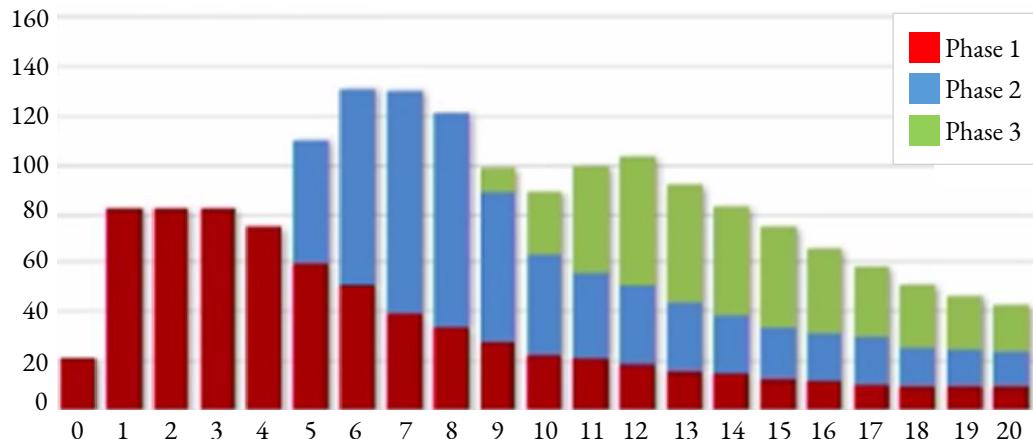


Source: Compañía... (2018).

The attraction of investment in hydrocarbon exploration on the islands was not considerable until 2010. The turning point came precisely after the discovery of crude oil in the Sea Lion field. In 2016, Rockhopper announced the beginning of the development of the first of the 3 phases projected in the Sea Lion Development Project. Although the technically recoverable production, discovered and audited, is around a minimum of 500 million barrels, the scenario officially presented by the operators' projects a number close to 1 billion barrels to be extracted in 20 years (ROCKHOPPER, 2017)<sup>8</sup>. According to Figure 6, by May 2019, the company maintained, just for Phase 1, estimates of 85 000 barrels per day and a total of at least 250 million barrels (ROCKHOPPER, 2020).

<sup>8</sup> According to data obtained from the presentation of Rockhopper's CEO, in September 2017, at the Oil Capital Conference.

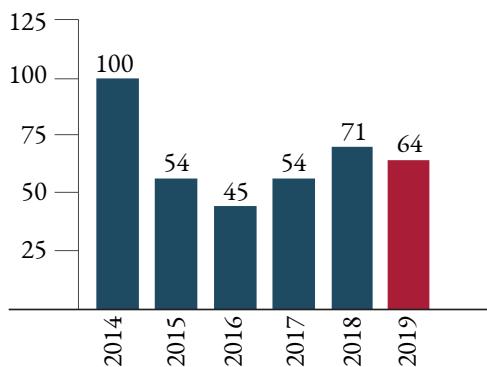
**Figure 6 – Estimated production from the first year of operation in millions of barrels per phase (Rockhopper estimates to start in 2020)**



Source: Rockhopper (2016).

However, even today, hydrocarbon work in the South Atlantic, and particularly in the sea around the Falklands, is onerous and represents a high risk. The uncertainty is even greater in relation to the quantity and quality of the crude oil and, above all, its commercial viability. The cost of the barrel that makes Phase 1 of Sea Lion viable is US\$35 (Rockhopper, 2016). At the time of writing, the price of the Brent barrel is quoted at US\$37 (June 15, 2020), having recovered from historically low values as a result of the global economic crisis caused by the COVID-19 pandemic (it was quoted at less than US\$20<sup>9</sup>).

**Figure 7 – Average price of the Brent Barrel in USD. Period 2014-2019**



Source: Rockhopper (2020).

<sup>9</sup> According to information available at: <https://br.investing.com/commodities/brent-oil-streaming-chart>.

