

Florian MANET

THE THALASSOPOLITICS OF INTERNATIONAL DRUG TRAFFICKING

THE HIDDEN FACE OF GLOBALIZATION?

Foreword by Jean-Philippe LECOUFFE

Afterword by Pierre VERLUISE



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Florian MANET

*Foreword by Jean-Philippe LECOUFFE, Deputy
Executive Director Operations, EUROPOL*

*Afterword by Pierre VERLUISE,
founder of DIPLOWEB.COM*

To Major Jean-Christophe Bolloch, a judicial police officer with the Brittany Criminal Investigation Service, who died on duty on 25 October 2023 on the A13 motorway near Le Perrey in the Eure department, while taking part in the arrest of a convoy of drug traffickers.

To Colonel François Désprés, who passed away prematurely on 2 December 2023, and who conveyed to me his passion for the judicial police and whose unique charisma made a deep impression on me.

Contents

Acknowledgements	9
Introductory remarks.....	11
Foreword	13
Introduction.....	16

Chapter 1. 19

Drug trafficking: the driving force behind criminal activity?	19
---	----

1. An attempt to define drug trafficking.....	19
1.1. A generic approach to drug trafficking.....	19
1.2. A consumer-focused value chain.....	20
1.3. ... which generates a prolific criminal ecosystem.....	21
1.4. A dark figure masks the reality of a growing phenomenon.....	26
1.5. Maritime drug trafficking: a secure and agile logistics solution?	27
2. The global drugs market is expanding rapidly.....	29
2.1. 'Everywhere, Everything, Everyone'	29
2.2. Explosion in global drug production	31
2.3. Laboratories located in Europe?.....	33
2.4. The impact of the health crisis: just an operational report or a lasting change in the drug trafficking market?	36

Chapter 2. 39

Maritimization of drug trafficking: a response to an expanding world market?.....	39
--	----

1. Maritime vectors – logistical solution to this underground economy	39
1.1. Local cabotage or last-mile logistics.....	39
1.2. Regional influence.....	41
1.3. Flag out and Flag shopping, the challenges of fleet tracking	42

1.4. International shipping – between strategic autonomy and systemic contamination of logistics flows	44
2. The hybridization of seafarers: the example of fishing fleets, subjected to all types of seduction	44
3. Technological innovation supporting crime	46
3.1. Design offices and sweatshops in the heart of the Amazon region	46
3.2. A fleet of narco-sub launches an assault on the oceans	47
3.3. Spain: a narco shipyard?	50
3.4. Underwater torpedo: a symbol of stealth	50
4. Conquering global consumer markets	51
4.1. Extremely daring techniques for contaminating sea freight	51
4.2. International law of the sea put to the test by drug trafficking	59
4.3. The sea as a buffer zone	61

Chapter 3. 64

The thalassopolitics of illicit traffic	64
1. A fundamental but complex criminal map	64
2. Variety of maritime routes: indicative of the intentions of the sponsors?	66
2.1. Routes dictated by the maritime environment	67
2.2. Ports of call determined by criminal support network	70
3. South America: a laboratory for the logistization of the world?	71
3.1. Colombia – at the heart of global cocaine production	74
3.2. Peru – the world's second largest coca producer and Bolivia's gateway to coca production	76
3.3. Bolivia: coca leaf production under control?	82
4. The criminal Eldorado to conquer	85
4.1. The Iberian Peninsula: an outpost for international drug trafficking?	86
4.2. The industrialization of cocaine imports: the time of the container and the choice of the Northern Range	88
5. Staging areas: providing a new lease of life for primary flows?	92
5.1. South America: a logistical springboard for international expansion?	92
5.2. Africa – at the heart of an international multi-product staging mechanism	101
5.3. Macaronesia: a hot spot for Atlantic drug trafficking?	108
5.4. Mozambique channel: a hot spot for multi-product trade?	110

Chapter 4. 112

New trends in international drug trafficking	112
1. A global exchange for psychotropic substances	112
1.1. Heroin	112
1.2. Captagon – an example of the dynamics of synthetic drugs	114

1.3. Cannabis and cocaine: the current drug barter between Africa and South America?	116
2. The oil-spill phenomenon: the Southern Cone, a new Eldorado for drug traffickers?	116
3. The Indian Ocean: a crossroads of influences?	122
4. Technology and maritime drug trafficking	124
4.1. Underwater drones: the key to logistical autonomy?	124
4.2. Cyberattacks: an irresistible change in modus operandi?.....	126
4.3. Can crypto-assets facilitate transactions and build trust?	128

Chapter 5. 131

Criminal thalassocracy: an unmasked actor in international drug trafficking?	131
1. Criminal thalassocracy: an active member of organized crime? ..	131
1.1. A maritime incarnation of organized crime?	131
1.2. Is corruption a criterion for successful operations?	135
1.3. Seaports infiltrated by drug organizations?	137
2. Criminal thalassocracy and criminal capitalism	138
2.1. The criminal thalassocracy, a partnership enterprise	138
2.2. The tortuous circuits of money laundering.....	141
2.3. Future markets?	143
3. Historical times: the founding fathers	144
3.1. The Italian mafia – forerunner of Colombian de-cartelization	145
4. Contemporary Uberization	147
4.1. Are Albanian criminal groups an emerging power?	148
4.2. Are South American cartels still active in Europe?	153
5. What impact does drug trafficking have on port cities?	154
5.1. A subject that requires further research	154
5.2. Segregated spaces but a shared destiny?	154
5.3. The emerging face of a polycriminal ecosystem	156
5.4. South America or the concentration of risk	157
5.5. Northern Europe and the realities of South America	158

Chapter 6. 161

The infrastructure of international relations: the port, the ship and the TEU.....	161
1. Logistization – the offspring of globalization.....	161
1.1. The world in a box	162
1.2. Data in a box?	164
1.3. The container ship – a symbol of the magnitude of the maritime industry	165
2. A reconfiguration of the contemporary maritime-port chessboard?	166

3. What are the safety implications?..... 169

4. The benefits and advantages of maritime capitalism: the second-
and third-hand market 171

Conclusion 173

1. Unstoppable globalization of criminal networks 173

2. Is criminal thalassocracy threatening the maritime giants? 174

3. International relations: vulnerable to drug trafficking? 175

4. Combating drug trafficking requires a multidisciplinary approach
..... 177

5. Thalassopolitics and geopolitics..... 180

Afterword 182

Bibliography 185

Table of figures 187

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Introductory remarks

*Dr Yann ALIX – Managing Director – Fondation SEFACIL
Le Havre, 13 June 2024*

From the distribution of Roman wines across the Mediterranean to the first psychotropic experiments in the wake of the discovery of the Americas, not forgetting the opium laudanum supplied by British apothecaries, there's one common historical thread in all of these stories – the use of the sea as a vector for forbidden and prohibited exoticism.

The first industrial revolution saw the emancipation of drugs and their use, with alcohol and tobacco as the first substances to experience a popularization of consumption. During this era, sails were replaced by steam, and nautical horizons were extended, increasing intercontinental connectivity and intensifying opportunities for commercial ties and the drug trade.

Narconomadism has since become 'thalassocratized' with market globalization and the maritimization of international trade. The twentieth century will be remembered as the century that witnessed a radical change in the scale of drug trafficking. The first scale is geographical, with the globalization of production and, above all, consumption, weaving networks that cover all the areas of the planet that embrace human civilization. The second scale is temporal, with a reduction in the space-time relationship that can be explained by the third scale – logistics. The twenty-fold increase in maritime traffic since 1950 (reaching more than 11 billion metric tonnes) requires ever greater transport capability (around 100 000 merchant ships in 2023). This provision of capacity and the intensity of service frequencies, thanks to the speed at which ships operate, increase drug importing and exporting opportunities. As such, they have significantly reduced the time between producer and consumer. Also, they have made transport networks more reliable, relying on economies of scale and scope to reduce dry losses from seizures.

The maritimization of the drug trade is characterized by an almost constant increase in both volume and value, as Colonel Manet's analysis accurately and diligently reveals. Ports, i.e. transshipment zones, where goods are also stored and transferred, are essential hubs for the concentration of arrivals by sea and distribution by land. The container, the internet and the smartphone are the three cornerstones of a thalasso-democratization of the global drug trade. The relative obscurity of the 850 million containers handled in all the world's maritime terminals in 2023 makes drug trafficking easier and more fluid. The use of artificial intelligence and data mining can be just as useful to the many services fighting trafficking... and to the cartels as well. The latter already use economic and strategic intelligence tools to make real-time calculations of the sum of all the inherent risks when cargo passes through a maritime route, a ship, a container and a series of ports. The most powerful cartels are multinationals with the means to achieve their ambitions. They are just as capable of recruiting the best brains to simulate logistical optimums as they are of corrupting, by means of threat and terror, all the trades involved in international value chains.

Cruising and yachting, which are becoming increasingly popular, are another ocean channel through which intercontinental transport can be carried with the utmost discretion. The small marinas scattered along the Atlantic coast of Africa have become hotspots for semi-sophisticated organizations distributing narcotics to European and Mediterranean markets. Once again, the boat becomes a container which is as discreet as it is widespread. Moreover, recreational boaters can become accomplices who are as malleable as they are oblivious to the risks and dangers involved.

The thalassopolitics of drug trafficking, meticulously dissected by Colonel Manet, draws attention to potential geopolitical abuses with their attendant destabilization of democracy. From the island systems of the Caribbean to those of West Africa, drug routes often link states that appear powerless to deal with the issues at stake. They do not have the policies nor the political means to confront with the temptations of corruption. Financial enslavement and political subjugation are the hallmarks of dangerous situations, with the risk of regional geopolitical outbursts, most of which are latent in port strongholds. The case of Port-au-Prince in Haiti is the worst modern illustration of this state of affairs.

The Fondation SEFACIL, the leading think tank for the maritime, port and logistics sectors, is proud to have been chosen by Colonel Manet to distribute this remarkable essay as widely as possible. Let us work together to raise awareness across the world. We must ensure that the thalassocratic drug trade is no longer the dark, hidden face of a prosperous globalization.

Foreword

‘Make Europe Safer’

Lieutenant-General (retired) Jean-Philippe LECOUFFE
Deputy Executive Director Operations, Europol

‘Helping make Europe safer’ is the motto of Europol, the European Union's agency for law enforcement cooperation.

From its headquarters in The Hague, the Netherlands, Europol currently supports the investigative services of the Member States in preventing and combating all forms of serious and international organized crime, cybercrime and terrorism.

But who remembers that the agency was originally set up in 1993 to combat drug trafficking in the form of a Europol Drugs Unit? Today, more than ever, the fight against international drug trafficking remains a priority.

The criminal intelligence made available to Europol shows that the threat has become more dangerous and is undermining the fabric of our democratic societies. As a result of the interception of the main encrypted communication messaging systems used by international drug trafficking networks - complex operations carried out, in particular by France and the Netherlands with the support of Europol, with the ENCROCHAT files by the Gendarmerie and SKY ECC files by the police - crucial information has been obtained on the scale and global nature of this trafficking, on the major importance of the maritime vector, and has revealed the international security issues linked to drug trafficking.

This is because exceptional resources have been, and still are being mobilized through an Operational Task Force (OTF) made up of investigators from all the Member States involved and linked to the network of liaison officers who, at Europol's offices, process and analyse millions of messages

exchanged by several thousand dedicated secure telephones. These analyses have led to the opening of several hundred investigations around the world, which to date have resulted in the arrest of more than 10 000 criminals, the seizure of millions of euros in cash or in any form of criminal assets, and the seizure of hundreds of tonnes of drugs on land and mostly at sea and in ports.

Europol has supported, and continues to assist these complex and extraordinary international investigations through the mobilization of high added-value operational and technical capabilities and its expertise in the international coordination of investigations. We must pay tribute here to the work of all the investigators in the Member States and partner countries, but also to Europol's experts, analysts and specialists in the European Cybercrime Centre (EC3), the European Serious and Organised Crime Centre (ESOCC), to which the Drugs Unit belongs, and the European Financial and Economic Crime Centre (EFECC). Europol also cooperates on an ongoing basis with other European agencies, first and foremost EUROJUST, the European Union's agency for judicial cooperation in criminal matters, based in The Hague, as well as the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) and the Maritime Analysis and Operations Centre (MAOC) based in Lisbon (Portugal).

More than ever, combating drug trafficking is one of the European Union's main priorities, reaffirmed in the 2022-2025 policy cycle and formalized by the European Multidisciplinary Platform against Criminal Threats (EMPACT). This tried and tested methodology is used to organise and give structure to the fight against serious international crime at European level. Four key stages guarantee the effectiveness of the fight against these criminal threats which affect the stability of the European area: threat assessment through Europol's flagship report every four years – the SOCTA, *Serious and Organised Crime Threat Assessment*; prioritization of threats; definition of operational action plans and, finally, independent evaluation at the end of each cycle; all of which shed light political decisions and steer the next EMPACT cycle.

It is therefore with great interest that we see the work of Colonel Florian MANET lifting a corner of the veil on a strategic aspect of international and globalized drug trafficking: the logistical process by sea. Many of these drugs have, at one time or another, been transported by sea from production zones to consumer markets.

Drawing on his rare personal experience as head of an investigation department specially adapted to the maritime environment, he explains in a methodology manner the workings of globalized supply chains and maritime transport means. In a highly documented way, he reveals the *modus operandi* of criminal organizations, which adapt to the current logistical situation as well as to public security policies. He naturally draws attention to the impact

of the technological revolutions that criminal networks specialising in drug trafficking can exploit to their advantage.

With the scaling-up of globalized trade, merchant shipping fleets and seaports are key focal points, with intrinsic vulnerabilities that can and must be reduced. The European Ports Alliance, launched in January 2024 by the European Union as a response to this security challenge, is indicative of a genuine awareness. Covering 16 of the main commercial ports on Europe's northern rim, as well as in the Mediterranean, it aims to develop a close partnership between public and private actors in the fight against trafficking, especially drugs.

This *Thalassopolitics of drug trafficking* is therefore highly topical and illustrates the security challenges of an interconnected and fragmented world in which the European Union must, more than ever, affirm its commitment to protect its security. In this regard, Florian MANET offers particularly valuable insights to understanding the issue at hand.

Introduction

On 18 November 2022, the Paris Assize Court sentenced 10 members of an international organization to between five and 17 years' imprisonment and ordered them to pay a joint and several customs fine of €51 million. These French, Panamanian, Spanish and Portuguese nationals are being prosecuted for taking part in international drug trafficking. The hushed atmosphere that emanates from the magistrates' mantles and the ancient gold panelling of the *Palais* marks a sharp contrast to the clandestine palaver of the Medellín favelas where the negotiations to purchase two tonnes of cocaine took place, or the whispering in the darkness of Panama's territorial waters as the drugs were transshipped on the high seas aboard three sailing boats. This judicial decision puts a definitive end to a period of almost five years that I have spent as commander of the gendarmerie Criminal Investigation Service, a national judicial investigation department specialising in maritime crime. On 20 January 2017, my counterpart from the Papeete Criminal Investigation Service informed me that a French-flagged sailing boat had been boarded off the Marquesas Islands by the French Navy on the back of intelligence gathered by the customs authorities. This was followed shortly afterwards by two more arrests of skippers exhausted by 45 days of sailing between Panama and the crystal-clear waters of Polynesia. This was the first stop on a transpacific expedition to Australia, where a total of two tonnes of cocaine were destined to supply a rapidly expanding market. It took years of meticulous inquiry for determined investigators and magistrates to unravel the complex mechanism of such an enterprise: the purchase and refitting in the French West Indies of a fleet of multihulls, the recruitment and selection of three separate crews, contact with Colombian cartels, and finally the purchase and delivery of the cocaine to Australia. Not to mention the convoluted circuit of money laundering. This exceptional judgement in one of the most important legal cases in this field illustrates the realities of international drug trafficking: namely, the challenge of mutual assistance in criminal matters and international police cooperation, maritime areas designed as links between cultivation areas and consumer markets, the

complexity of the operational coordination involved in the shipment of psychotropic substances, the transnational dimension of criminal organizations, the opacification of physical and intangible flows, and the financial stakes involved in drug markets.

Drug trafficking, the global trade in illegal psychotropic substances, is flourishing in an increasingly conspicuous way in the face of growing consumer demand, while coca leaf, poppy and cannabis cultivation and agricultural yields are increasing effortlessly in sanctuary areas. Hungry for power as well as money, criminal organizations have identified unexpected financial leverage and infinite promises of gain in this sector of activity. As part of a global market, they are making intelligent use of the advantages of globalization, which is based on the free flow of goods and data. They also point to the legal and security shortcomings resulting from this liberalization drive. In their own way, they underline the power of logistical coordination as part of the maritimization of our economies and lifestyles. A veritable hive of talent is required to satisfy this international clientele. However, thanks to the colossal financial resources of the narco businesses, the time has come to fully enter the era of real industrialization of traffic, made possible by the connectivity of ports, the massification of maritime freight and the digitalization of trade. This new world economy is witnessing its administrative borders, both physical and intangible, collapsing one after the other under the combined effects of free trade and technological progress. The result is the emergence of a criminal ecosystem that draws its power from a close relationship with the sea, a vector for illegal freight and a multiplier of profits. A unique thalassopolitical approach is being built on the geopolitical foundations of States, non-governmental actors and private operators, as well as on logistical infrastructures that make territories more fluid and even bring them closer together.