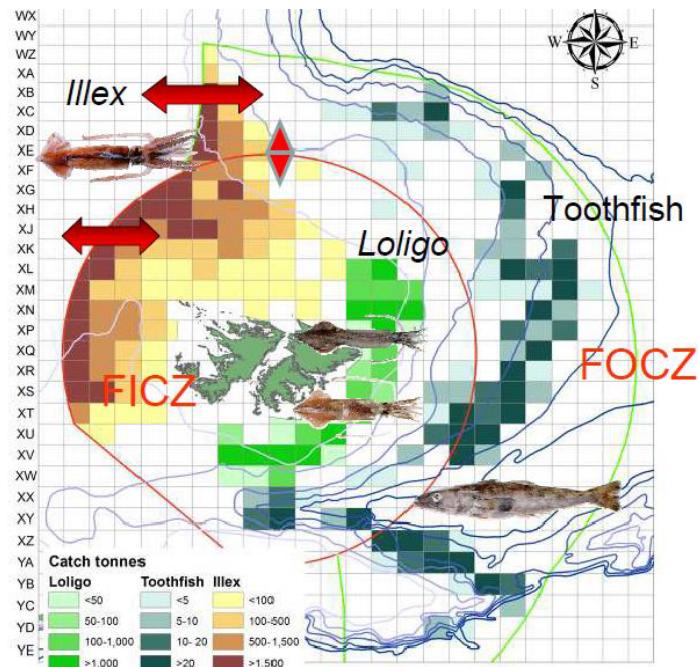
These perspectives require an active strategy on the part of the Argentine Republic, understanding that within the framework of the Madrid Treaties (1989 and 1990)<sup>10</sup> additional agreements could be established to reach an understanding that fully protects the current legal positions, but also allows the extension of cooperation to new areas to be explored (such as the Southern watershed), as a way of initial approximation that allows a more advantageous repositioning for a future comprehensive approach to the Falklands issue, where the situation of hydrocarbons is called to occupy a central position. In fact, the Sea Lion watershed is the fifth most important discovery in shallow waters in the last decade (ROCKHOPPER, 2020).

## 7.2 Fishing wealth

The areas around Falklands and the South Atlantic islands have increasingly important fishery resources: squid (illex and loligo), hake (toothfish), krill, seaweed, mollusks, cetaceans, pollock and cod, among others (CAMARGO, 2014, p. 602; KOTOUDJIAN, 2019).

The fisheries sector in the Islands has grown exponentially since the United Kingdom established in 1986 the “first interim Falkland Islands Conservation and Management Zone” or FICZ (Falkland Islands Conservation Zone) of 150 miles, equivalent to about 210km<sup>2</sup> (CAMARGO, 2014, p. 602; PANSA, 2015, p. 73).

**Figure 8 – Falkland Islands Fisheries Conservation and Management Zone (geographical distribution of catches of the main species – September 2014)**

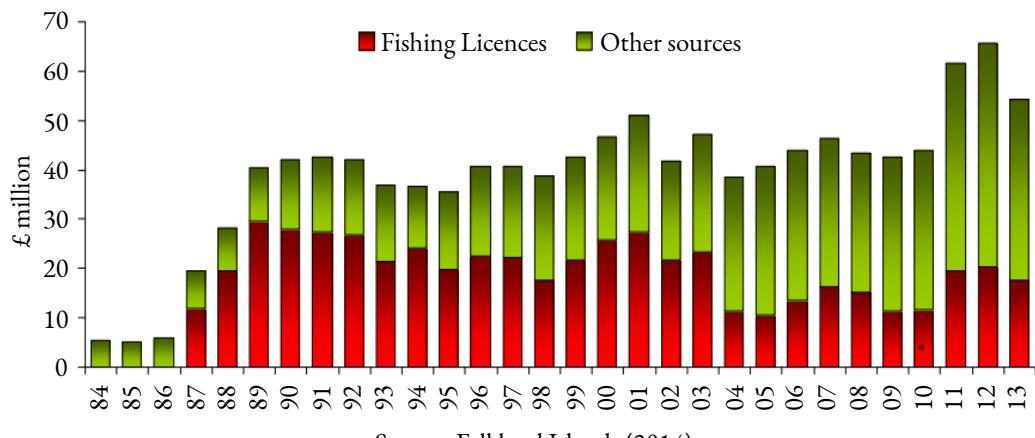


Source: Falkland Islands (2014).

10 In both treaties, Argentina and the United Kingdom of Great Britain restored diplomatic relations after the Falklands War.

Since then, fishing has become a big business, which has brought great benefits to the inhabitants of the islands. In fact, the Falkland Islands' GDP in 1986 was 9.8 million pounds and in 1987, after the liberalization of fishing, it jumped to 30.7 million pounds (13.7 million of that total directly related to fishing). With an average catch of 260 000 tons of fish per year in the islands (BARTON, 2002, p. 127) and revenues averaging 20 million pounds out of a total of between 40 and 65 million pounds since 1987, fishing was the most profitable source of resources in the Falklands (CAMARGO, 2014), until the start of oil exploitation, as can be seen in Figure 9.

Figure 9 – Income from economic activities in the Falkland Islands (1984-2013)



Source: Falkland Islands (2014).

For a better understanding of what has been expressed, in all the Argentine coast the fishing reaches 800 thousand tons per year, while in the Islands it exceeds 200 thousand tons per year, which allows to dimension the fishing potential of the region (KOUTOUDJIAN, 2019).

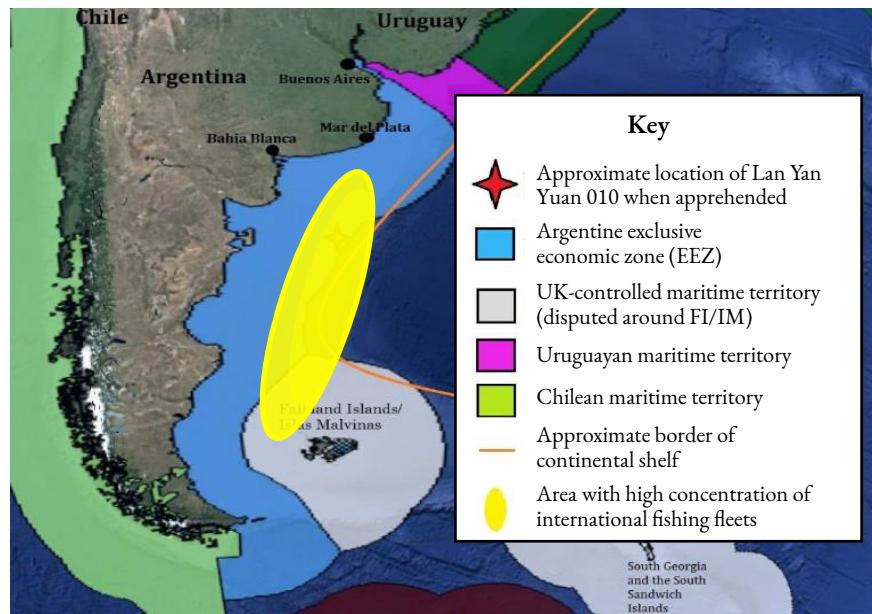
For Testa (2015, p. 69), the strategic uniqueness of the region lies, among other things, in its current and enormous fish resources, which are the result of depletion in other seas of the world, generating concern about the overexploitation to which the Southwest Atlantic can be submitted. For this reason, this enormous maritime space is becoming increasingly important in the global fishing business.

This situation attracts the presence of numerous foreign fleets in the vicinity of the Argentine Sea, fishing in the limit of the Exclusive Economic Zones of the Argentine Sea and Falklands (often within them, illegally) among which the Chinese presence cannot be avoided, which has generated an alarm in the Argentine authorities. In fact, while this article is being written, the Argentinean Executive is sending a bill to the National Congress

“[...] to raise the limitations and fines on those who engage in illegal fishing in Argentine waters, including those around the Falkland Islands. The regulation seeks to prevent the plundering by fishing vessels that enter Argentine maritime spaces without permission, with the aim of defending natural resources in the South Atlantic” (ARGENTINA, 2020, n.p, our translation).

This situation is also present in the Falkland Islands authorities. The Islands' Director of Natural Resources, John Barton<sup>11</sup> made public the concerns of the islanders' government in 2018, following the notable increase in foreign fishing vessels in the region (FALKLANDS CONCERN..., 2012).

Figure 10 – Area with high presence of international fishing vessels



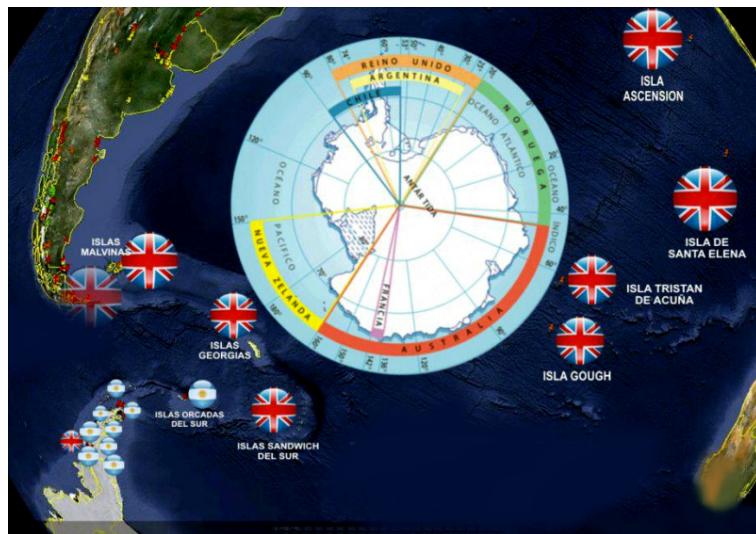
Source: China... (2016).

### 7.3 The Antarctic projection

It is important to understand that, for Great Britain, in the succession of bases it has in the South Atlantic, the Falkland Islands, South Georgia and the South Sandwich Islands are one more link in that chain, although of crucial importance. From the classical geopolitical viewpoint, it not only assures Great Britain the control of the South Atlantic and the communication between the Indian, Atlantic and Pacific Oceans, but also provides it with a projection to the Antarctic continent and, therefore, the possibility of claiming territory over it. It is clear that, in the systemic complex of overseas possessions, the Falklands are the “key” to access to Antarctica.