Examining drug trafficking is a major step towards understanding the complexity of an interdependent world where not only goods and skills are exported, but also inter-state conflicts and intra-state rivalries. The drugs market implies a territorialization of activities and, as such, full control of the territory, including through illegal methods such as violence and corruption. It also requires control of logistical and financial infrastructures on an international scale. Ultimately, being an actor in this illicit market means, above all, entering into competition and – inevitably – conflict with the State. Therefore, is this tale inevitably a David versus Goliath story? Is a colossus with feet of clay properly equipped to defeat an agile actor with no fear of God or man? Such is the fight that must be waged against international drug trafficking, which sows the seeds of division, instability and perversion of the socio-economic public order.

The subject of drug trafficking is often left to film and television series, which take viewers into the shoes of “handsome thugs” in the underworld of the

unloading docks of Medellín, Guayaquil and Rotterdam. The research focuses – quite rightly – on major public health issues. The authorities deplore the settling of scores that plague the estates, the endemic phenomenon of corruption of both public and private officials, and the offshore money laundering schemes. Analysing drug trafficking from a maritime perspective is undoubtedly an innovative approach, and one that will teach us a great deal, not only in order to better understand the phenomenon but also to anticipate the future. This research is essential, but no less ambitious. However, it comes up against the problem of gathering information about an underground economy that is, by definition, obscure, as well as confidential data reserved for judicial investigation and intelligence services. This review is not intended to be exhaustive. It does, nevertheless, offer up-to-date, well-documented keys to understanding. It also presents the major trends and modus operandi of criminal organizations – veritable multinationals of crime. Over and above the lessons learned from a wealth of personal experience in specialized judicial investigations into international organized crime, the approach is based essentially on the convergence of geopolitical, criminological, legal and logistical approaches, as well as on a knowledge of maritime navigation techniques. This cross-disciplinary method provides a global understanding of illegal mechanisms and their impact on socio-economic public order at both national and international level.

This focus on the maritimization of a criminal activity is also an original way of assessing the value chains of the blue economy. At the heart of international logistics chains, it highlights the power of port communities and regional and international connectivity, which cover 64% of the globe, i.e. the surface area of the high seas. It also calls for an understanding of our dependence on maritime areas, which account for 90% of trade flows. This power is symbolized by various fleets of merchant vessels such as container ships serving interconnected and increasingly digitalized ports. Diving into the world of drug trafficking means analysing the consequences and prospects offered by globalization and the globalization of trade, and comprehending the race to the sea observed among criminal organizations.

Based on a definition of the illegal drug trade (Chapter 1), this thalassopolitical work describes and defines the maritime dimension of drug trafficking in terms of its modus operandi (Chapter 2), maps its activities (Chapter 3) and considers future trends (Chapter 4). We then present the criminal thalassocracy, the embodiment of maritime crime syndicates (Chapter 5). Finally, we will look at the infrastructurization of international relations in the context of the maritimization of human activities (Chapter 6).

La Gaudière, 20 January 2024.

Drug trafficking: the driving force behind criminal activity?

The international drugs market is the world's most dynamic criminal activity, fuelled both by widespread global demand and an increasingly productive cultivation. We therefore need to define drug trafficking (1) and place it in the context of an expanding market (2).

1. An attempt to define drug trafficking

Drug trafficking is defined by a body of law, but its actual perception is hampered by methodological limitations.

1.1. A generic approach to drug trafficking

Drug trafficking refers to an illegal activity aimed at distributing substances classified as psychotropic to consumers.

The French word 'narcotrafic' comes from the English expression "narcotics trafficking".

'Psychotropic' comes from a Greek root meaning '*which acts in the direction of* (trope) and '*the mind or behaviour*'(psycho). A psychotropic substance is a chemical product or substance that acts primarily on the central nervous system. It modifies certain biochemical and psychological processes in the brain, without prejudging its ability to induce addiction or its potential toxicity. By altering the functions of the brain in this way, a psychotropic drug induces changes in perception, sensation, mood, consciousness or other psychological and behavioural functions.

The emergence of international regulation of psychotropic substances

The first regulations on drug use date back to the early 20th century. In 1912, the **International Opium Convention** aimed to regulate the import and export of poppy derivatives. In the 1950s, other substances such as cocaine were included in the Convention.

Then, in 1961, the **Single Convention¹ on Narcotic Drugs** established a framework for the use of substances such as cannabis, opium, coca and their derivatives. However, it omitted the new synthetic substances. The stated aim was to limit the production and trade of these substances, which were classified as narcotics. It included a table categorising substances and announced the creation of the International Narcotics Control Board (INCB). This independent body ensures that the UN conventions on drugs are properly implemented.

Incorporating new addictive practices such as the use of synthetic drugs, the international **Convention on Psychotropic Substances** was ratified on 21 February 1971 in Vienna (Austria) and came into force in 1976. Its categorization table has the following four headings:

- Table I: Substances with abuse potential presenting a serious risk to public health and low therapeutic value (MDMA, Tetrahydrocannabinol, etc.);
- Table II: Substances with abuse potential presenting a serious risk to public health and low to medium therapeutic value (Amphetamine, Secobarbital, etc.);
- Table III: Substances with abuse potential presenting a serious risk to public health and a medium to high therapeutic value;
- Table IV: Substances with abuse potential presenting a low risk to public health and a low to high therapeutic value (gamma-hydroxybutyric acid or GHB).

1.2. A consumer-focused value chain...

Drug trafficking is an illegal international trade. Under the terms of the 1988 Vienna Convention, “trafficking” means the cultivation, production, manufacture, extraction, preparation, offering for sale, delivery, brokering, dispatch, transport, import and export of any narcotic drug or psychotropic substance. Similarly, the organization, management, financing or facilitation of the aforementioned operations or activities constitute trafficking.

What emerges is a value chain specific to an activity based on the cultivation of a raw material (opium flower, coca leaf, etc.) which is then processed, packaged and transported to an international consumer market. A multitude of players with a wide range of skills are involved in the development of these products, creating a very open space-time framework. We can speak of a dedicated ecosystem in which each link is interdependent. An initial difficulty

¹ This international convention is unique in that it replaces previous conventions on the same subject.

with the hybrid nature of this value chain is already apparent: raw materials and their subsequent processing have a legal status that is restricted to certain uses that are defined and recognized within a traditional or pharmaceutical framework. As a result, drying up production will be no easy task in this dual context. Finally, there is also the major dimension of logistics, which adds value to these substances. Going to market and making a profit remains the ultimate and only goal of this meticulously coordinated industry. It is part of an ongoing relationship with risk. Admittedly, it is subject to the hazards inherent in maritime transport, which is subject to weather conditions, sea conditions and shipping traffic. In addition, there are security risks associated with illicit trafficking, such as the regular inspections carried out on board ships by the national navies' high seas inspection teams. Not to mention the customs checks carried out at the port. Finally, in this irregular context, it is important not to overlook the competition between criminal organizations that might be tempted to take possession of the cargo without the owner's knowledge. This is known as a "carrot". Our criminals operate in a particularly complex environment, and the success of a narcotics charter requires a daring alchemy.

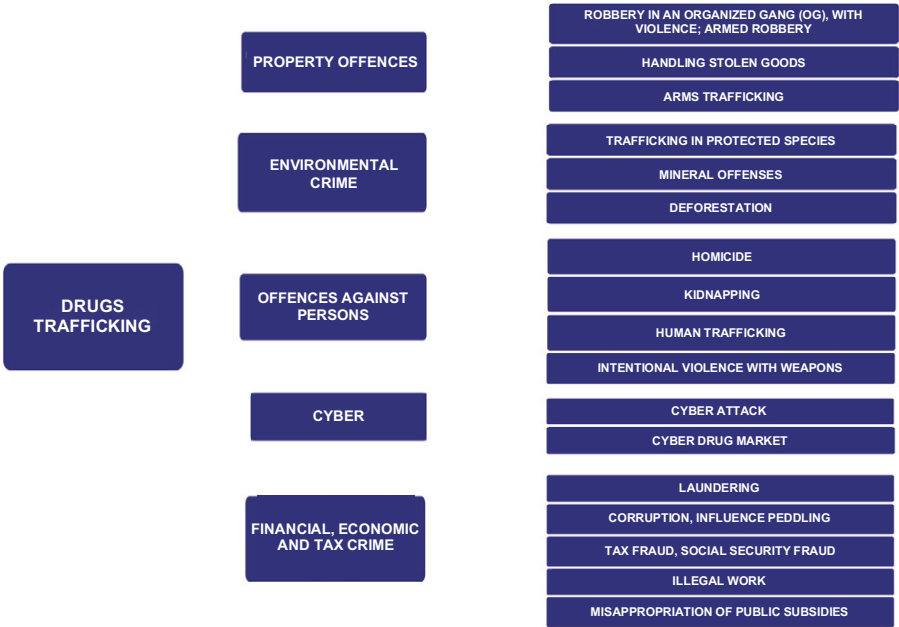
The valuation of these substances is based entirely on capitalist mechanisms: it is the implacable law of supply and demand that imposes itself without diversions. Without a consumer, cocaine or heroin have no value in themselves. This focus on marketing drives a complex underground ecosystem that is often anonymous by design.

1.3. ... which generates a prolific criminal ecosystem

Drug trafficking is an autonomous criminal offence defined in the Criminal Code. This offence can be described as a matrix offence: it provides a framework on which many other offences of a very diverse nature are based. As such, it is a useful key to understanding many situations of social instability or disorder. On land and at sea. This traffic inevitably generates many other offences in return. Thus, caught up in a race for financial profit and/or the unbridled conquest of power, evolving on the fringes of regulated societies, it irresistibly drags those involved into an irreversible criminal spiral. A prolific criminal ecosystem is emerging, affecting people, property and the environment. Often in an inescapable vicious spiral.

Figure 1. Modelling of the criminal ecosystem of international drug trafficking

Produced by Guillaume MANET



A wide range of disputes are involved in this matrix offence:

- **Offences against persons:** threats, physical or psychological pressure, kidnapping, hostage-taking, intentional or unintentional violence, with or without a weapon, homicide. In Colombia, public studies² demonstrate the link between coca leaf cultivation and violence against persons. Between 2017 and 2022, in municipalities where coca is grown, the civilian population suffered 2.8 times more threats and 4.3 times more homicides than in municipalities without coca cultivation.
- **Property offences:** violent robbery, armed robbery, handling stolen goods. The pandemic has had an impact on the coca leaf processing chain. In Ecuador, for example, in the province of Carchi³, cocaine hydrochloride refining laboratories have been set up in forested areas along the border with Colombia, mainly because of the presence of pharmaceutical centres stocked with

² Indepaz 2021, quoted in the joint report by the UNODC and SIMCI (*Sistema Integrado de Monitoreo de Cultivos Ilícitos*), *Monitoreo de los territorios con presencia de cultivos de coca 2022*, September 2023, available at https://www.unodc.org/documents/crop-monitoring/Colombia/Colombia_Monitoreo_2022.pdf, accessed 3/12/23.

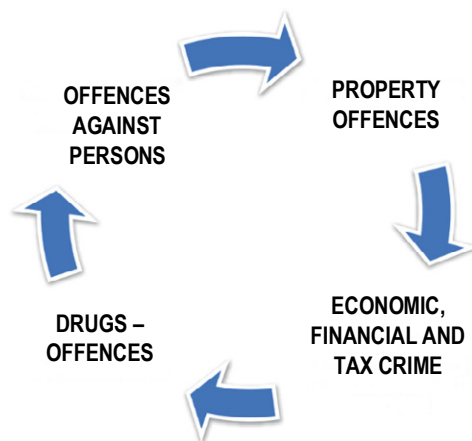
³ Carchi is located in the north of Ecuador, on the border with Colombia. Its capital is Tulcan. It borders the provinces of Esmeraldas to the west and Sucumbios to the south-east.

chemical precursors in Tulcan. A network has also been set up to handle stolen fuel from the neighbouring province of Sucumbios for use in laboratories along the border.

- **Firearms trafficking:** these firearms are either purchased through the illegal arms trade or stolen from the stocks of the regular forces of the States.⁴ They fuel the violence surrounding drug trafficking and defy the authority of the State by resorting to the unlawful use of weapons.
- **Offences against socio-economic rules:** production and use of false administrative documents, illegal work, social and tax fraud, illegal transfers of capital, violation of banking legislation, money laundering, extortion, corruption, handling stolen goods. Money laundering is the hidden face of these offences and raises questions about the volumes of capital that are introduced into the legal economy in this way. The key investment sectors are real estate, buying/selling cars, shops and restaurants and online gaming centres.⁵ In Ecuador, Guayaquil is considered by the authorities to be the national centre for money laundering, while the port city of Manta is considered to be the 'business centre' for organized crime, bringing together criminal organizations, politicians and international actors. The process also involves the creation of 'front companies'.
- **Damage to the environment:** the impact of drug trafficking on the environment remains to be assessed and is a field that needs to be studied in greater depth. However, the direct impact on the Amazon basin ecosystem is estimated to be moderate. Chemical pollution can be attributed, for example, to the conditions under which raw materials are processed in clandestine workshops located in the Amazon rainforest or in urban areas. Criminal organizations can also use environmental crime as a source of revenue. This applies to mining offences, trade in minerals, plants, animals or insects and protected species.
- **Criminal connections:** the marketing of banned substances has connections with other illicit trades such as arms, medicines, migrant smuggling, banditry and maritime piracy. In fact, they contribute to attacks on the safety and security of maritime shipping through the intrusions they entail, both in port areas and on board ships. They involve young people for whom drug trafficking is the gateway to crime.

⁴ UNODC report, *Violence, crime and illegal arms trafficking in Colombia*.

⁵ Report by the Ecuadorian Organized Crime Observatory (OEEC 23), accessed 7/12/2023.

Figure 2. Global criminal system generated by drug trafficking*Produced by Guillaume MANET***São Miguel Island in the Azores, a living laboratory for the effects of cocaine⁶**

On 6 June 2001, an Italian sailor ran aground with his 40-foot yacht on the coast of São Miguel Island⁷, in the Azores archipelago – 1 000 nautical miles from Portugal (1 600 kilometres). This magnificent island is home to 130 000 inhabitants, forming a close-knit community that has been inward-looking for centuries. His destiny was to be changed forever by this event at sea.

This monohull was in fact one of three sailing boats in a dedicated flotilla bound for various Spanish ports⁸, each carrying more than a tonne of pure cocaine.

Of course, this natural refuge at the heart of the transatlantic shipping lanes was no new experience. A similar incident occurred in 1995 when an Italian, Marco Morotti, took refuge in the port of *Ponta Delgada*. A large quantity of cocaine was concealed in oil drums. This time, however, the public authorities succeeded in seizing the entire illicit cargo.

⁶ See The Guardian article of 10/05/2019, available at <https://www.theguardian.com/society/2019/may/10/blow-up-how-half-a-tonne-of-cocaine-transformed-the-life-of-an-island>, accessed 15/11/2021.

⁷ The volcanic island is the largest in the archipelago, measuring 65 kilometres long and between 8 and 15 kilometres wide.

⁸ Two other yachts, Lorena and Julia, were intercepted on 1 July 2021 in Spanish waters.

The judicial enquiry revealed that the yacht had completed two transatlantic crossings, totalling 3 000 nautical miles, in less than three months. Bought in the Canary Islands, in the North Atlantic, off Morocco, this 13-metre monohull yacht first sailed to Venezuela, where it was loaded with cocaine. Via Barbados, in the eastern Caribbean Sea, it then headed for the Balearic Islands, a Spanish archipelago in the Mediterranean Sea. However, fortune had other plans.

Aware of his illegal status, the captain of the yacht⁹ used the island's rugged coastline of cliffs, crevices and caves to hide his cargo of white powder. At least half a tonne of pure cocaine. That's a guaranteed €40 million in resale value.

Some 10 years after this incident, a journalist studied the impact of this drug, which was made available to the local population by chance. A product usually reserved for an elite group of city-dwellers, now all islanders were consuming it without restraint. This had the immediate effect of making it commonplace and accessible to everyone. An inescapable dependency was quickly established, leading to profound changes in social relations. The fishing village of *Rabo De Peixe* became, in spite of itself, a hot spot for dealings in hard drugs in Portugal.

With cocaine now a mainstream product, the population suddenly developed a strong addiction to it, despite having no previous experience of the substance. The health effects attributed to this democratization were soon palpable. A cardiologist working at Ponta Delgada Hospital acknowledged that, a few weeks after the massive influx of psychotropic substances, he was confronted with multiple cases of heart attacks or unconsciousness among patients. Overdoses led to around 20 deaths and dozens of hospital admissions, some in a very serious condition, in the first three weeks.¹⁰ So much so that a Portuguese newspaper, *Açoriano Oriental*¹¹ on 7 July 2001 ran the headline "Cocaine kills in São Miguel" a month after the grounding!

Other islanders have built their fortunes on the resale value of these illicit substances. These tailor-made money laundering operations have, however, developed economic activities such as the catering sector.

In the long term, the health of local residents has been seriously affected. Including the youngest. Withdrawal from cocaine has also led users to turn to an alternative... heroin. One drug rears its ugly head and conceals another.

9 Arrested on the island at the end of June and imprisoned, Antoni QUINZI, a Sicilian, managed to escape from the detention centre before being arrested again after a fortnight on the run on an island. He was sentenced to 10 years in prison.

10 Comments by journalist Nuno Mendes reported by <https://digismak.com/this-is-how-he-destroyed-a-town-of-7000-inhabitants-half-a-ton-of-lost-cocaine-icon/>, accessed 20/11/2021.

11 L'Açoriano Oriental is an Azorean daily newspaper published on São Miguel Island. It is one of the oldest newspapers in the world published under the same name since its first edition in 1835.