<sup>11</sup> After 33 years in this function, in 2019 the Falkland Islands government appointed Andrea Clausen, an expert in marine biology, to the post.

Figure 11 – British bases in the South Atlantic and territorial claims in Antarctica



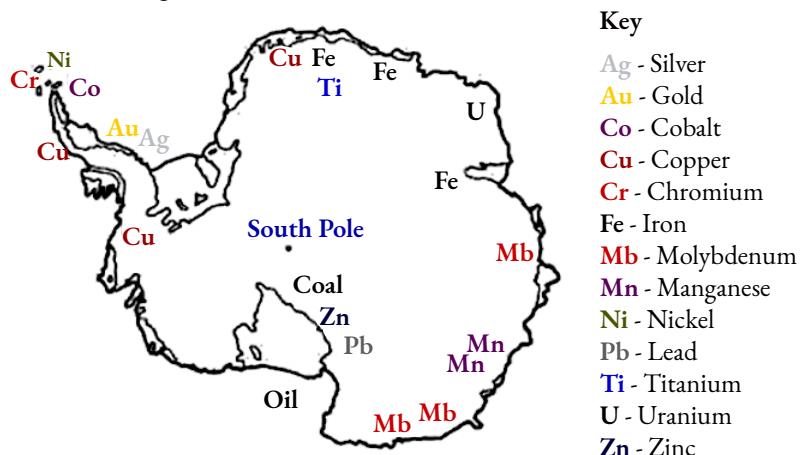
Source: Juventud Marítima (2019).

From the point of view of natural resources, this projection opens the door to a source of renewable resources (fish wealth), non-renewable resources (hydrocarbons and minerals) and an immense reserve of fresh water.

It is precisely the enormous masses of ice (water) present in Antarctica that represent one of the Continent's great riches, with its reserves estimated to constitute nearly 80% of the planet's total fresh water, making it a major potential resource for supplying the world's population, in addition to many other uses.

Regarding non-renewable resources, only in the Antarctic Peninsula (a region of the continent where there are overlapping claims to sovereignty by Argentina, Chile and Great Britain), is there evidence of the existence of nickel, cobalt, chrome, copper, gold and silver deposits<sup>12</sup>.

Figure 12 – Proven mineral deposits in Antarctica

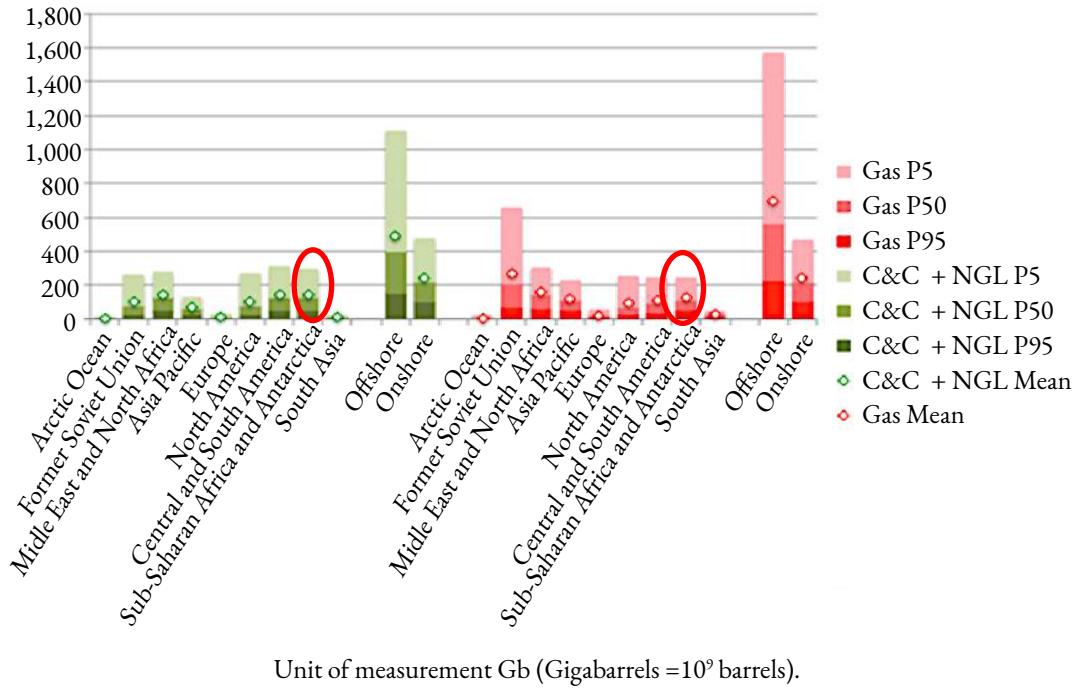


Source: Minerals (2014).

12 Information available at [https://www.coolantarctica.com/Antarctica%20fact%20file/science/threats\\_mining\\_oil.php](https://www.coolantarctica.com/Antarctica%20fact%20file/science/threats_mining_oil.php)

Similarly, Kaplan (2017), using data from the United States Geological Survey (USGS), places Antarctica among the regions of the planet with the largest estimated reserves of gas and oil in the world.

Figure 13 – Estimated world reserves of gas and oil undiscovered circa 2017



Source: Kaplan (2017).

While it is true that, in the short term, the Antarctic Treaty (1961) serves to contain the claims of countries and protect all the resources of the Antarctic, the proximity of the end of the aforementioned treaty (in 2041<sup>13</sup>), may give rise to numerous conflicts which are waiting to be defined.

For this reason, and with great adherence to what Cisneros (2013) has said, the Falklands and the Antarctic should not be considered independent issues, at least by Argentine foreign policy. A thorough territorial awareness, from which a geopolitical vision must be derived, may allow us to understand that both disputes have the same nature.

## 8 Conclusions

As expressed by Bégarie (1988), an acute geostrategic vision must be based on the systematic exploration of the possibilities offered by large spaces, where resources have a transcendental role. This forces nations to work on the permanent exploration of their interests in all sovereign spaces. This process, which is born in ideas, must move to action, in a coordinated and synergic way, among all the factors of the National Power.

13 At the international meeting held in 1991 (Madrid), it was agreed to extend for 50 years the Original Treaty, which declares the Antarctic to be the heritage of all mankind.

In the attempt to obtain essential elements for the future analysis of the Falklands issue (objective of the work), and in accordance with what was stated in the development of the work, we appreciate the following:

- From the strict point of view of natural resources, there are two central elements in the evolution of the conflict: hydrocarbons and fishing. This aspect coincides with the postulates of Klare (2003, 2008), in relation to the war for resources that is presented as the main focus of conflict between states, after the end of the Cold War.

With regard to hydrocarbons, in the next few years there will be two crucial indicators on the general conflict board: that the extraction (by phases) of the estimates of the Sea Lion oilfield (North Falklands Watershed) be carried out and, at the same time, the results of other explorations that may be carried out in the South Falklands Watershed. Simultaneously, Argentina could again attempt a rapprochement to establish joint exploration areas with Great Britain, considering the difficulties and costs associated with this task in the South West Atlantic and the low margin of profitability that the current price of oil provides for British companies.

In terms of fisheries, the incipient signs of a decrease in total catches must be closely monitored, not only in the waters around Falkland Islands, but also in the Argentine Sea. Thus, it is imperative to recover the strict control of fishing in the southern fishing area, by Argentina, but also by the islanders. This aspect can be a point of connection towards which Argentine and British efforts converge, to coordinate strategies to defend the southern sea in general from foreign predators.

- From the classic point of view of geopolitics, but with undeniable points of connection with natural resources, there are two aspects of central importance: the demarcation of the Exclusive Economic Zones claimed by both countries and the question of Antarctica.

With respect to the first point, the clear existing overlaps, especially since the recognition by the UN of Argentina's claim on the extension of its maritime jurisdiction, may generate an increase in the existing tensions in the decade that is beginning, which will surely demand an active strategy from both countries, where Diplomacy and Defense will have to be intelligently articulated in order to arrive at rational solutions.

Finally, it should be noted that the completion of the Antarctic Treaty is on the horizon. The main basis for Britain's claim to sovereignty on that continent is based on its overseas possessions in the Falkland Islands, South Georgia and the South Sandwich Islands. Undoubtedly, the estimated and undiscovered natural resources on the Antarctic continent make it difficult for any negotiations focused on sovereignty (of the Falkland Islands) to be proposed by Argentina in the short term.

Finally, the need to deepen territorial awareness is noted, without which no geopolitical vision is possible. This also applies to natural resources, which implies

rethinking and resignifying Falkland Islands geopolitically from that perspective; conflict that in its past, present and future allows us to approach to the conceptualization of the “Violent Peace” prevailing in the region, than that of “Long Peace.” The evolution of the Falklands issue in the 21st century (and its associated interests) will be crucial to tip the balance towards one of the sides.

## References

ALTIERI, M. Poder naval en el Atlántico Sur Occidental del siglo XXI: nuevo escenario mundial y competencia por el control del espacio marítimo entre los años 2002 Y 2015. *In: ENCONTRO NACIONAL DA ASSOCIAÇÃO BRASILEIRA DE ESTUDOS DE DEFESA*, 10., 2015, São Paulo. *Anais* [...]. São Paulo: Abed, 2015.