1.4. A dark figure¹² masks the reality of a growing phenomenon

Assessing a security situation is based on a statistical analysis of the acts committed. When it comes to property offences, the vast majority of victims of theft have a natural reflex to seek compensation for their loss. This personal approach involves making the theft official by reporting it to the police and gendarmerie and lodging a complaint. All in all, this data, which is naturally incomplete, provides a relatively accurate picture of insecurity. This makes it easier to draw up a thematic map to support an action plan to combat the spread of the phenomenon.

By contrast, assessing the dynamism of the criminal drugs market follows a completely opposite logic. In fact, investigating drug trafficking on any scale is a voluntary process initiated by an investigation department. In the exercise of judicial police powers, this is one of the few criminal offences that does not directly result in a complaint from the victim. Moreover, the victims do not consider themselves as such. These are consumers who, freely and without external constraint, indulge in their addiction. None of them will go to a police station to report that they have not received their doses of drugs from their supplier or that dishonesty has been involved with the goods. The same applies to other related offences, such as kidnapping or violence with a weapon. This undisclosed data contributes to a dark figure that masks the reality of the phenomenon and blurs the perception of reality. Sometimes with very serious consequences, particularly when the suspicious calm of a district conceals the prosperity of an underground economy. As a result, this offence comes to light through the action and initiative of law enforcement agencies or through public order events such as violence, kidnapping, extortion, etc., which lead investigators to this criminal theory.

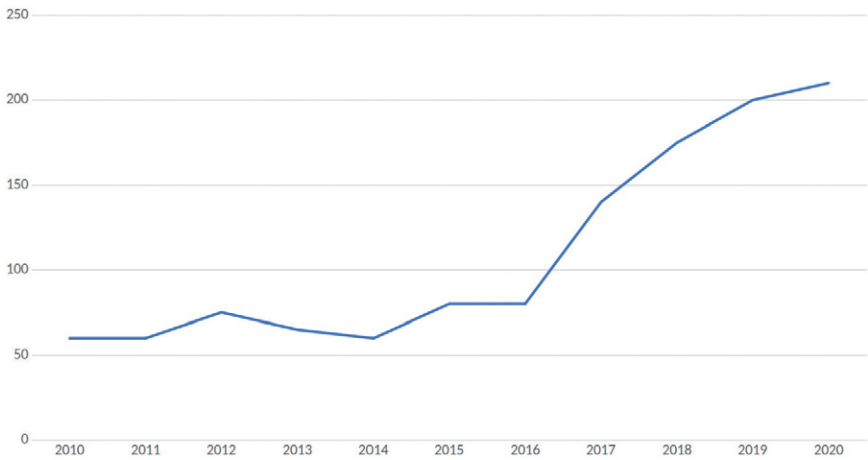
Similarly, apprehending trafficked drugs remains a challenge. No customs declaration can attest to the reality of the volumes transported or their origin. Only the volume of products seized is known. It certainly reflects market trends. Essentially, however, it sets out the level of commitment of the law enforcement agencies involved in the fight against this health and safety scourge.

As a result, the figures given in this study should be treated with a great deal of caution, particularly with regard to assessments of the volumes of substances produced. The figures come from open sources and productions by international organizations.

¹² The dark figure refers to the difference between the number of criminal offences committed (actual crime) and the number of offences recorded (known crime) in police and gendarmerie statistics. These are the crimes that escape the police.

Figure 3. Trends in global cocaine seizures between 2010 and 2020 (in tonnes)

Sources: *Global Report on Cocaine, 2023, UNODC. Produced by Guillaume MANET*



1.5. Maritime drug trafficking: a secure and agile logistics solution?

By its very nature, international drug trafficking is strongly constrained by the logistics involved in exporting illicit products to consumer areas that are often far removed from highly localized production areas. But the oceans are the preferred transport routes. They offer a sense of security provided by the vastness of the ocean and logistical hubs to facilitate the shipment of mass freight. They are therefore perfectly integrated into the illicit substance value chain. They increase the value of these products by securing their marketing. As such, the oceans are both carriers of freight and, more rarely, storage areas for immersed products off the coasts.

Moreover, the famous port geographer Alain VIGARIÉ¹³, states that *“We must bear in mind that the maritimization of the world is an irreversible and growing phenomenon; nations are turning more and more towards the sea; they are constantly developing their interests”*. Contemporary organized crime is totally in line with this development logic. Eager for gain and influence, it cannot turn away for long from the infinite capacities offered by ocean spaces as maritime vectors, from the simple inflatable outboard boat to the super tanker, not forgetting the inshore and offshore fishing fleets. Drug trafficking is a perfect illustration of this maritimization of organized crime. It sees maritime vectors as a means of increasing its capabilities and, consequently, its profits.

Article 17 or the legal innovation creating police powers on the high seas

United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, signed in Vienna on 20 December 1988.

Against a backdrop of ever-escalating drug wars and the inability of stakeholders to curb drug trafficking despite international legal instruments, this new convention highlights the consequences of drug trafficking and production. It encourages the harmonization of existing legislation at national level.

It covers the following key points:

- Strengthening international cooperation on organized crime (seizure of criminal assets, extradition for drug-related crimes, mutual legal assistance, international cooperation, etc.);
- Legal consideration of the boarding of a vessel on the high seas suspected of drug trafficking, in addition to the provisions of the United Nations Convention on the Law of the Sea.¹⁴ Article 17 stipulates that the flag State may authorise the requesting State to board and search the suspected vessel. In the event of discovery, the latter may “take appropriate measures”.

A new table of regulated substances and the precursors has been appended.

¹³ Born 20 January 1921 in Le Havre, died 21 December 2006. This French geographer specialises in ocean geostrategy. He has set out his innovative thinking in numerous books and articles.

¹⁴ Article 108 of UNCLOS, entitled “Illicit traffic in narcotic drugs and psychotropic substances”.

2. The global drugs market is expanding rapidly

Before delving deeper into the subject, we need to define the actors involved and analyse the global market for substances which are classified as psychotropic. This global context provides fundamental keys to understanding drug trafficking, its dynamism and the role played by the maritime vector.

2.1. ‘Everywhere, Everything, Everyone’¹⁵

The global drugs market is remarkably dynamic, so much so that the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) sums up the situation as “everywhere, everything, everyone”. Various types of narcotics are readily available. It is based on the dynamic system of supply and demand. Rarity and purity are the two criteria that define the price of different substances. The European market is characterized by several major trends:

- **A fast-growing consumer base.** 29% of adults in the European Union (EU) aged between 15 and 59 have used an illicit drug at least once, representing more than 83.4 million users. Studies conducted by the UNODC¹⁶ identified 210 million regular users in 2009, or 4.8% of the world's population aged 15-64. In 2019, there were an estimated 275 million consumers worldwide, representing 5.4% of the population aged between 15 and 64, an increase of 22% on 2010. The population of developing countries is currently experiencing faster growth in drug use than that observed in developed countries, irrespective of differences in population growth according to the level of development. This trend is particularly marked among young people and young adults. The recent use of cannabis in South America illustrates the reshaping of markets as a result of new practices.
- **A growing volume of available drugs,** often of high potency or purity, as evidenced by the increase in seizures. The cocaine market is one of the most dynamic in the EU. The high availability of cocaine is accompanied not only by stable prices but also by a level of purity that has not been seen for a decade. According to

¹⁵ European Monitoring Centre for Drugs and Drug Addiction, *European Drugs Report 2022: Trends and developments*, Publications Office of the European Union, Luxembourg.

¹⁶ *World Drug Report 2020* (United Nations Publications, Sales No. E.20.XI.6), <https://www.unodc.org/unodc/press/releases/2020/june/media-advisory---global-launch-of-the-2020-world-drug-report.html>

the EMCDDA, the purity rate is calibrated between 23% and 87% in Europe. However, more than half the Member States estimate the rate at between 53% and 69%. France, Germany, Italy, the Netherlands, Spain and the UK account for 66% of the European population, but more than 87% of cocaine users. New growth markets have been identified in Poland, Denmark and Sweden, as well as in Oceania.

- **A wide variety of products** are available, including synthetic drugs and falsified substances (Figure 4).

Figure 4. Estimated number of illegal drug users in the EU in 2022 and trends in drug seizures (2010-2020 period)

Source: EMCDDA, European Drugs Report, 2022. Produced by Florian MANET

	Cannabis	Cocaine	MDMA	Amphetamine	Heroin
Estimated number of consumers in millions	22	3.5	2.6	2	1
2010-2020 comparison of largest increases in seizures	+278%	+266%	+200%	+391%	/

- Increasingly complex **patterns of drug use**: poly-drug use, mixing with medicines, new unregulated psychoactive substances and substances such as ketamine or GBL/GHB.
- **The EU is a producer** of certain drugs (methamphetamine, cannabis) for domestic consumption and the world market, as demonstrated by the dismantling of more than 350 production facilities in 2020. Informal collaborations with Mexican groups have been recorded.
- **Major impact on public health.** It is estimated that at least 5 800 deaths¹⁷ as a result of an overdose, involving illegal drugs, occurred in the EU in 2020, representing a mortality rate of 16.7 deaths per million inhabitants (adult population). Most of these deaths are associated with poly-drug use, generally involving combinations of illegal opioids, other illegal drugs, medication and alcohol.
- According to the 2019 report¹⁸, the European drugs market is estimated to have been worth more than €30 billion in 2017. As a

¹⁷ The average age is 41. The presence of opioids was confirmed in 74% of deaths. EMCDDA, 2022.

¹⁸ European Drug Markets Report 2019, European Monitoring Centre for Drugs and Drug addiction (EMCDDA), https://www.emcdda.europa.eu/publications/joint-publications/eu-drug-markets-report-2019_en

result, this valuation, which is very complex to produce accurately, remains the reference value.

Figure 5. Composition of the EU drugs market based on 2019

Source: EMCDDA, 2022 Report. Produced by Florian MANET

Product	Share of the European market (2017)	Value of the retail market in € billion	Share of seizures by product in 2020 (%)	Total seizures 2020, in tonnes	Total seizures 2019, in tonnes
Cannabis - resin	40%	7.4	17	584	464
Cannabis - herb			47	155	130
Cocaine	31%	9.1	13	213	202
Heroin	25%	7.4	4	5.1	7.9
Amphetamine, MDMA	5 %	1.5	8	21.2	15.4

2.2. Explosion in global drug production

Precise data on the production of the raw materials that make up drugs are difficult to access and their reliability is questionable. In fact, it is advisable to bear in mind the major trends that are emerging.

Admittedly, there is regular production, corresponding to traditional uses or the needs of the pharmaceutical industry. This is the case with tramadol, a central analgesic whose efficacy is due to the synergy of an opioid and monoaminergic effect.¹⁹ In France, the first opioid analgesic was used to treat pain. In view of its pharmacological effects, a strong dependence on this drug has been observed in the United States and France, leading to falsified prescriptions and prolonged and abusive non-medical use without medical supervision.

¹⁹ Monoamines are neurotransmitters involved in the regulation of alertness and mood.

In addition, there is the question of crop acreage and yields. The analysis comes up against difficulties in terms of access to information and its authenticity. Cultivation areas are very often located in hot spots around the world, where the central State has control over the territory, such as in Colombia and Afghanistan. Total production depends on this data. Estimates of the area under cultivation are provided either by States themselves, or by international organizations which, based locally, endeavour to carry out as exhaustive a census as possible. These producer States are keen to control production areas by adjusting cultivation areas. However, it has to be admitted that a significant proportion of production is smuggled out of the country, beyond the reach of any State control. The unique topography of the growing regions, combined with the weakness of certain States, helps to mask the reality of agricultural production. Despite these inaccuracies, a number of major trends are nonetheless emerging, depending on the product. The increase in cocaine production can be attributed to a number of factors, depending on the country concerned, which will be developed later. Let's explain this situation with an example. The Colombian government has abandoned the use of chemical eradication by aerial means in cultivated areas. Farmers have adapted to public policies. They compensate for the loss of public subsidies intended to encourage the restriction of coca cultivation. This is why a large proportion of them have returned to farming, the main source of income in landlocked areas. Lastly, in all countries, farming techniques and the leaf transformation process have been optimized, increasing yields and productivity.

Afghanistan remains the world's leading producer of illicit opium and heroin. It is the main source of supply available in Europe. In July 2021, opium poppy cultivation was estimated at 177 000 hectares, representing 85% of the world's illegal opium production. The extension of cultivated areas is observed mainly in Afghanistan. This is also borne out by the growing volume of seizures made in Turkey, the main export route for both processed and unprocessed opium. In August 2021, the United States and NATO forces withdrew from Afghanistan and the Taliban took control of the country. The internal development of this country influences the production of drugs and their export to consumer markets. However, to date, the ban on the expansion of cultivation appears to be largely unenforced and there are signs that poppy cultivation, an essential source of income for many rural households, is continuing and may even have increased by 2021.

Synthetic drugs are increasingly being used in a wide variety of ways. They are produced in Central America, Asia, the Middle East and Europe. These substances are regularly seized at sea and processing laboratories dismantled.

Cocaine: massive and prolonged increase in supply and demand

- Coca bush cultivation will cover **315 500 hectares in 2021** (a significant increase on 2020).
- Total cocaine production reached **2 304 tonnes** (seventh consecutive year of increase).
- The cocaine-using population is estimated to reach **22 million in 2021**.
- Cocaine seizures will total 2 026 tonnes (not adjusted for purity) in 2021.

Overall, the increase in the prevalence rate²⁰ over the last two decades (from 0.32% of the general population in 2004 to 0.42% in 2021) is a reliable indicator of changes in demand.

2.3. Laboratories located in Europe?

The manufacture of drugs requires prior chemical transformation carried out by precursors in laboratories that are often clandestine. The EMCDDA notes an increase in this trend in 2020, whatever the illegal substance. The Netherlands dismantled 20 secondary cocaine extraction laboratories, some of which were large-scale sites. As regards amphetamine and methamphetamine, 78 laboratories were reported (38 in 2019) and 31 tonnes of MAPA, a precursor chemical, were seized in the EU in 2020.

It is useful to take a brief look at some of these psychotropic substances to gain a better understanding of the various stages involved in bringing them to market. This focus highlights the need for imported precursors to transform natural products, and the need to master the know-how involved.

Let's start with cocaine. Coca is a South American plant in the Erythroxylaceae family, which comes in two different species (*Erythroxylum coca* and *Erythroxylum novogranatense*). Its light green leaves measure between 2.5 and 7.5 centimetres and are extracted from shrubs measuring between 1.5 and 4 metres in height. It grows naturally at altitudes of between 300 and 2 000 metres. Several harvests are possible in one year (up to 6). The Peruvian authorities estimate that one hectare of cultivation produces 2 369 kilograms of coca leaf. 258 621 kilograms of leaf produce 1 kilogram of cocaine hydrochloride. Tropical ecosystems favour growth when favourable conditions linked to soil fertility, temperature, altitude, hygrometry and latitude are present. However, other areas in the tropical belt in both Asia and Africa offer the same conditions. So why is coca leaf cultivation still concentrated in the Andean countries without exception? And in contrast to

²⁰ Annual prevalence: total number of people in a given age group who have taken a given drug at least once in the past year, divided by the number of people in the age group in question, expressed as a percentage.

opium or hashish, which are also present in South America? It would appear that cultivation areas have recently been identified in Venezuela and Honduras. This indicates an expansion in production which will have an impact on the market.

Cocaine comes in two forms:

- Hydrochloride, a white, flaky powder often mixed with various substances such as bicarbonate of soda, sugar, paracetamol or caffeine;
- “Crack”, derived from cocaine base or “free base”. This mixture of cocaine, bicarbonate of soda and/or ammonia takes the form of small pebbles.

From coca leaf to ready-to-use cocaine²¹

Once collected, the dried coca leaves then undergo an extraction phase consisting of mixing them with an alkaline product (weak base) and an organic solvent (kerosene or benzene). Once the coca leaf debris has been removed, a strong base (soda) is added to produce the brownish coca paste, which is then left to dry. This 80-90% pure intermediate form is sometimes smoked on the production site. After a series of operations (filtering, cleaning, drying using several chemical substances and treatment with sodium permanganate), a form of cocaine base is obtained and then dissolved in acetone and hydrochloric acid. Cocaine hydrochloride is then obtained in the form of a white, flaky powder. Cocaine in hydrochloride salt form can also be modified by dissolving it in water and adding an alkaline agent. By using this method, it takes the form of “crack” or “free base”.

Heroin is obtained by acetylation of morphine, the main alkaloid derived from the poppy plant. It was synthesized²² from morphine for the first time in 1874 by an English chemist, C.R. Alder WRIGHT. However, its potential was recognized by Heinrich DRESER, a German chemist employed by the Bayer pharmaceutical company, who used it commercially as a medicine for respiratory infections. It was given the name ‘heroine’ from the German word *heroisch* meaning ‘heroic’. It was thought to be able to reduce morphine dependency without addiction, a widespread ailment among soldiers during the American Civil War and the War of 1870. The opium poppy (*Papaver somniferum*) or ‘garden poppy’ is a species of annual herbaceous plant in the “Papaveraceae” family found in temperate and subtropical climates. Botanists distinguish between two varieties of opium poppy:

21 Office Français des Drogues et Toxicomanie (OFDT), *Cocaine données essentielles 2012*, accessed 12/10/2021, <https://www.google.com/url?s,a=t&source=web&rct=j&url=https://www.ofdt.fr/BDD/publications/docs/chap1.pdf&ved=2ahUKFwjwoPCe1sXzAhWixoUKHYmeAewQFnoECAMQAQ&usg=AOvVaw2PzeiGWh1TkNsMfqgUjcpT>

22 Denis Richard, Jean-Louis Senon, Marc Valleur, *Dictionnaire des drogues et des dépendances*, Larousse 2004.

- The white poppy or opium poppy. It has flowers with white corollas and a dehiscent fruit²³ containing yellowish-white seeds. The latex needed to produce opium is extracted from this species;
- The black poppy or blue poppy.