MINERALS. **Antarctica Information**, [s. l.], 13 jun. 2014. Available at: <https://bit.ly/3filaER>. Access on: June 12, 2020.

ARGENTINA. Presidencia. **El Presidente enviará tres proyectos de ley para darle estatus de política de Estado al reclamo argentino de soberanía sobre las Malvinas**. Buenos Aires, 2020. Available at: <https://bit.ly/39yFMH8>. Access on: June 16, 2020

ARNAUD, V. G. Malvinas, Atlántico Sur y Antártida: la realidad actual. *In: ANTICIPO DE ANALES DE LA ACADEMIA NACIONAL DE CIENCIAS DE BUENOS AIRES*, 8 abr. 2014, Buenos Aires: *Anais* [...]. Buenos Aires: Academia Nacional de Ciencias de Buenos Aires, 2014.

ATLAS NACIONAL DE ESPAÑA. **Instituto Geográfico Nacional**, 2020. Available at: <[http://atlasnacional.ign.es/wane/Pesca\\_y\\_acuicultura](http://atlasnacional.ign.es/wane/Pesca_y_acuicultura)>. Access on: June 16, 2020.

AYUSO, F. B.; ANGUERA, M. M.; PÉREZ-SEOANE, S. **La campaña de Malvinas**. Madrid: San Martín, 1985. (Colección historia del siglo de la violencia: campañas).

BARTON, J. Fisheries and fisheries management in Falkland Islands conservation zones. **Aquatic Conservation**, Hoboken, v. 12, n. 1, p. 127-135, 2002. Available at: <https://bit.ly/3iSeO1t>. Access on: June 8, 2020.

BATTAGLINO, J. M. Palabras mortales: ¿rearme y carrera armamentista en América del Sur? **Nueva Sociedad**, [s. l.], n. 15, p. 23-34, 2008.

BATTAGLINO, J. M. The coexistence of peace and conflict in South America: toward a new conceptualization of types of peace. **Revista Brasileira de Política Internacional**, Rio de Janeiro, v. 55, n. 2, p. 131-151, 2012. ISSN 0034-7329.

BATTALEME, J. et al. La Geopolítica de los Recursos Naturales Estratégicos: del mito a la realidad. **Revista de la Escuela Superior de Guerra**, Buenos Aires, n. 577, p. 102-115, enero-abril 2011. ISSN 0327-1137.

BECK, P. The Anglo-Argentine dispute over title to the Falkland Islands: changing British perceptions on sovereignty since 1910. **Millennium Journal of International Studies**, London, v. 12, n. 1, p. 6-24, 1983.

BECK, P. **The Falkland Islands as an international problem**. London: Routledge, 1988.

BÉGARIE, H. C. **Geoestrategia del Atlántico Sur**. Buenos Aires: Intituto de Publicaciones Navales, 1988.

BLACKWILL, R.; HARRIS, J. **War by other means**. Geoeconomics and Statecraft.

CAL, C. et al. **La cuestión estratégica**. Análisis y conducción. Buenos Aires: Escuela de Guerra Naval, 2016.

CAMARGO, F. R. D. Ilhas Falklands: o despertar econômico. *In: CONGRESSO BRASILEIRO DE GEOGRAFIA POLÍTICA, GEOPOLÍTICA E GESTÃO DO TERRITÓRIO*, 1., 2014, Rio de Janeiro. **Anais** [...]. Porto Alegre: Ed. Letra1, 2014. p. 599-611. Available at: <https://bit.ly/3ecGuKM>. Access on: July 10, 2020.

CENTENO, M. A. **Blood and debt**: war and the nation-state in Latin America. Philadelphia: Penn State University Press, 2002.

CHINA on the brink of fishing conflict in South America. **Diálogo Chino**, London, 11 May 2016. Available at: <https://bit.ly/2Oh8hyY>. Access on: June 10, 2020.

CISNEROS, A. Antártida y Malvinas: ¿un mismo conflicto? **Boletín del Centro Naval**, Buenos Aires, n. 836, p. 277-286, 2013.

COMPANÍA británica confirmó proyecto de explotación de petróleo en Malvina. **Lavoz**, [S. l.], 21 mayo 2018.

DELGADO, C. A. B. Cuestión Malvinas. Atlántico Sur, Plataforma Continental y Antártida. **Relaciones Internacionales**, La Plata, v. 21, n. 42, p. 177-195, 2012.

DUPUY, H. A. et al. **La cuenca del Atlántico Sur**: una región geopolítica en transición. La Plata: Sedici, 2015.

ESPÓSITO NETO, T. A política externa brasileira frente ao Conflito das Falklands/Malvinas. **História: Debates e Tendências**, Passo Fundo, v. 6, p. 111-131, 2006.