All these varieties of *Papaver somniferum* contain opiate alkaloids, the best known of which are codeine and morphine. They have an analgesic effect used in the treatment of pain. As well as being produced for therapeutic purposes, morphine is illegally trafficked, mainly for conversion into the synthetic opiate heroin. Poppy seeds are widely used in food and contain very low levels of alkaloids.

From opium to heroin or diamorphine

Opium is extracted from the swollen but not fully ripe capsule of the opium poppy. To harvest opium, a knife is used to cut the pericarp of the ripening capsules after the petals have fallen off. This process produces a milky white latex which dries to a brown resin. Finally, to harvest the dried resin that makes up the raw opium, the capsules are scraped with a wide, curved blade. Once the latex has dried, it is used to extract the morphine on which heroin is based.

The morphine base is boiled with acetic anhydride and sulphuric acid, which acts as a catalyst for the reaction. After various chemical processes, heroin base appears. One kilogram of morphine yields 700 grams of heroin. Heroin base can be marketed as is for smoking, after being mixed with various cutting agents to increase its volume. Other chemical processes then transform and refine the heroin into a purer product, such as heroin hydrochloride or white heroin, which takes the form of a particularly fine, light white to beige powder.

The example of heroin illustrates the difficulties of combating illicit trafficking using chemical precursors as leverage.²⁴ Acetic anhydride²⁵ has a dual use. It is used in the pharmaceutical industry to make aspirin, and in the chemical industry to make paint, polymers, plastics and cellulose (for cigarette filters). But it is the key precursor for heroin production. According to the International Narcotics Control Board, only 0.1% of global acetic anhydride production is used in the heroin production process.

²³ In botany, dehiscence consists of the spontaneous opening of closed plant organs (anthers, fruits) in defined areas to release their contents (seeds, pollen, spores, etc.).

²⁴ The framework for the international control of precursors is established by the 1988 Convention (Article 12), ensuring the availability of chemical substances for legitimate uses while preventing their use in the manufacture of narcotics.

²⁵ Because of its use in the synthesis of heroin through the diacetylation of morphine, acetic anhydride is listed as a precursor in Table I of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.

Opium poppy analysis

Global cultivation is set to increase significantly in 2022, but the ban on drugs in Afghanistan could reverse the trend in 2023.

Most of the world's illegal opium production continues to take place in a small number of countries, notably Afghanistan. In 2022, Afghanistan produced 6 200 tonnes of opium, or 80% of estimated global production (7 800 tonnes), followed in volume by Myanmar (795 tonnes) and Mexico (504 tonnes) according to the latest available data for 2019/2020).

2.4. The impact of the health crisis: just an operational report or a lasting change in the drug trafficking market?

The global pandemic has had an extraordinary impact on drug trafficking and, more broadly, has led to a profound disruption of the drugs market. The whole of this illegal economy has been shaken to the core in terms of its mechanisms, and supply and consumption logics. The keystone is the freedom and fluidity of physical exchanges of goods and people. In short, coronavirus has given us a better understanding of the system. It has confirmed the crucial importance of the road, air and sea supply chain in trafficking operations. From this perspective, combating drug trafficking means first and foremost understanding the complexity of multimodal logistics flows of people and goods. It also means taking action on multimodal mobility, not only on convergence hubs such as ports, but also on vectors.

However, the impact of the health crisis is difficult to assess. In fact, it is dependent on multiple factors:

- the impact of the pandemic at national/regional level and its effects on the population concerned;
- the degree of involvement of the public authorities in the health crisis. In particular, the nature of the tasks devolved to the law enforcement agencies, who may have been distracted from combating organized crime;
- the type of production sites (field crops, processing of raw materials and chemical production in laboratories) and the type of products.

The crisis has also highlighted the importance of the continuity of supply chains at the heart of globalization. Considered from the point of view of the transport vector, the major lessons are as follows:

- the interruption of commercial air traffic put an end to drug mules carrying cocaine between South America and Western Europe, as well as psychotropic substances sent by post following online purchases made on the Internet (dark web and clear web);

- lockdown has immobilized criminal actors for whom physical mobility is essential not only to carry out their business but also to leave their mark on a territory;
- the disruption of international shipping links has derailed a logistical framework that may have appeared risky from afar but in fact turned out to be perfectly calibrated. The ballet of the different merchant fleets takes place methodically on the stages of the ports of departure or arrival, the refuelling or transshipment ports of call. The images of dozens of ships at anchor outside ports in Asia and North America will be remembered as a symbol of the inertia of world trade. Perfectly globalized. For better or for worse. Similarly, the shortage of containers characteristic of the end of the COVID crisis since mid-2021 demonstrates the interdependence of the effects of a globalized system;
- drug production was affected during the first months of the pandemic. Buyers of coca leaves no longer had access to growers, who turned to processing to avoid financial losses. It should be noted that packaged coca leaves can be kept for up to five years, allowing them to 'digest' the post-pandemic recovery. At the end of 2020, the volumes of cocaine seized showed that trafficking was picking up again, although there were still problems with the supply of precursors;
- criminal organizations have demonstrated their agility by inventing new logistical solutions. Over short distances, they have opted for autonomy in the creation of new logistics chains;

The health crisis is not a traffickers' crisis! ²⁶

Operation PORPOISE was set up during lockdown to detect suspicious motor vessel crossings between Denmark and Sweden. The aim is to combat drug imports, which are estimated at between 100 and 150 tonnes a year. They generate sales equivalent to €1.5 trillion per year.

With the health crisis reducing air links and closing the Öresund bridge, special emphasis was placed on shipping. One morning in September 2021, a walker discovered abandoned bags containing cocaine with a street value of €10 million on the Nyhamnsläge beach in Sweden. The investigation discovered these bags were thrown over the side of a merchant ship. The two sailors in charge of retrieving the packages at sea suffered damage to their speedboat and were rescued by the Swedish coastguard at night.

- The effects of the time lag in international trade: the ships and the freight shipped eventually arrived at its destination despite the weather. This has made it difficult for criminal organizations to

²⁶ <https://www.politico.eu/article/swedens-border-drugs-boat-cargo-smuggling/>, accessed 29/12/22

coordinate the recovery of illegal freight and has led to tensions during these operations. Have parcel backlogs weakened shippers' positions in terms of the capital they have tied up and the stocks they have built up in logistics warehouses?

- The increasing digitization of the drugs market, supported by encrypted telephony and social networking, has helped to maintain the illicit flow, by bringing the links in the chain closer together in a context of social distancing.

The pandemic offers a unique opportunity for a virtually open-hearted operation of the international drugs market. It sheds light on the mechanisms of a complex system subject to the law of supply and demand. However, there are still many aspects that need to be explored in greater depth. How have criminal structures adapted to lasting and inescapable systemic disruption? What are the consequences for the many interdependent actors (producers, clandestine laboratory processors, logisticians, the service chain and – ultimately – the consumer)? Did this criminal market show any real resilience throughout this period? How can we measure the impact of drug market disruption on other areas of criminal activity, such as money laundering and terrorism? Lastly, will these adaptations remain temporary? Or will they be permanent?

Figure 6. Cocaine seizures in Central America

Source: INCB, 2021 Report. Produced by Florian MANET

	2018	2019	2020	January – April 2021
El Salvador	13.8	0.1	1.9	Unknown
Guatemala	Unknown	18.9	13.6	Unknown
Costa Rica	Unknown	31.1	1.9	13.8

Maritimization of drug trafficking: a response to an expanding world market?

A dynamic global drugs market has stimulated the appetites of agile, inventive and responsive criminal organizations. Naturally, sea transport (1) has emerged as the logistical solution, supplying areas of consumption securely, regularly and with the necessary volumes. In fact, seafarers (2) and technological innovation (3) make it easier to conquer international markets (4).

1. Maritime vectors – logistical solution to this underground economy

All existing maritime vectors can be used to transport narcotics by sea. First and foremost, let's remember that drug trafficking is all about logistics. Admittedly, this particular freight has an exceptional market value given the considerable leverage effects observed when it was brought to market. This situation in turn requires security measures to be taken by the sponsors, who seek at all costs to conceal and anonymize the operation as perfectly as possible.

This absolute imperative to blend the illegal with the legal requires the use of the most transparent means of transport, fully integrated into the local, regional and international economic landscape depending on the organization's ambitions.

1.1. Local cabotage or last-mile logistics

The aim of local cabotage is to transport small quantities, less than a tonne, either as part of a last-mile delivery to a local consumption centre, or with a view to gradually building up stocks before shipment to regional or international markets. It can initially be by land, river or sea. At sea, there are dedicated buffer zones on regularly supplied mother ships, as well as storage areas submerged in the ocean. This method has been detected in the North Atlantic near the Iberian coast and in the Pacific near Australia.

The traditional local fleet is ideally suited to logistical requirements, but also to concealment. These low-powered sailing or motor vessels are called “Dhow”¹ on the Iranian coast, for example. Elsewhere, they are sampans or skiffs, depending on local custom.

The case study of Ecuador² illustrates the role played by these fleets. What is at stake is the “departure” of Ecuadorian-Colombian production to the North American market in particular. After navigating by river, the fishing boats or semi-rigid craft set sail for the Galapagos Islands³, a distance of 15 000 nautical miles, where they are refuelled and/or their illegal cargo is transshipped to other boats that sail directly to the ports of Guatemala, Costa Rica and El Salvador. However, the freight can once again be redistributed on more discreet daughter ships before reaching the ports of Central America. In this context, sailors in coastal ports such as Jaramiló are highly sought-after for their precise knowledge of currents and marine topography. This means that a trip pays close to US\$30 000. Some crews do three or four trips a week.

The ships are often built from fibre and refitted to increase fuel reserves. A network of accomplices is regularly deployed along the shipping route. Simulating a fishing expedition, this flotilla of vessels performs intelligence, alert and operational coordination tasks, providing advanced warning of any suspicious presence on the route. If there is a suspicion, the illegal cargo is put in the water and tracked using GPS beacons inserted in the watertight bundles.

1 The dhow is a type of traditional wooden Arab sailing boat, with one or more masts rigged with triangular or trapezoidal sails, originally from the Red Sea. By extension, this term refers to small sailing or motor coasting vessels sailing in the Indian Ocean.

2 Report by the Ecuadorian Organized Crime Observatory, *Caracterización del crimen organizado*, 2023

3 17% of the cocaine seized in the United States passed through these islands. Source Department of Justice quoted by the OECS.

Figure 7. Maritime operation to export cocaine from Ecuador to North American markets

Produced by Ronan KERBIRIOU, January 2024



1.2. Regional influence

The constraints of maritime navigation dictate the technical characteristics of vectors capable of coping with the vagaries of climate and sea conditions. They also require technical skills, both individual and collective, within crews that are subject to regional and even international conventions⁴ governing maritime navigation. The vectors will have far greater carrying capacity in terms of volume, weight and endurance, given the distances they will have to cover. The choice of port of departure and route determines the willingness and stance of clients to blend into the conventional flow or, on the contrary, to opt for shipping methods that are far removed from the major maritime

⁴ The main purpose of the SOLAS Convention (*Safety Of Life At Sea* – signed on 1/11/1974) is to specify minimum standards for the construction, equipment and operation of ships compatible with their safety, which are subject to mandatory control by the port and flag States.

highways linking international hubs. Some ports have a local reputation for offering facilities and “arrangements” with the law. In other words, these transactional measures suggest the degree of corruption of the actors in the supply chain, including the security forces.

A fleet dedicated to regional flows

These are mainly commercial vessels (bulk carriers, ocean-going tugs) or even pleasure craft of the multihull or monohull type. They are either chartered by illicit operators or ‘contaminated’, meaning that traffickers insert products into the ships without the crew's knowledge. In the case of dedicated fleets, it is interesting to analyse the capital structure of the vessel, to identify the various successive owners such as shipowners or crews. This environmental information facilitates risk assessment. They may reflect circumstantial aspects of maritime economic realities, such as the phenomenon of overcapacity, which devalues the vector, or the issuing of fishing licences, which trivialises a conventional company name extended to illicit actors. Similarly, the maritime know-how required confers value on seafarers, whatever their position onboard. The crew then becomes a high value-added intermediary who needs to be carefully recruited and retained.

1.3. Flag out and Flag shopping, the challenges of fleet tracking

The international law of the sea defined by the United Nations Convention signed in Montego Bay on 10 December 1982 assigns a fundamental role to the flag State. The legal link that subordinates a ship to a State is established by the nationality, with or without the residence, of the legal entity or natural person who owns the ship. As a result, ships have the ‘nationality’ – known as the ‘flag’ – of the State in which they reside. As a result, the legal and institutional corpus of the State is imposed as the normative framework – the summary of rights and obligations for shipowners, whatever the waters in which their fleet sails. A characteristic feature of the assertion of State sovereignty on the international scene, the fact of ‘flying the flag’ is supplemented by the maritime register, which is in a way the application of this competence in domestic law. These are the subjective rights attached to the existence of a national flag. So, while there can only be one flag per State, each State can create as many maritime registers, commonly referred to as ‘secondary flags’. Thorough record-keeping is a prerequisite for the strict application of the provisions of the Conventions. Let us illustrate our point. Article 17 of the 1988 Vienna Convention introduces police powers on the high seas in relation to drug trafficking by sea. The State in control at sea can then request the flag State of the vessel suspected of illegal action while it is on the high seas. The prerequisite remains confirmation of its flag following a survey. In fact, the flag issue is central from both a legal and diplomatic point

of view. It is the legal basis for operational success in the field of policing at sea.

The use of an open-registry flag is a recurring phenomenon⁵ among shipowners wishing to place their commercial activity within a framework that is less restrictive than certain national legislations and benefit from the positive effects of a new international division of labour. The phenomenon has been growing for over 30 years. Today, more than half the world's fleet has opted for this administrative framework. We are seeing a two-fold movement: 'flagging out' or fleet evasion is being replaced by 'flag shopping'⁶ which reflects the shipowner's quest for the best deal. In this new flag economy, ships are no longer captives of the State where the shipowners reside and where the main activity takes place. Of course, such registration offers a number of tax, social and regulatory advantages, particularly in terms of maritime safety and environmental protection. Conversely, for the host State holding the flag of open registry, this can be a source of economic development. Analysed from the point of view of maritime and port security, this situation is nonetheless problematic. This change of flag operation can take place on the high seas, provided there is an internet connection. The impact on the actors responsible for safety at sea is manifold. If only for the flag investigation, which is a prerequisite for any inspection of a ship on the high seas. Not to mention the quality of the response from the flag State to the requesting States.

Furthermore, this structural deficit in the surveillance of human activity at sea is further exacerbated by the lack of administrative clarity of companies and, consequently, by the lack or absence of State control over the activity of these companies. If it's impossible to know everything about the sea, it's just as impossible to control the precise results of human activity on land. The techniques usually encountered in economic and financial crime are well represented in the sea world through the concealment of capital behind multiple 'front' companies. In many cases, they are governed by foreign law and are even registered in their entirety in tax havens or failed States. The dispersion and lack of transparency of financial flows, which cleverly exploit national legislation, limit the ability to control and regulate the activities of maritime actors.

All in all, in the eyes of the public authorities, this is yet another difficulty in tracing human exploitation of the sea and detecting illegal activity.

⁵ The report on *"The merchant fleet by flag of registry and type of vessel, annual, 1980-2016"*, available from the United Nations Conference on Trade and Development, notes that 71% of total merchant shipping tonnage is registered under a flag of open registry. The trend is currently rising.

⁶ Pierre ANGELELLI defines 'flag shopping' as follows: "This anticipates the idea that the flag, after having been a rule of law, has become a service, the subject of a market where supply and demand confront each other."

1.4. International shipping – between strategic autonomy and systemic contamination of logistics flows

The specific requirements of the criminal markets for narcotics mean that shipments have to be transoceanic in order to satisfy an international clientèle. When it comes to maritime chartering, the rules and demands of the environment are very strict and require criminal organizations to use more sophisticated means. The central issue is either strategic autonomy in the supply chain or systemic contamination. This choice is also a criterion for evaluating criminal organizations and their ability to corrupt established institutions. It also clearly reveals their financial strength.

Cruises, safety and regularity of illicit routes

Criminal organizations are looking for regular vectors to guarantee their safety. Passenger ships on transoceanic cruises are also prime targets. Provided that an undercover relay is identified within the crew. They may be cooks, cleaners, sailors, etc.

Cruises exposed to drug trafficking

On 24 March 2019, Portuguese police questioned a dozen individuals when the passenger ship MSC OPERA⁷ dropped anchor in the port of Funchal, the capital of the Madeira archipelago. As part of a transatlantic cruise, she set sail from the Caribbean after a series of stopovers for tourists, including Havana in Cuba, Montego Bay in Jamaica and Saint John in Antigua, before crossing the Atlantic Ocean. During this operation, 18 kilograms of pure cocaine were discovered concealed in packets of crisps transported in suitcases.

2. The hybridization of seafarers: the example of fishing fleets, subjected to all types of seduction

Criminal organizations are obliged to subcontract certain phases of their illicit operations to experts. The logistics involved in shipping narcotics require special skills. The same applies to expertise in shipping and maritime chartering. Yachting, sea fishing and commercial crews represent a major added value in securing exports of illicit substances. Highly solicited, they are subjected to provocation, pressure, threats and even acts of violence.

The unique situation in Ecuador⁸ is a good illustration of the measures taken by organizations to bring Colombian and Peruvian cocaine to the North

⁷ See the article published on 28/03/2019, *Drug Bust on the MSC OPERA: Cocaine in Your Cheetos?*, <https://www.cruiselawnews.com/2019/03/articles/drugs/drug-bust-on-the-msc-opera-cocaine-in-your-cheetos/>, accessed 28/11/21.

⁸ See OEEC report.

American market. We see alliances between criminal actors who are experts in a particular field. In this way, they can subcontract the “recruitment” of skilled workers to other structures. To carry out large-scale operations, fishing fleets have been targeted as providing perfect concealment of the illegal trade by displaying an indisputable corporate name that is perfectly integrated into the regional blue economy. Sometimes falsified fishing licences give Maritime Affairs officers the slip. What's more, these vectors offer significant carrying capacity, as well as long-lasting and safe behaviour at sea.

Armed robbery is perpetrated against fishing vessels in territorial waters on both the Pacific and Atlantic coasts and in the Caribbean. Under threat, the aim is to seize vectors and equipment such as boat engines in order to build up a flotilla. Or simply to steal food, deck fittings and fuel on board. Secondly, dedicated crews are put together by “recruiting sergeants” who visit the fishing villages. Faced with intimidation, physical or even armed violence, or the promise of a tempting salary, some sailors end up working for these organizations. This phenomenon is far from anecdotal, as the press points out.⁹ According to information reported by journalists, the Commander of Operations North of the Ecuadorian armed forces estimates that over 300 fishermen from the provinces¹⁰ of Esmeraldas, Manabí, Guayas, Santa Elena and El Oro have been arrested in drug trafficking operations and are being held in the United States. As per some accounts, a fisherman was offered the modest sum of US\$80 000 US to transport two tonnes of cocaine to Central America. The average monthly salary is around US\$500. His employers then provided him with details of a rendezvous point at sea for refuelling, as well as the contact details of an intermediary to arrange the transshipment of the illegal cargo as it approached the territorial waters of the destination country. Initially, he was to receive US\$8 000 and the remainder at the end of the operation. Genuine service stations were then positioned on the high seas, giving the flotillas greater range. The business model is based on a return of 1 to 20 on the price per gallon of fuel between land and sea. Not to mention the diversion of State aid granted to the fishing industry from the price of petroleum products. This criminal capitalism generates an illicit circular economy in which everyone has a vested interest.

The yachting fleet, an alibi for transoceanic drugs traffickers

Pleasure boating is a widespread *modus operandi* throughout the oceans and concerns all substances. It provides agility, flexibility of stopovers, obscurity of illegal trade and autonomy in maritime shipping. On the other hand, you

⁹ See the article published on 22/02/2016 *Mafias captan a pescadores para llevar droga*, <https://www.elcomercio.com/seguridad/actualidad/mafias-captan-pescadores-llevar-droga.html>, accessed 25/09/21.

¹⁰ According to Ecuador's Secretariat for Fisheries Resources, there were more than 54,000 fishermen in these five provinces in the country.

need to have a vessel that is sea worthy, manned by a crew with sailing expertise, and a plan that takes account of the seasons at sea (currents, prevailing winds, etc.).

Slow Movers are catamaran-type multihulls or habitable monohulls. They are either bought on the second-hand market or the property of a skipper who makes his seafaring skills available to a criminal organization. The reasons for this are common to other types of illicit trafficking by sea (human beings, arms, etc.). These vessels are refitted by craftsmen or shipyards to create interior storage spaces hidden in the bulkheads. In fact, the vessel has a carrying capacity of several hundred kilograms up to one tonne, or several cubic metres of freight. It also requires food and drinking water for voyages lasting several dozen days, as well as diesel for the auxiliary engine. A sailing boat sails at an average speed of 5 knots. A transatlantic crossing from South America to the western coasts of Europe, for example, takes almost 50 days. A transpacific crossing from Panama to the east coast of Australia would take almost 60 days at sea. The crews are not always very experienced, which explains some of the navigational errors.

Australia – the new Eldorado for drug traffickers?

On 24 July 2023, the Australian Federal Police announced the discovery of 247 kilograms of cocaine concealed in the hull of a yacht from Vanuatu. The vessel, which arrived in Townsville in April, was initially denied access to the port in order to carry out investigations. Once the ship was dry, major anomalies were discovered in the hull where the drugs had been hidden. Two French nationals were arrested on suspicion of transporting part of the drug shipment from Townsville to Canberra. The value of the goods seized is estimated at US\$61 million.

3. Technological innovation supporting crime

Criminal organizations are designing and developing prototypes of maritime vectors adapted to logistical needs, unique sailing conditions and increasingly stringent security constraints. The logistical challenge is enormous. The aim is to bring ever-larger quantities of illegal substances to staging areas or more remote consumption centres. This challenge is part of an international battle that is taking on the appearance of a veritable hunt. An analysis of the situation in Latin America, the international centre of coca leaf production and processing, demonstrates the ingenuity and organization behind the export of cocaine to North American and European markets.

3.1. Design offices and sweatshops in the heart of the Amazon region

To do this, organizations call on service providers who are experts in shipbuilding. They design new prototypes and then 'industrialise' production.

Design offices and clandestine construction and assembly plants are located in the jungle, in sparsely populated areas close to waterways. They are essential for testing operational conditions and, at a later date, for a discreet launch in the Pacific Ocean. The Andean hinterlands of Colombia and Ecuador offer a wealth of opportunities for bringing together sponsors, shipbuilding engineers and crews. The use of this know-how is exceptional on the Atlantic coast, where pressure from the Colombian central government is stronger. What's more, the land is owned by large landowners, in contrast to the Pacific coastal plain where lush vegetation prohibits any infrastructure development. What's more, the Caribbean coast is served by a less dense river network, making access to the sea more difficult. Clandestine shipyards are not just concentrated on the Pacific coasts of the Andes. Such facilities have also been dismantled in the Caribbean, as in September 2018, when the Dominican Republic Navy seized a semi-submersible vessel¹¹ under construction in the Villa España area. Other seizures have taken place in Venezuela¹² on the border with Colombia and in Suriname.¹³

3.2. A fleet of narco-subs launches an assault on the oceans

First appearing in 1993, the vessels are known as narco-submarines or narco-subs, even though they are not all submersibles. Most are categorized as Low Profile Vessels (LPV). All have special design features that seek the lowest possible radar signature to avoid detection by visual, infrared, radar or sonar systems. They are made from steel or fibreglass, with a slender shape and minimal surface area. Ranging in length from 12 to 24 metres, they can cover more than 3 000 kilometres. LPVs have propulsion independent of air or external diesel engines. They keep a snorkel constantly at the surface, preventing complete immersion. By contrast, fully submersible vessels (FSVs) – both electric and diesel-powered – are capable of submerged navigation. However, they have less autonomy, requiring logistical operations during navigation. Diesel-powered unmanned surface vessels (USVs) have also been observed. In terms of capacity, LPVs manned by a crew of one to three sailors have an average carrying capacity of one to two tonnes of products (up to 10 tonnes for the largest).

Often designed for one-time use, each boat costs up to US\$2 million (to be compared with the resale price of narcotics transported at high levels of purity). The illicit cargo is transshipped off the coast onto a feeder vessel,

11 <https://elnuevodiario.com.do/armada-dominicana-incauta-embarcacion-semisumergible-en-astillero-clandestino/>, accessed 27/09/21.

12 <https://www.zona-militar.com/2019/10/08/fanb-captura-un-submarino-en-el-zulia/>, accessed 27/09/21.

13 A semi-submersible was spotted by Surinamese security forces trapped in a river in the Saramacca district. <https://guyanachronicle.com/2018/03/05/surinamese-cops-discover-narco-submarine-off-coast-with-guyana/>, accessed 27/09/21.

which introduces the substances into the shipping stream. The vector, whatever it may be, is then scuttled on its own initiative. Similarly, in the event of a denial manoeuvre by law enforcement agencies at sea, crews scuttle their boats, invoking the universal principles of solidarity among seafarers. A judicial police operation then turns into a rescue operation!

A typology of narco-sub, reflecting criminal determination

According to the international expert HI Sutton¹⁴, the fleets have evolved over time, taking into account technical progress and the intensity of the repressive policies implemented by States or the international community. Here are the main categories:

(1) LPV IM or Low Profile Vessel Inboard Motor: low-profile vessel with an inboard motor. This term first appeared in 2005 and is still in use today, but is being used less and less;

(2) LPV-OM or Low Profile Vessel OutBoard Motors: low-profile vessel with an outboard motor. A synthesis of LPV and Go-Fast modes, it looks like a fast boat but is designed to blend into the water;

(3) LPV-OM- VSVs or Low Profile Vessel OutBoard Motors Very Slender Vessels hull. Introduced in 2017, it is very long and slender with a penetrating bow that cuts through the waves. It can be up to 20 metres long and 2 metres wide;

(4) LPV-IM- VSVs or Low Profile Vessel in-Board Motors Very Slender Vessels hull. It is fitted with a *snorkel-type* mast that can be hoisted by periscope immersion, supplying air to the diesel engines without having to surface;

(5) FSV or Fully Submersible Vessel: this category of vessel is fully submersible. It includes both real submarines and so-called snorkel subs.

In total, HI Sutton counts more than 180 events communicated in open source. In 2019, it analysed more than 40 incidents involving narco-subs. Bans on such craft are rare. On 7 August 2021, the Colombian authorities seized more than two tonnes of cocaine being transported in a semi-submersible in the waters off the Pacific coast, south of Nariño. The seizure was carried out after coastguard vessels from the Pacific Naval Force, guided by information from the French Navy, succeeded in intercepting a semi-submersible craft, piloted by three individuals, which was heading for Central America. During the inspection of the 15-metre-long boat, 102 bags containing 2 039 rectangular packets of cocaine were discovered.

These underwater operations are not without risk. On 12 March 2023, the Colombian navy once again intercepted a 50-foot semi-submersible carrying 2.6 tonnes of cocaine hydrochloride in the form of thousands of plastic-wrapped bricks. The interception team also found two smugglers in poor

¹⁴ HI Sutton, <http://www.hisutton.com/>, accessed 27/09/21.

health inside the semi-submersible and two others who had died, probably as a result of poisoning from the gases produced by combustion. The survivors and the drugs were transferred to Tumaco, a small fishing port close to the Ecuadorian border. The cargo was valued at almost US\$90 million. It was to supply up to six million doses to consumers.

Is the narco-sub phenomenon spreading to Europe?

The question is worth asking after two exceptional events recorded in the maritime approaches to the Iberian Peninsula in recent years. They reflect the determination of criminal organizations to seize the European cocaine market, and the connections between organizations from production areas to consumption centres. Lastly, they identify the Peninsula as a strategic bridgehead in the approach to the continent.

The interception of the 'Chê' at Praia De Foxos

The interception of a narco sub, the 'Chê' off the coast of Galicia, at Praia De Foxos in north-west Spain, on 24 November 2019¹⁵, sent shock waves across Europe in the fight against international drug trafficking. Following intelligence, a joint international operation carried out off the Peninsula located the vessel close to the coast.

When the police intervened, the crew of three – including two Ecuadorian nationals – were scuttling the ship, while the third was fleeing ashore. The ship set sail from Brazil and covered more than 400 miles in 15 days in particularly rough and difficult sailing conditions. On close examination, this vessel has the following characteristics: length: 20 metres, width: 2.60 metres, weight: 50 tonnes, tank capacity: 20 000 litres, available freight volume: 10 cubic metres. The hull, made of a thick layer of fibreglass, is very tapered, enhancing the stealth of the vessel. In all, three tonnes of cocaine in 152 packages were seized, the equivalent of more than €100 million in re-sale value on European markets.

Analysis of the *modus operandi* teaches us a great deal about how such an expedition was conceived in advance and the meticulous coordination that went into making it a success. First of all, the construction of such an LPV is carried out in clandestine workshops, probably in the Amazon rainforest, along a river artery leading ultimately to the Atlantic shores in sparsely populated areas. Illegal freight is loaded either on a river pier or following transshipment from a mother ship in territorial waters or on the high seas. Sailing with basic instruments for a fortnight, the aim is to reach a rendezvous point several hundred nautical miles from the European coast, off the Iberian

¹⁵ First 'Narco-Submarine' caught, <https://www.wsj.com/articles/inside-the-first-narco-submarine-caught-after-crossing-the-atlantic-11603033200>, accessed 28/09/21.

Peninsula. This initial contact is both a logistical step to replenish fuel and food supplies and a coordination point for the delivery of the product. More likely, it may have been a transshipment operation prior to the scuttling of the single-use LPV. From then on, a mother ship (fishing vessel, cargo ship, powerful RIBs) receives the cargo and crew. Alternatively, a second transshipment can be organized, at night, to ensure safe delivery on 'dry land'. In this case, it would appear that damage to the mother ships necessitated an adjustment to the initial plan, forcing the LPV to run aground on a deserted beach in northern Spain.

3.3. Spain: a narco shipyard?

A second related event points to Spain as a historic point of entry for cocaine into Europe: the discovery of the first semi-submersible built in Europe in March 2021. Coordinated by the European Police Office, EUROPOL, Operation FERRO¹⁶ aimed to dismantle an international criminal organization made up of Spanish, Colombian and Dominican nationals. The searches, which took place in various parts of Spain, led to the seizure of more than 3 tonnes of cocaine, 700 kilograms of hashish and a semi-submersible in an industrial warehouse in the coastal area of Malaga. The vessel was 9 metres long, 3 metres wide and 3 metres high and designed in this workshop.

3.4. Underwater torpedo: a symbol of stealth

As part of a frantic pursuit to gain the upper hand, a torpedo container device towed by a mother ship was developed. It was submerged to a depth of over 30 metres thanks to a clever ballast system that controls submersion. In the event of an inspection at sea, the trailer is abandoned and the container automatically releases a camouflaged buoy in the shape of a piece of wood, fitted with a geolocation device so that the loaded container can be recovered at a later date. This so-called "parasite" technique can take many forms, depending on the ingenuity of the criminal operators and the situation on the ground. However, this mode of operation presupposes a particularly complex operational integration and extraction exercise, requiring meticulous skills and coordination.

In view of the prohibition measures that have been made public, they are mainly observed and intercepted in the Pacific, although some have been intercepted in Atlantic waters.

¹⁶ <https://www.europol.europa.eu/newsroom/news/spanish-police-seize-first-ever-narco-submarine-made-in-europe>, accessed 27/09/2021.

On 3 May 2020, Colombian Navy divers discovered 200 kilograms of cocaine contained in a torpedo attached to the hull of the STAR COURAGE in the port of Turbo (Antioquia province). The container ship was bound for the Spanish port of Tarragona.

4. Conquering global consumer markets

Only seasoned fleets make transoceanic crossings. Safe and sound. On a regular basis. These are large-capacity merchant vessels such as tankers, container ships and bulk carriers. As a result, criminal organizations are working tirelessly to penetrate the international supply chains that contribute to economic globalization. These ships form part of maritime routes that are scheduled in advance, following agreed itineraries, and with costly stopovers that are strictly planned.

4.1. Extremely daring techniques for contaminating sea freight

The fundamental challenge for drug trafficking organizations is to transport drugs safely and in sufficient quantities to areas of consumption. Most of the time, the business model is based on the costs of packaging illegal freight, transport (which are often very low) and labour, which are higher depending on the techniques used. The 'transport' sequence adds value to these raw materials from plantations. It involves several phases coordinated by a generally obscure organization based on the compartmentalization of the various links in a clandestine regional or even international supply chain. The main effect is to conceal the cargo itself, but also to make the logistics flow anonymous, whether it is dedicated or 'contaminated'.

Penetrating global supply chains

To do this, and to complement the chartered fleets, the aim is to infiltrate the workings of international logistics, by 'coming on board'. Often with the complicity of certain members of the port community. Without the knowledge of the ships' crews. To study these fraudulent mechanisms in detail is also to penetrate to the heart of the logistical realities of a global economy based on the maritimization of trade. It also means highlighting the fragility of the maritime link, which is often ignored but is fundamental to the resilience of our societies and economies, which are heavily dependent on the sea. Finally, it means demanding greater security in the day-to-day operation of international supply chains, which in turn determine the stability of both socio-economic and international relations.

Contaminating the ship without the crew's knowledge

‘Contamination’ is the act of introducing unauthorized substances into a supply chain without the knowledge of the legitimate actors. This particularly demanding and delicate operation requires the support of a structure and the ability to control logistics circuits on an international scale, even though they are subject to security rules imposed by international conventions. It also underpins connections upstream and downstream of the consumer market. In practical terms, contamination consists of introducing quantities of packaged narcotics either into the superstructure of a maritime vessel or into the cargo being transported.

There are many spaces on board a merchant ship that are by construction not used from a commercial or operational point of view, and these offer large volumes of available space. Located below the waterline or onboard, they are more or less accessible to traffickers. The challenge then is to gain access, for example, to the ship's quick works¹⁷ and to submerged technical parts such as the various water intakes located¹⁸ on the hull that supply the cooling circuit or balance the ballast tanks. We should also mention the rudder trunk¹⁹ or the rudder box, which offers space measuring 1.6 metres on each side and 2.5 metres high. This requires a discreet approach to the targeted merchant ship by a RIB and the work of divers to introduce the illegal products into this area.