FALKLANDS CONCERN with vast fishing fleet gathering on high seas. **Mercopress**, 12 jan. 2012. Available at: <https://bit.ly/2DDKass>. Access on: July 13, 2020.

FALKLAND ISLANDS. **Natural Resources**: fisheries. Falkland Islands: Falkland Islands Government, 2014.

FIEL, F. D. I. R. L. **Las inversiones extranjeras en la Argentina.** [S. l.: s. n.], 1973.

FORMENTO, W. et al. Malvinas: relevancia geoestratégica en las relaciones globales de poder del Siglo XXI. **Memoria Académica**, La Plata, 10 nov. 2017.

FRANCHI, T.; GLASER, E. F.; VILLARREAL, R. X. Taxonomy of interstate conflicts: is South America a peaceful region? **Brazilian Political Science Review**, São Paulo, v. 11, n. 2, e0008, 2017.

FRANKS, O. S. **Franks Report**. London: Falkland Islands Review Committee, 1983.

FREEDMAN, L. **The official history of the Falklands Campaign**. London: Routledge, 2005a. v. 1.

FREEDMAN, L. **The Official History of the Falklands Campaign**. London: Routledge, 2005b. v. 2.

FRISCHKNECHT, F.; LANZARINI, M. **Lógica, teoría y práctica de la estrategia**. Buenos Aires: Instituto Universitario Naval, 2015.

GANEAU, E. L. Las jurisdicciones marítimas como sustento de los intereses marítimos argentinos y sus necesidades de protección. **Primero Bahía**, Buenos Aires, 2019.

JUVENTUD-MARÍTIMA. Juventud Marítima Juan Ocampo, 2019. Available at: <<https://juventudmaritimasmou.com/2019/09/06/el-dominio-total-de-gran-bretaña-en-el-atlántico-sur/>>. Access on: June 20, 2020.

INTERNACIONAL BOUNDARIES RESEARCH UNIT. **Claims and potential claims to retimeme jurisdiction in the South Atlantic and Southern Oceans by Argentina and the UK**. Durham: IBRU, 2010.

KACOWICZ, A. M. **Zones of peace in the third world**. New York: Sunny Press, 1998.

KAPLAN, G. Non-OPEC Mid-size Oil Producers. **Peak Oil Barrel**, [S. l.], 29 nov. 2017. Available at: <https://bit.ly/3iX7j9f>. Access on: June 10, 2020.

KLARE, M. T. **Guerra por los Recursos**: el Futuro escenario del conflicto global. Barcelona: Urano, 2003.

KLARE, M. T. **Planeta sediento, recursos menguantes**: la nueva geopolítica de la energía. [S. l.]: Tendencias, 2008.

KOUTOUDJIAN, A. Geopolítica del Mar Argentino. **Revista de la Escuela de Guerra Naval**, Buenos Aires, n. 57, p. 69-93, oct. 2011.

KOUTOUDJIAN, A. Las Malvinas, Georgias y Sandwich del Atlántico Sur: un camino necesario para la soberanía argentina. 2019. Artigo não publicado.

MARES, D. **Violent peace**: militarized interstate bargaining in Latin America. New York: Columbia University Press, 2001.

MARTÍN, F. E. **Militarist peace in South America**: conditions for war and peace. New York: Palgrave McMillan, 2006.

MARTIN, J. M. Geopolítica del Atlántico Sur. *In*: KOUTOUDJIAN, A. **Geopolítica del Mar Argentino**. Buenos Aires: Instituto de Publicaciones Navales, 2015.

MARTINS, M. A. F. Sobre a geopolítica de Segundo Storni: raízes epistemológicas do seu pensamento e percepção da política sul-americana. *In*: Simpósio Internacional Pensar e Repensar a América Latina, 2., 2016, São Paulo. **Anais** [...]. São Paulo, Prolam, 2016a.

MARTINS, M. A. F. **Terra e mar no pensamento geopolítico argentino**: da disputa hegemônica no cenário doméstico a sua influência sobre a Geopolítica do Brasil. 2016. Tese (Doutorado em Integração da América Latina) – Universidade de São Paulo, São Paulo, 2016b.

PANSA, R. **Los intereses británicos en las islas Malvinas, Georgias del Sur y Sándwich del Sur en el siglo XXI**. Tesina (Grado) – Facultad de Ciencia Política y Relaciones Internacionales, Universidad Nacional de Rosario. Rosario, p. 1-126. 2015.

PERÓN, J. D. **Discurso en la Escuela Superior de Guerra**. Buenos Aires: ESG, 1953.

PHELPS, V. L. **The international economic position of Argentina**. Philadelphia: University of Pennsylvania, 1938.