A ship's superstructure is also an excellent place to conceal contraband. The design of merchant ships – container ships, tankers or bulk carriers – offers many dry meshes or cofferdam, i.e. the spaces separating parts of a ship's hull. They are closed with a bolted fastener. These unused spaces can be found in ballast tanks, crane cofferdam, stools, inside radar masts or foremasts, and in the double hulls of oil tankers. Other on-board facilities are likely to be exploited, such as the duck keel. This is a dry mesh, i.e. an internal passage of watertight construction running the entire length of the vessel. It facilitates the passage of technical ducts and provides additional buoyancy. Accessible via a watertight manhole from the engine room, checking its integrity is certainly not a priority for the crew or the law enforcement authorities. However, this presupposes partial or total complicity on the part of the crew.

Finally, homemade containers called ‘torpedoes’ can also be fixed to the bilge or the anti-roll plate on the sides of the ship after underwater welding work.

¹⁷ In contrast, dead works are anything above the waterline.

¹⁸ On 9/08/2023, during an underwater drone inspection of the hull of a container ship sailing from Argentina via New Zealand, the *Australian Border Force* discovered 200 kilograms of cocaine concealed in a water box in the port of Melbourne. <https://www.afp.gov.au/news-centre/media-release/call-information-after-200kg-cocaine-seized-hull-cargo-ship>, accessed 18/12/23.

¹⁹ <https://www.yumpu.com/en/document/read/11296391/rudder-trunk-used-for-smuggling-maritime-security-council>, accessed 2/10/21.

The daily situation of maritime trade²⁰

On 5 November 2023, in the port of Vitoria (State of Espírito Santo), the Federal Police and Brazilian Customs seized 1 594 kg of cocaine in 52 packages on board the Ro-Ro container ship GRANDE AMBURGO (Italian flag). The latter operates a circular route from Hamburg to various ports in Brazil, Argentina, then Dakar, the Canaries, Antwerp and Hamburg again.

As on its last stopover in Hamburg on 23 October, where the German authorities had reportedly already discovered 400 kg of cocaine, the drugs discovered in Brazil were concealed in metal partitions and ventilation ducts, bringing the total weight to around two tonnes. The packaging of the cocaine was designed to drop off the packets.

The vivid imagination of the narco-logistical specialists

The substances can also be concealed and camouflaged in the freight being transported, with a remarkable level of ingenuity. This has the effect of thwarting any attempts by the security forces to detect them. Here are a few examples of the mechanisms observed.

On 13 September 2021, the Indian Directorate of Revenue Intelligence seized²¹ two containers of goods from Afghanistan at the Mundra Port in India. Declaring talcum powder on customs manifests, analysis of the sample revealed the presence of heroin. A total of three tonnes of drugs were isolated, representing a street value of at least 2 billion rupees, or US\$27 million on the international market.

On 19 September 2021, after a search lasting more than 10 hours, the Brazilian authorities discovered three bags containing a total of 155 kg of cocaine on board a bulk carrier in the port of Santos. The ship was carrying 46 000 tonnes of sugar bound for Africa.

In spring 2021, Brazilian customs discovered several hundred kilograms of cocaine in a container of exotic wood stored in the transit area of the port of Itaguaí (Rio de Janeiro province). The drugs were hidden inside hollowed-out logs.

Shipments of tropical fruit and vegetables grown in South America are ideal for concealing cocaine. In the summer of 2021, two tonnes of cocaine were found in a container of potatoes from Costa Rica. Similarly, almost 503 kilograms of cocaine were discovered in a warehouse in Bucharest²² in

²⁰ See video available at <https://youtube/ZtFIWS8AJZM>, accessed 18/12/23.

²¹ See article published on 23/09/2021, *DRI arrests 8 including 5 foreign nationals in 3,000 kg heroin seizure case at Mundra Port*, <https://theprint.in/india/dri-arrests-8-including-5-foreign-nationals-in-3000kg-heroin-seizure-case-at-mundra-port/738371/>, accessed 29/09/21.

²² See article published on 29/06/2021, *Romania: Cocaine found in Colombian banana boxes*, <https://apnews.com/article/europe-business-colombia-romania-f4eec671805e68a17f0420e536ea95fc>, accessed 29/09/21.

around 40 boxes of bananas. This shipment of 20 tonnes of fruit came from Colombia.

Ecuadorian bananas, the vector of choice for cocaine exports?

Ecuador is the world's leading banana exporter,²³ with an annual volume of over 6.5 million tonnes. Stimulated by a national policy (the '*Ley del Banano*') which strictly regulates the banana industry, this expanding activity accounts for 40% of agricultural GDP, or 3% of national GDP. The increase in the area under cultivation (over 200,000 hectares), combined with higher yields, has kept pace with rising global consumption. An international exception, bananas from Ecuador are supplied to all world markets, with priority given to the European Union, Russia and then the United States of America. Asia, the Middle East and Oceania are also becoming fast-growing destinations. The structure of the international market is changing at the same time. The spot market for the purchase of cargoes on a day-to-day basis is developing alongside the futures market (60% of export volume in 2021), which guarantees prices negotiated in advance.

Nearly three quarters of exports go through the port of Guayaquil, less than 150 kilometres from the major plantations of Guayas and Los Rios, which account for 27% and 35% of the banana plantation area respectively. The rest of the production goes via Puerto Bolivar, 200 kilometres further south and 50 kilometres from the El Oro production areas. Finally, small volumes are shipped from the new banana port of Posorja, 65 kilometres north of Guayaquil. Ecuador is also a signatory to free trade agreements with the EU, which reduces customs duties.

Finally, the banana-growing areas are located on volcanic soils, mainly on the edge of the Cordillera in the centre-west of the country. At the forefront of the Colombian and Peruvian cocaine export logistics chains?

On 16 February 2022, the National Drug Investigation Directorate (UIAN) inspected a suspect container in the pre-shipment area of the port of Guayaquil (Ecuador), with its final destination a German port. Investigators discovered packs containing 5 720 bottles supposedly containing guayusa tea (a tropical plant renowned for its virtues), but filled with liquid cocaine, weighing a total of 3.5 tonnes. The drugs, originating from Colombia, had transited Ecuador on their way to the European market.

Concealing illegal products is also a way of thwarting the actions of the security forces. Distributing these substances among tuna carcasses onboard fishing vessels is a way of thwarting checks carried out by dog teams. Other types of bulk also make it possible to transport these products safely. Such practices have been noted on merchant ships transporting coal from Colombia.²⁴ On 6 October 2023, Turkish Customs announced that it had discovered 150 kilograms of cocaine onboard the bulk carrier PHOENICIAN-

23 <https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.fruitrop.com/content/download/57650/1023744/version/8/file/F274%2Bfiche%2Bbanane%2Bequateur%2BFRA.pdf&ved=2ahUKEwjv5aVnqWEAxAATqQEHSsSD04QFnoECBcOBg&usq=AOvVaw0lcao6t94QpyMtlKgeSeQK>

24 Colombia is the world's fifth largest coal exporter.

M²⁵ (Panama flag) in the Turkish Black Sea port of Eregli. This is a regular occurrence, as evidenced by the discovery of cocaine onboard in the ports of Durrës (Albania) in May 2022 and Ghent (Belgium) in November 2022. Other techniques are emerging, with illegal substances being integrated into machines or industrial equipment. In July 2019, 380 kilograms of cocaine were discovered in the hydraulic arms of mining equipment in Australia. On 28 January 2024, the Australian Federal Police seized 139 kilograms of cocaine hidden in caches in luxury buses imported from Asia. The buses were part of a shipment of 6 400 vehicles carried on a Ro-Ro vessel operating regular services from Singapore to the port of Fremantle. This seizure corresponds to the sale of almost 700 000 transactions, representing an estimated turnover of AUS\$45 million (US\$29 million) at local exchange rates.

Finally, the technical ducts of refrigerated or 'reefer' containers are easy to access in a terminal, making it easier to conceal products.

The challenges of detection: impregnation of products with illegal substances

The opacification of illicit traffic is giving rise to new technical solutions that play on the phases of chemical treatment and their concealment on conventional physical products.

Bolivia²⁶ made a historic seizure of cocaine hydrochloride on 26 December 2023. 776 kilograms of this substance were isolated from planks of wood that had previously been impregnated. After processing, the 776 kilograms of hydrochloride could have generated 8 tonnes of products available for consumption. The North European market was the final destination.

Cocaine hydrochloride is a white powder which, once cut, can be sniffed. It is also used as a base for crack using an extraction process in aqueous and alkaline media using an organic solvent (ether).

Techniques for contaminating maritime logistics chains

Combating drug trafficking also means understanding the regulations, procedures and operational situations within globalized, multimodal supply chains.

There are many ways of contaminating sea freight:

- (1) The packaging of the product for the purpose of concealing it** in legal cargo using techniques as sophisticated as they are daring, and its subsequent introduction into the cargo or into the superstructure of the ship.
- (2) Contamination of legal cargo** by illegal substances before the container is unloaded on a port loading dock.

²⁵ <https://www.maritimebulletin.net/2023/10/06/cocaine-found-on-bulk-carrier-with-coal-from-colombia-turkey/>, accessed 3/12/2023.

²⁶ Accessed on 6/01/24.

(3) Rip on, rip off

The operational process is as follows. The criminal organization is able to penetrate port areas. It then gains access to a container²⁷ by breaking the customs seal. In the middle of the cargo, it places drugs packed in sports bags or other similar containers. This will require two new customs seals. One for closing the container at the port of departure. A second seal for its closure at the arrival port.

Two other recent alternatives have been identified:

- cloning, or the Three Seals Method, consists of replacing the contaminated container with another that is to be inspected by Customs and has the same registration codes;
- the container switch method consists of swapping illicit freight transported in a contaminated container with another that is likely to be less controlled, targeting in particular intra-Community flows.

These last two methods give criminal organizations direct control over freight, but also require access to containers at both upstream and downstream ports. This requires a two-pronged effort to bribe the port authorities. In both cases, this operation requires *at least* complicity within the company and/or within the port community (dockers, carriers, government agents, security guards, etc.) in order to gain access to the containers. In return, the public authorities are able to target port movements according to the origin of the flows. However, the effectiveness of these countermeasures needs to be tempered by the sheer size of the flows and the intense activity at certain port terminals. These modes of action concern large cargoes (several tens of kilograms to tonnes);

(4) Integrating packages into the superstructure of the container:

traffickers try to slide reefer containers into the superstructure of the container (walls, floor or ceiling) or into the technical room, giving access to the refrigeration system.

(5) The insertion of illegal cargo into the superstructure of a ship:

another method consists of approaching the vessel, unobtrusively, at anchor and inserting products packaged in watertight bags. The superstructure of a merchant ship is full of options.

²⁷ Or TEU or Twenty-Foot Equivalent Unit is an international unit of measurement defining a standardized length of 20 feet for containers (length: 6.058 metres – width: 2.438 metres and a height of 2.591 metres).

On 28 April 2020, the Palau-flagged merchant vessel *THRONE*²⁸ was boarded outside territorial waters by the Trinidad and Tobago coastguard. 400 kilograms of cocaine, with an estimated street value of €13 million, had been submerged in the Ecuadorian port of Guayaquil in the tanks of the ship bound for Bélem in Brazil.

This operation can also be carried out with the participation of the crew. This is achieved by bribing the crew into accepting the illegal cargo on board, without the shipowner's knowledge. It is then up to the sailors to conceal the product onboard. This system requires prior knowledge of the sea route of this vector and, above all, agreement on the conditions for recovery of the product at the port of destination. Two scenarios are possible: either recovery at sea under the same conditions (drop-off) as during the ship's transit or directly into a container on the loading dock.

(6) Operations at sea: drop off.

Traffickers in a RIB approach a moving vessel. This operation often takes place in territorial waters off an area of consumption. Also, illegal products packaged in watertight containers can also be passed overboard, drifting before being recovered by a support team at sea.

The French Channel and North Sea coasts are regularly the scene of 'drop-off' operations. Some have been complete and utter failures, such as in February 2023, when more than two tonnes of cocaine were discovered washed up on the beaches of the English Channel. The products were packed in watertight bags secured with ropes, fitted with life jackets and empty cans, allowing them to float. Geolocation devices were found in these airtight packages. During aerial patrols, empty big bags were also detected. The same phenomenon was also observed in October 2023 on the English coast²⁹ off the coasts of Dorset, the Isle of Wight and Hampshire.

MSC GAYANE: a symbol of organized industrial contamination³⁰?

20 tonnes of cocaine were discovered on 17 June 2019 onboard the container ship *MSC GAYANE*³¹ during a logistics operation at the Packer Marine Terminal at the Port of Philadelphia in the United States (East Coast). This record seizure was valued at US\$1.3 billion. On its way from Colombia, it made a stopover in the United States before heading for Rotterdam (Netherlands).

²⁸ <https://www.fleetmon.com/maritime-news/2020/29533/cargo-ship-intercepted-seized-all-crew-400-kg-coca/>

²⁹ <https://metro.co.uk/2023/10/24/package-of-cocaine-washes-up-on-beach-for-the-fourth-time-this-month-19710532/>, accessed 03/12/23.

³⁰ <https://splash247.com/msc-guyane-crewmember-provides-details-about-the-largest-drugs-bust-in-us-history/>, accessed 30/09/21.

³¹ Liberian-flagged container ship owned by *Mediterranean Shipping Co (MSC)*. 314 metres long, it has a payload capacity of 10 776 TEUs.

The Montenegrin crew members admitted that they had been approached by the organization before the ship's departure. Persuaded to take part, other sailors onboard are said to have received sums of money of at least US\$55,000 in exchange for their complicity.

On several occasions, illegal cargo was transshipped on the high seas, at night, between speedboats and the MSC GAYANE. Similarly, between two ports of call in Chile and Panama, the container ship was approached by speedboats to receive drug consignments. The ship's crane was used to lift the loads transshipped at sea, and the crew then divided the packages into seven containers containing wine, vegetable extracts, scrap metal and other consumer goods bound for Europe, Africa and Asia. The customs seals were forged to make it easier to conceal their wrongdoing.

The second officer, employed for 11 years in the armaments industry, and a student mechanic in direct contact with the criminal organization recruited five other crew members. For a large sum of money, they persuaded them to take part in the various transshipment logistical operations by providing a service. The ship's chief officer, the fourth engineer, the refrigeration assistant, the onboard electrician and a deckhand were all involved.

These complex operations require thorough advanced preparation, prior selection of maritime skills (divers, propulsion engineers, etc.), a precise study of the target vector and its maritime kinematics), not forgetting the scenarios for introducing and recovering the illegal cargo in the ports of departure and arrival. The prior need for intelligence on the identification of the target vessel, the coordination measures on two or even three continents, the harnessing of rare skills and specific equipment and deployment of these at the port of departure/arrival, and the immobilization over a long period of significant financial capital bear witness to the power of the criminal organizations involved in this international trafficking. They also point to the small number of candidates capable of working in the big league.

Operating methods are adapted to the situation on the ground and to maritime traffic flows. Ecuador's Organized Crime Observatory has identified variations between ports in this highly exposed transit country:

- Port of Manta: Rip-on/Rip-off for bulk goods, with pollution occurring upstream of the port;
- Port of Bolivar (El Oro): use of double bottoms on fruit and vegetable containers bound for the United States and Europe;
- Port of Contecon (Guayaquil): all modes of operation are encountered, particularly due to the easy accessibility of port facilities.

4.2. International law of the sea put to the test by drug trafficking

Whatever the *modus operandi*, these operations to contaminate sea freight raise questions about the safety of port facilities and vectors. More broadly, the question of the overall security of international trade is being raised in a context where inter-State rivalries and the threat of terrorism are considered to be very significant. How, then, can sealed containers be opened on docks or onboard ships? How do you explain the fact that packages are inserted into the superstructure of merchant ships without the knowledge of the crew or port security staff? The problem becomes even more acute if narcotics are replaced by explosive or chemical substances. Or if we consider the scenario of embargoes that restrict the carriage of certain types of specifically defined products.

Maritime law was quick to address safety issues relating to risks of natural origin and those associated with maritime navigation (regulation of the number of life jackets and survival craft in proportion to the number of passengers and crew members). In contrast, the first standards dedicated to maritime security, i.e. human malevolence, only emerged at the end of the 20th century following an unfortunate episode that crystallized international cooperation: the hijacking of the *ACHILLE LAURO* cruise ship.³² This event gave rise to the Rome Convention known as SUA (Suppression of Unlawful Acts against the Safety of Navigation), enhanced by additional protocols.³³ Signed in 1988, it covers the seizure of a vessel by force, assaults on persons onboard and the bringing on board of devices capable of destroying or damaging the vessel.

Although terrorism had already been seen at sea³⁴, this threat was clearly taken into account in the 2000s in the wake of the attack on the *LIMBURG*³⁵ oil tanker and the attacks of 11 September 2001. Chapter XI-2 of the SOLAS Convention incorporates the ISPS Code (International Ship and Port Facilities Security), which came into force on 1 July 2004. It is binding on all actors in international shipping, and aims to guarantee a high level of security both at port facilities and on board ships sailing on international routes. As a result, even if terrorism is the priority target, drug trafficking is also tested each day by these regulatory provisions and their application on the ground. This full-scale test is an invitation to take an in-depth look at maritime transport security.

32 Passenger ship hijacked by Palestine Liberation Front terrorists in the Mediterranean on 7 October 1985.

33 As in 2005, the Protocol on the Safety of Fixed Platforms Located on the Continental Shelf.

34 The Palestinian movement, the IRA or the Tamil Tigers.

35 Attack on a French oil tanker by a suicide boat in the Gulf of Aden on 6 October 2002, claimed by the Aden-Abyan Islamic Army.

International Ship and Port Facilities Security code

This code has two parts:

- detailed maritime and port security requirements for States, port authorities and shipping companies contracting the SOLAS Convention;
- recommendations on the measures to be taken to meet maritime and port security obligations.

Its aim is to detect threats of illicit activities against ships, ports and port facilities. A port security plan (PSP) is drawn up by a port security officer according to a precise methodology. Each port facility has a duly trained port facility security officer (PFSO) who draws up a security plan for the facility. Each company has a security officer³⁶ as does each ship.³⁷ At each port of call, the latter draws up an effective security plan to combat any potential threats. The ISPS Code establishes three levels of security aimed at limiting the vulnerability of shipping and port operations.

These international conventions have been supplemented by regional developments that demonstrate the adaptation of legal rules and the definition of international security tools with the aim of thwarting criminal intentions. This involves reconciling the fundamental principles of the international law of the sea with the realities of fragile sovereign States or States of critical size.³⁸ They are required to share their repressive powers with major powers established in the region. The San José, Costa Rica agreements are the result of the Aruba agreements signed on 10 April 2003 between the Caribbean States and the European States established in the region. They are part of the drive to strengthen cooperation in the fight against the illicit trafficking of narcotics and psychotropic substances by sea and air in the Caribbean. As a direct consequence of Article 17 of the Vienna Convention, they facilitate the detection, identification, surveillance and interception of suspect ships through enhanced operational cooperation. These texts adapt the exercise of national sovereignty in an area where maritime borders are very tenuous. Exemptions from the Law of the Sea have been negotiated regarding right of pursuit, ship boarding and the use of weapons. In addition, bilateral agreements promoted by the United States of America since 1999 have been signed with a majority of Caribbean States. Under shiprider agreements, the US Coast Guard patrols the territorial waters of third countries and contributes to the security of the oceans. In very operational terms, these agreements are supplemented by “hot pursuit agreements” which authorise them to extend the pursuit of a suspect vessel

³⁶ Or Company Security Officer (CSO)

³⁷ Or Ship Security Officer (SSO)

³⁸ The configuration of the Caribbean region offers a host of opportunities for criminals and presents law enforcement agencies with unsolvable problems. Some States have hundreds of islands or islets. Saint Vincent and the Grenadines is an archipelago made up of 32 islands, only nine of which are inhabited.

in territorial waters without the presence onboard of a representative of the sovereign State.³⁹

All in all, a body of standards has developed around this founding text of UNCLOS. It aims to take note of recent security developments on the world's waters. However, illegal operators are not signatories to these international conventions and, therefore, have little involvement in these universal objectives.

4.3. The sea as a buffer zone

The oceans are used as logistical storage areas or buffer zones pending post-routing of illegal products. This recent trend calls into question our knowledge of how traffickers operate. It's a new phenomenon that has appeared all over the world, in the Mediterranean, Atlantic and Pacific oceans, often close to centres of consumption. This requires advance preparation and knowledge of currents and shipping routes. It also requires the implementation of real-time geolocation systems to coordinate the tracking and recovery operations of drifting submerged packages.

In December 2022, a patrol aircraft from the Dutch Caribbean Coast Guard (DCCG) spotted a field of bales floating in the international waters of the Caribbean. The crew of the HOLLAND patrol vessel discovered a vast cargo of 5 tonnes of cocaine waiting to be recovered.

On 7 February 2023, as part of Operation Hydros⁴⁰, the New Zealand Navy diver base ship MANAWANUI brought back to Auckland 3.2 tonnes of cocaine⁴¹, divided into 81 bales found floating more than 700 nautical miles north-west of New Zealand. The bales were held together by a net and supported by floating devices. The cargo is believed to have been dropped from a ship on the high seas by traffickers bound for Australia. The authorities estimate that the quantity was sufficient to supply the market for one year. The estimated resale value was half a billion US dollars. This exceptional operation was coordinated by customs and the police on the basis of information from the "Five Eyes" group, an alliance of intelligence services from Australia, Canada, the United States, New Zealand and the United Kingdom.

In April 2023, the Italian *Guarda di Finanza* spotted a floating and drifting cargo of bales of cocaine off the eastern coast of Sicily, retained by a fishing net. It was identifiable by a luminous device. The inspection led to the

³⁹ This contradicts Article 111 of UNCLOS, which stipulates that "*the right of hot pursuit ceases as soon as the ship pursued enters the territorial sea of its own State or of a third State*".

⁴⁰ Hydros started in December 2022. Working in close partnership with other international agencies, it monitors and controls shipping to detect suspicious vessels.

⁴¹ See the New Zealand Police press release, <https://www.police.govt.nz/news/release/operation-hydros-police-customs-and-nzdf-recover-half-billion-dollars-worth-cocaine>, accessed 3/12/23

discovery of 70 packages containing more than 1 600 bricks with a total gross weight of 2 000 kilograms. The resale value to the retail trade amounts to €400 million.

Figure 8. Global mapping of cocaine shipments from production areas to consumer markets
Produced by Ronan KERBIRIOU, January 2024

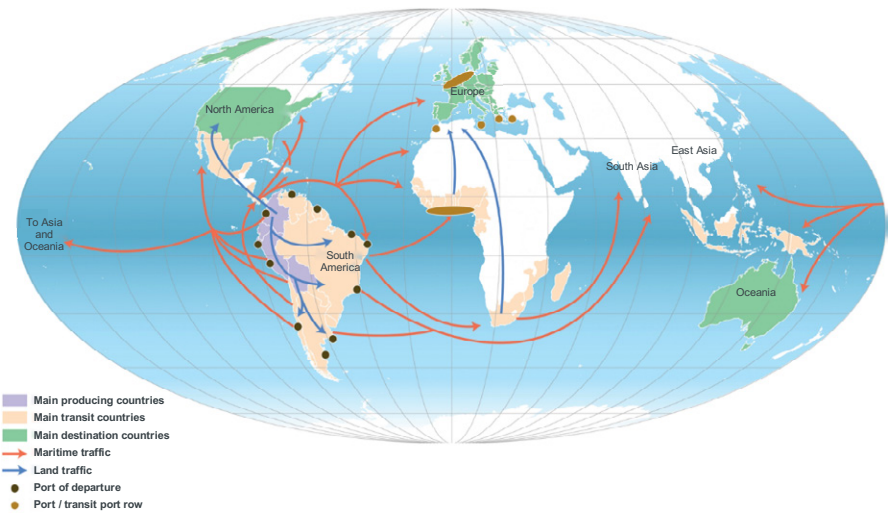
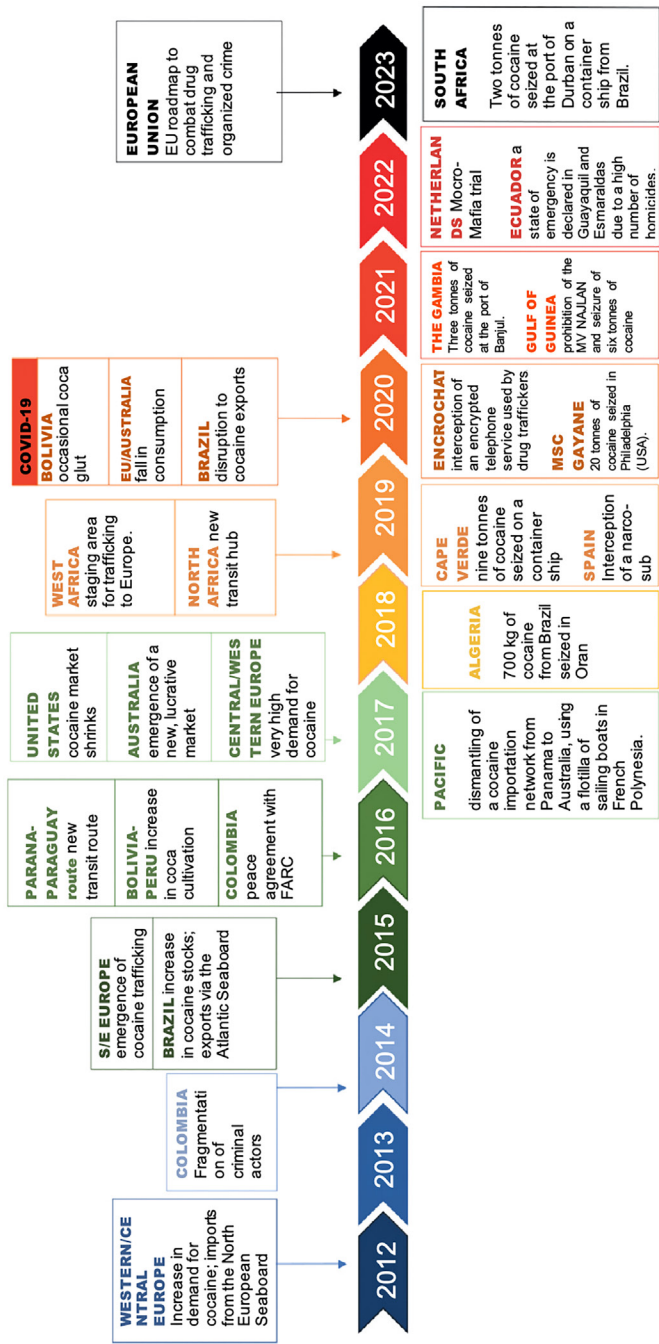


Figure 9. Chronology of events linked to illegal cocaine trafficking
Produced by Guillaume MANET



The thalassopolitics of illicit traffic

Drawing the current flows of drugs using ocean spaces is a fundamental but complex exercise (1). It identifies the main trajectories (2) leading from South America (3) to consumer markets (4) via staging areas (5).

Thalassopolitics refers to a thalasso-centric approach in managing international relations in an increasingly liquid world. This point of view seems entirely consistent with the maritimization of trade, lifestyles and competition between States and economies.

1. A fundamental but complex criminal map

This meticulous mapping work is fundamental to understanding global balances. It facilitates risk assessment for international trade. In addition, it is fundamental to understanding the internal balances of the States involved in this illegal trade in different ways (as a production area for substances, a staging area and a focus for consumption). More specifically, this patient work of synthesis sheds light on the forces at work (producers, sponsors, intermediaries, etc.), the alliances that may be temporary or lasting, the concrete effects of security policies and sea-land interdiction on drug flows, and the new dynamics of the international drug market. This, in turn, enhances our knowledge of 'onshore' traffic by understanding upstream flows. Lastly, this collaborative upstream-downstream work will provide explanations of the mechanisms by which psychotropic substances are imported. More broadly, it provides an understanding of the *modus operandi* that facilitate illicit trafficking of all kinds in a globalized criminal market whose centres are linked mainly by maritime flows.

Methodological limitations

Fundamental to understanding international drug trafficking, this mapping is nonetheless proving complex to draw. In fact, it depends on a number of factors, the most important of which are listed below:

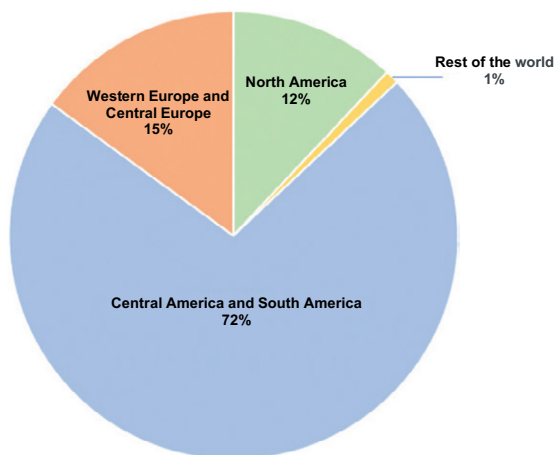
- the local agricultural conditions, which determines crop productivity;
- the nature of the raw materials grown in restricted geographical areas;
- the actors involved in the processing of raw materials into drugs;
- the domestic political situation, which has an impact on crop eradication measures or their extension;
- regional logistics matrices that direct the flow of production towards consumer markets, as well as supplies of precursor products;
- the international geopolitical context, which creates zones of instability that present a real opportunity for illegal operators, or, on the contrary, which applies a firm and constant security policy;
- the law of supply and demand that prevails on international drug markets;
- local or regional opportunities that introduce new addictive practices;
- the regularity of international multimodal logistics chains;¹
- port connectivity.

In addition, the vast majority of product seizures are made at sea or on containerized transport vectors that have set sail. The example of cocaine illustrates the challenges of product-focused control strategies.

¹ The health crisis linked to the spread of SARS-CoV-2 has caused lasting disruption to international logistics flows. The example of global container management illustrates the disorganization of logistics movements and the time needed to restore balance to logistics chains.

Figure 10. Global location of cocaine seizures, year 2020

Source: UNODC, Global Cocaine Report, 2023. Produced by Guillaume MANET



2. Variety of maritime routes: indicative of the intentions of the sponsors?

The maritime routes used by drug traffickers depend on the means of transport chosen (dedicated or contamination of ship/cargo), the vectors available (sail, semi-submersible, merchant ship) and their criminal intentions (concealment, etc.).

Logistical routes adapt to the expansion of the international criminal market: the example of cocaine.

Since 1975, demand for cocaine has risen sharply in North America and the United States in particular. This led to a substantial increase in coca leaf cultivation in South America. From 1980 onwards, Colombia's northern seaboard became one of the main export hubs for North American customers, mainly via Florida.

In fact, the Caribbean is gradually becoming the preferred transit zone, with some islands controlled or even bought by members of Colombian cartels. Carlos Lehder Rivas, known as El Bocon, the big mouth, co-founder of the Medellín cartel, acquired the island of Norman's Cay in the Bahamas archipelago, 200 kilometres from Florida.

Faced initially with imports by air, the United States defined an operational strategy in 1995, the *Air Bridge Denial Program*. Operated by the CIA, it targets the airborne transport used by drug traffickers. In fact, the sea route is becoming the preferred means of transport. It escapes the strict control of the American forces, following, in particular, the geography of the Gulf of Mexico and the Caribbean Sea. However, the stagnation in demand for the product in the United States is naturally opening up a new source of consumption among Caribbean islanders. Then, in the second half of the 1990s, the cocaine wave finally reached the European market. The Caribbean is emerging as a staging area, and even a secondary wholesale market for Europe. At the same time, new cocaine chartering zones are emerging further and further away from the three producers, in the heart of South America.

2.1. Routes dictated by the maritime environment

Routes are revealed in the course of restriction operations, judicial investigations or events at sea that result in damage or abandonment of the vessel by the crew. In fact, we have to admit that there are grey areas in our knowledge of traffic flows. May they be as few and limited as possible. These routes can be summarized as follows:

- the **ocean currents** (Gulf Stream, trade winds) and their seasonal effects on sailing;
- the **obligatory points of passage** such as islands, peninsulas and canals. For example, the Pacific route linking cocaine-producing countries or staging areas to Australia by sail requires the crew to make stopovers in French Polynesia or New Caledonia. The Azores and Cape Verde are also natural transit points for transatlantic sailing in the North and South Atlantic respectively. These natural refuges help to overcome the human and technical limitations of these maritime expeditions. They also provide opportunities to replenish fresh food and drinking water supplies;
- the **motorways of the seas** connect major international logistics hubs such as the Northern Range, Brazilian ports in the South Atlantic and new port hubs in the Mediterranean Sea such as Tangier Med and the free port of Marsaxlokk² in the south-east of the island of Malta. The motorways of the seas are linked by natural bottlenecks such as straits or channels known as choke points. They provide a concentration in the major flows of international trade. For example, on 28 October 2021, the Panama Canal Authority (PCA) announced that the canal had beaten its record for tonnage traffic in fiscal year 2021, up 8.7% on the previous year, which was already a record, despite the global crisis caused by port congestion. 516 million tonnes passed through the port,

² The *Malta Freeport* is experiencing a sharp rise in transshipment traffic. 95% of this port's traffic is transit traffic on its way to its final destination. Collector or feeder vessels then link up with the other Mediterranean ports. CMA-CGM has made it its main Mediterranean stopover on its 44-day shipping route linking Asia to Europe via the Strait of Malacca, the link between the China Sea and the Andaman Sea, and the Suez Canal.

representing 3.5% of world seaborne trade. These are mainly containers, cereals, chemicals and liquefied natural gas. Conversely, the summer of 2023 called into question the maritime dynamics between the Pacific and Atlantic oceans via this canal. Insufficient rainfall in 2023 meant that traffic had to be reduced³ as did the size of the vessels during the dry period. A complex water management system was designed to cross the 80-kilometre Isthmus of Panama. It is based on three sets of locks fed by two artificial lakes (Lake Gatun and Madden).

- **The smugglers' routes:** often as part of regional cabotage or in the convergence of river-sea flows that send natural or processed products to international export facilities located on the coast. The Atlantic coast of Brazil is a good illustration of the connections between generous watersheds and the ocean. The size and flow of the many rivers help to foster the success of these natural facilities. These itineraries can also involve natural eldorados, such as the many islands of the Caribbean, the Cape Verde archipelago or the coastline of Guinea-Bissau, divided by the Bijagos archipelago;⁴
- **The typology of maritime flows and cargoes transported:** it determines the mode of transport, whether containerized, bulk or liquid. It involves dedicated or non-dedicated maritime transport, both sailing and merchant vessels. It is also justified by the nature of trade relations between countries and continents. For example, the port of Antwerp has strong links with South America, particularly in terms of large-volume fresh fruit imports.