ROCKHOPPER. **Building a well-funded, full-cycle, exploration-led E&P company**. London: Rockhopper, 2016.

ROCKHOPPER. **Creating value through building a well-funded, full-cycle, exploration-led E&P company**. Rockhopper Exploration PLC. London. 2020. Oil Capital Presentation. Available at: <https://bit.ly/305I0dV>. Access on: July 13, 2020.

RODRÍGUEZ, A. B. **La vinculación internacional de Argentina 1880-1930:** las relaciones internacionales y la ideología de la élite gobernante. 2005. Tese (Mestrado em Facultad de Ciencias Económicas, Universidad de Buenos Aires. Buenos Aires, 2005.

RUDA, J. M. **Alegato Ruda.** Islas Malvinas. Nueva York: ONU, 1964. Intervención del representante argentino, embajador José María Ruda, en el Subcomité III del Comité Especial de la ONU.

SE PRESENTÓ el nuevo límite exterior de la plataforma continental argentina. **Telam**, Buenos Aires, 28 mar. 2016. Available at: <https://bit.ly/2Wbds88>. Access on: July 13, 2020.

SENHORAS, E.; MOREIRA, F.; VITTE, C. S. A agenda exploratória de recursos naturais na América do Sul: da empiria à teorização geoestratégica de assimetrias nas relações internacionais. In: ENCUENTRO INTERNACIONAL DE GEÓGRAFOS DE AMÉRICA LATINA, 12., Montevidéu, 2009. **Anais** [...]. Madri: AGE, 2009.

TERRÍBIL, H. **Enfoque estratégico para una prospectiva naval.** Buenos Aires: [s. n.], 2018.

TESTA, A. **La Guerra de Malvinas 02 abr/14 jun 1982 – Argentina y RUGB y la importancia geoestratégica del archipiélago en el Atlántico Sur.** Buenos Aires: Escuela Superior de Guerra, 2015.

VACA, M. A. **Influencia del poder naval en la cuestión estratégica Malvinas.** Buenos Aires: Escuela de Guerra Naval, 2017.

VALÉRIO, M. A. G.; HENTZ, L. A. S. Islas Malvinas versus Falkland Islands: o arquipélago da discordia. **Revista de Informação Legislativa**, Brasília, DF, n. 198, p. 189-209, 2013.

VELASCO, J. E. G. El Informe Shackleton sobre las Islas Malvinas. **Revista de Política Internacional**, Madrid, n. 153, p. 31-56, sect./oct. 1977.

VERGARA, S. **Métodos de pesquisa em administração.** São Paulo: Atlas, 2008.

WITKER, I. Claves geopolíticas en torno al conflicto del Atlántico Sur. **Revista Política y Estrategia**, Santiago, n. 119, p. 69-88, 2012.

ZURUTUZA, S. **La cuestión de Malvinas:** hacia la construcción de un nuevo periodo estratégico mediante una estrategia nacional. Buenos Aires: Escuela de Guerra Naval, 2017.



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The manuscript:

1. It must be original and unpublished;
2. It must not have been published or be in assessment process by another journal, and an eventual submission to another journal will only occur after the assessment return;
3. A substantially similar version must not have been published in annals of events.

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### Focus and Scope

The *Coleção Meira Mattos* is an interdisciplinary journal that publishes scientific articles related to Security, Defense and Military Sciences, promoting a dialogue between academics and professionals and integrating questions about Armed Forces and Society. It publishes peer-reviewed articles and, occasionally, interviews and selected technical reports on current issues of interest to the area.

### Formatting

The papers should be submitted in Word or RTF format.

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Language: articles may be submitted in Portuguese, English or Spanish.

Title: The title should be brief, limited to 22 words (including, if any, the subtitle).

Abstract: with a maximum of 150 words in the language of the text and in English (when submitted in Portuguese or Spanish). It must describe the objectives, methodology and results.

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Word limit: The article should have between 6000 and 8000 words, including pre-text and references. However, major or minor articles may be published as long as justified by the content of the contribution.

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[Explanatory text]. Available at: [website]. Access on: [month abbr. Day, year].

More information available on the Brazilian Army website. Available at: [www.eb.mil.br](http://www.eb.mil.br). Accessed on: Jul. 2, 2019.

## **Other Recommendations**

Indication of financing: it should be indicated as a footnote of the title if the research is financed and who financed it. Also indicate, when available, the process number. According to the following structure:

Study/Research project financed by the [funding body], through [project/program], [notice/process].

Example:

Study funded by the Brazilian Ministry of Defense and the *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* (CAPES), through the Program of Support for Teaching and Scientific and Technological Research in National Defense (*Pró-Defesa*), notice 27/2018.

Data about the author(s): they must be informed only in the metadata filled in the system when submitting the article. Only the full name, institutional association and e-mail address will be published.

Example:

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