To get a clearer picture of the major maritime routes used by drug traffickers, we need to distinguish between the departure and destination coasts and the ports of call.

The following two maps show the location of interdiction operations carried out in the Atlantic over the last 15 years by the European Maritime Analysis and Operations Centre against Drug Trafficking (MAOC-N) based in Lisbon (Portugal).

³ 32 ships per day instead of 36. The draught has been reduced to 13.41 metres instead of 15.2 metres. The type of vessel that can use the canal is called a PANAMAX vessel.

⁴ This archipelago is made up of 88 islands or islets in the Atlantic Ocean, at the mouth of the Rio Geba river. It covers an area of 10 000 square kilometres. UNESCO classified this archipelago as a biosphere reserve on 16 April 1996. The 27 000 inhabitants are spread across 23 main islands.

Figure 11. Atlantic interdiction operations coordinated by MAOC-N targeting cocaine, 2008 to 2023.

Sources: MAOC-N. Produced by Ronan KERBIRIOU, January 2024

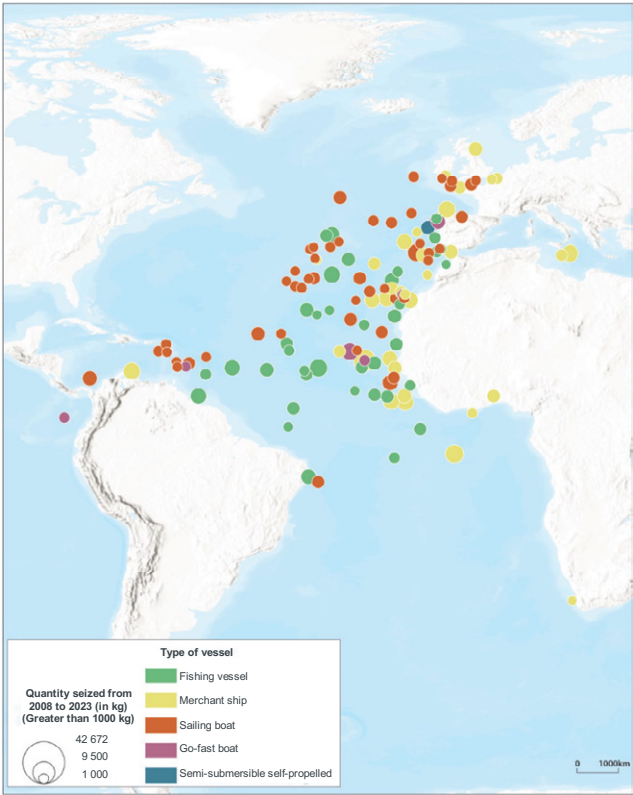
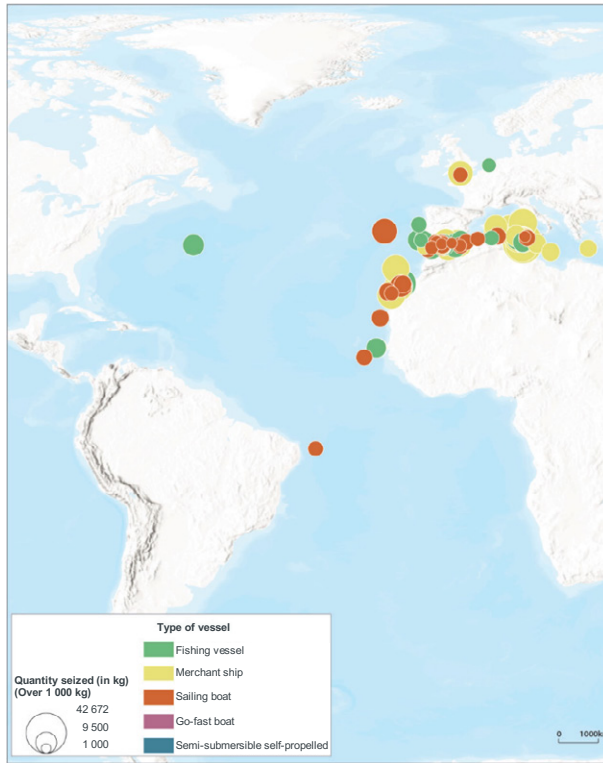


Figure 12. Atlantic interdiction operations coordinated by MAOC-N targeting cannabis, period from 2008 to 2023.

Sources: MAOC-N. Produced by Ronan KERBIRIOU, January 2024



2.2. Ports of call determined by criminal support network

Criminal organizations are establishing themselves as close as possible to the links in the supply chain by setting up international “trading posts”. This makes it easier to control and monitor logistics operations as well as to create local resale opportunities. They take advantage of linguistic communities or criminal sympathies to establish themselves in the social life of the target countries, taking up key positions over time. This is a widespread trend that is currently being observed across all products. The Brazilian criminal organization, *Primeiro Comando da Capital*,⁵ is an interesting example of international deployment, particularly in the Portuguese-speaking world. The same is true of the Balkan actors, who are present in both South America and Europe.

⁵ This criminal organization was allegedly set up in 1993 in Taubaté prison to regulate relations between prisoners in overcrowded prisons. The ‘Party’ has gradually established itself as an interlocutor for the State in the prison environment. At the same time, it has established a reputation as a very violent organization based in the outskirts and major urban centres of Brazil. It has carried out attacks on police stations and prisons, notably in São Paulo.

3. South America: a laboratory for the logistization of the world?

At this point, we need to identify the areas where psychotropic substances are exported. They naturally vary according to the products and geopolitical situation as well as in terms of logistical constraints. Our study will focus on the case of cocaine, examining the situation in producer countries (3.1, 3.2), including Bolivia, a landlocked country (3.3). This study logically points to the value of maritime logistics chains, as a source of profit and transport security, but also as a means of concentrating risk on one vector.

The areas where the raw materials needed for drug production are produced are restricted geographical areas. Although most drugs are grown on every continent,⁶ the fact remains that the majority of cultivation is concentrated in three main basins:

- **South America:** Colombia, Bolivia and Peru for coca leaf, and Mexico and Colombia for opium;
- The **Middle East and South-East Asia** for the cultivation of opium. The main producers are located in the 'golden triangle' (Burma, Thailand, Laos and Vietnam) and the golden crescent (Afghanistan, Iran and Pakistan);
- The **Maghreb** (Morocco) as well as **Afghanistan, Mexico, India and South Africa** for cannabis.

With the notable exception of Afghanistan and Bolivia, which are completely landlocked, all the producing countries have access to the sea, even if, for some of them, it is limited or not very conducive to shipping. Neighbouring countries act as strategic intermediaries. Thanks to their geographical position and port connectivity, they are advanced export bases. Over time, and in particular for reasons combining logistics and safety imperatives, we have noted the gradual extension of departure zones or areas of influence like an oil stain. The United Nations Office on Drugs and Crime (UNODC) has identified more than 900 routes from the Amazon basin to consumer markets.

⁶ The notable exception is coca cultivation, which requires climatic and altitude conditions found on different continents. However, coca is only produced in South America and in three countries. Why isn't this crop being developed in Venezuela or Ecuador, for example? Juan Lucas RESTREPO, Director of CIAT (International Centre for Tropical Agriculture) told *La Semana* newspaper (05/04/20): "There are environments similar to those in Colombia in Africa or Asia, where coca could be produced".

Figure 13. Destination of cocaine flows from producer countries and Brazil, period 2010-2021

Source: UNODC, World Drug Report 2023 (United Nations publication, 2023)

	Connected countries	European Union (West, East)	Asia, Africa	Central and North America	Main destinations
Colombia	64	35%	/	52%	Ecuador, Venezuela, Panama, Italy, Belgium, El Salvador, Spain, Mexico, United States
Peru	51	35%	/	47 %	Chile, Ecuador, Uruguay, Montenegro, Mexico, Panama, Switzerland
Bolivia	31	20%	/	60%	Chile, Uruguay, Paraguay, Panama, Argentina, Italy, Lebanon
Brazil	65	44%	23%	/	Italy, Uruguay, Hong Kong, China, Portugal, Belgium, South Africa, Lebanon

Figure 14. Area under coca cultivation in hectares, by producer country, 2014-2021

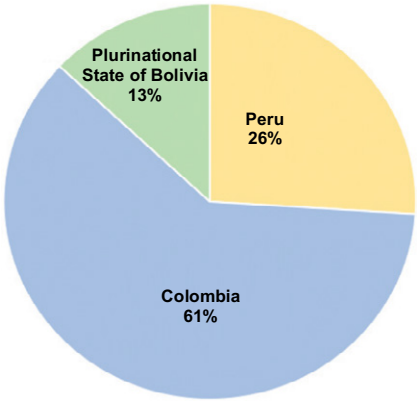
Sources: UNODC report, World Drug Report 2023, accessed 4/12/23,

<https://www.unodc.org/unodc/en/data-and-analysis/world-drug-report-2023.html>. Produced by Guillaume MANET

Country	2014	2015	2016	2017	2018	2019	2020	2021
Bolivia	20 400	20 200	23 100	24 500	23 100	25 500	29 400	30 500
Colombia	69 000	96 000	146 000	171 000	169 000	154 000	142 800	204 300
Peru	42 900	40 300	43 900	49 900	54 100	54 700	61 800	80 681
Total	132 300	156 500	213 000	245 400	246 200	234 200	234 200	296 600

Figure 15. Breakdown of coca leaf cultivation by producer country, 2020

Source: UNODC, *Global Cocaine Report, 2023*. Produced by Guillaume MANET



The coca leaf: a sacred leaf for the Andean peoples?

Archaeological research has shown that the pre-Inca Tiwanaku civilization⁷ cultivated the coca leaf. For this civilization, the leaf was a cultural symbol associated with rites and beliefs. The Tiwanaku polity ruled between the 7th and 11th centuries in a territory stretching from the Andes to the Pacific Ocean, covering regions currently found in Bolivia, Peru and Chile.

The advent of the Incas restricted the use of this plant to the elite, although it could be distributed to the population in times of crisis. It also had a mystico-religious function, founding this civilization according to the legend of the Sons of the Sun. Its eminent qualities have already been recognized: as a food substitute, as an energiser, as a powerful remedy for altitude sickness and as a way to forget misfortunes.

After much debate over the eradication of its culture, Spanish colonization finally recognized the importance of this leaf to Inca public order.

Today, the coca leaf is an integral part of Bolivia's ancestral culture, as recognized by the Constitution of the Republic of Bolivia. As such, it is not involved in cocaine production. It is usually chewed.

In 1952, the World Health Organization (WHO) deemed this practice to be addictive. In 1961, the Vienna International Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances classified the coca leaf as a narcotic drug. In fact, the *cocalero* or coca grower is regarded as a drug trafficker and the consumer as a drug addict.

⁷ In the Aymara vernacular or 'Tiahuanaco' in Spanish. Aymara is one of the official languages alongside Spanish under the Constitution of the Republic of Bolivia, promulgated on 26 January 2009.

Then, faced with an explosion in cocaine use, the United States condemned the cultivation, marketing and consumption of the coca leaf. With the Organization of American States in their wake, they methodically organized the fight against cocaine trafficking. With one exception. Cultural? The *Coca-Cola Company* was granted the privilege of supplying this 'sacred' drink to the people of the West. Coca cultivation ultimately becomes the privilege of this American multinational.

In 1995, a WHO report recognized the non-toxicity of the coca leaf. Much to the dismay of the United States, which censored the report. The UN finally accepted the chewing of the sacred coca leaf on 15 January 2013. As a result, coca cultivation gained legal status. This traditional practice, which delivers both dietary and medicinal effects, thus loses its addictive connotation. This international recognition relates to traditional use, but not to a policy of exporting a raw material that can be transformed into substances with psychotropic properties. At the same time, Bolivia has re-established its place in the concert of nations within the Vienna Convention.

3.1. Colombia – at the heart of global cocaine production

Colombia is the world's leading producer of coca leaf, with a 43% increase in production in 2021 compared with 2020. Cultivation is highly concentrated, with 44% of national production coming from 14% of the coca-growing area.

Coca leaf cultivation concentrated in geographical area

The outlying departments on the Pacific coast are the most productive regions, with more than 89 200 hectares, or 41% of the national surface area. Growth is 5.5% above the 2021 baseline. The Nariño and Cauca regions have the highest density of cultivation,⁸ particularly on the border with Ecuador and in the heart of the Cordillera. The second largest producing region is Putumayo-Caquetá on the border with Ecuador, with 53 648 hectares or 23% of the estimated total area. There has been a sharp increase of 68%, particularly in the enclaves of Puerto Asis, Orito, Valle del Guamez and San Miguel on the border with Ecuador. The Catatumbo region is the third highest producer with 42 043 hectares, or 18% of the total area, down by 1%. The municipality of Tibú accounts for 52% of crops. It is located in the Norte de Santander region, on the border with the Bolivarian Republic of Venezuela.

Geographical observation highlights the location of coca crops in mountainous areas or in the foothills of the Andes. They are often not easily accessible. The Amazon rainforest is predominant, offering ideal climatic conditions. The region is characterized by large rivers and major vectors of regional mobility. The terrain is difficult to traverse, thus having the effect of isolating these outlying provinces from the influence of the central government. These major centres of coca leaf production either border other countries (Ecuador, Bolivarian Republic of Venezuela) or the Pacific Ocean. These administrative boundaries are naturally porous and encourage illicit

8 The Tumaco, El Charco (Nariño) and El Tambo (Cauca) sectors account for 41% of the area.

trafficking and corruption. They all bear witness to the challenges faced by the public authorities in controlling the security of national land and sea areas, which has become particularly difficult. The Norte de Santander region is a case in point. The Sierra Oriental divides the territory along a north-west/south-east line, making communications with Venezuela easier than with the rest of Colombia. The department is rich in natural resources, but lacks economic investment and public infrastructure. Despite policies to voluntarily replace illegal coca crops, local people still see this as the only profitable activity. Furthermore, cultivation trends do not seem to be conditioned by administrative boundaries. The same increase in cultivated areas can be seen on both sides of the border between Colombia and Peru. Between 2018 and 2022, the Colombian department of Putumayo will have developed its surface area by 1.8 times, while over the same period the Loreto district will have grown by 1.5 times.

According to publicly available estimates,⁹ 49% of crops are grown in special management areas such as natural parks (21%), indigenous reserves (18%) and the territories of Afro-descendant communities (4%).

Public policies to limit coca cultivation

The Colombian public authorities are developing a plan to combat coca growing, which has been renewed in view of the significant increase in production in Colombia. The 2023-33 National Drugs Plan was drawn up with the support of the communities affected by the consequences of this illicit activity. Municipalities in the regions¹⁰ most affected were consulted, in particular peasant, indigenous and Afro-descendant communities.

With a view to restoring public order, the guidelines are as follows:

- oxygenate the communities dependent on this criminal economy through a territorial development plan in the areas affected;
- stifle the operational capabilities of criminal organizations and their business model.

⁹ See the joint report by the UNODC and SIMCI (Sistema Integrado de Monitoreo de Cultivos Ilícitos), *Monitoreo de los territorios con presencia de cultivos de coca 2022*, September 2023, https://www.unodc.org/documents/crop-monitoring/Colombia/Colombia_Monitoreo_2022.pdf, accessed 3/12/23.

¹⁰ The municipalities of Tumaco and Taminago (Nariño), San Miguel and Puerto Asis (Putumayo), Santander de Quilichao, Cali, Buenaventura (Cauca), Tibú (Norte de Santander).

Figure 16. Results of the repression of illicit cocaine trafficking by the Colombian security forces, period 2021-2022

Source: UNODC, *World Drug Rapport 2023* (United Nations publication, 2023). Produced by the author

	2021	2022	Change 2021/22
Seizure of cocaine paste/base	88 655 kg	106 728 kg	+20%
Cocaine seizure	669 340 kg	659 134 kg	-1.5%
Clandestine laboratories dismantled	5 750	4 707	-18%

3.2. Peru – the world's second largest coca producer and Bolivia's gateway to coca production

Peru is the world's second largest cocaine producer, behind Colombia and ahead of Bolivia. Peruvian cocaine production is on the rise, with around 700 tonnes in 2020 according to the annual reports of the ONDCP (US *Office of National Drug Control Policy*) and the UNODC (United Nations Office on Drugs and Crime). According to the Peruvian authorities, the area under cultivation is estimated at 95 000 hectares in 2022, which means that 870 tonnes of cocaine hydrochloride could be produced. Nearly 70% is exported, mainly by sea, with the vast majority destined for the European market and only 10% to the United States. According to the Peruvian National Police, 45% of flows take the sea route directly (land or air flows can also lead to the seaside).

According to some experts, coca leaves harvested in Peru contain much higher levels of alkaloids than those grown in Colombia or Bolivia.

Concentration of coca-growing areas in the Valley

The main coca-growing area in Peru is the so-called VRAE region.¹¹ It accounts for 75% of national production. This Hispanic acronym refers to the valley of the Apurímac and Ene rivers, distant tributaries of the Amazon. The acronym is now supplemented by the “M” for Mantaro, another tributary of the Amazon. It is nestled on the lush jungle slopes of the eastern Andes, at an altitude of between 2 000 and 2 500 metres. The estimated area under cultivation is over 21 000 hectares, the vast majority of which supplies the illicit market. Its contribution to the value produced by the agrarian sector is estimated at 55%, although it is difficult to put a precise figure on it.¹² It employs 69% of the workforce¹³ and produces 90% of the valley's gross domestic product.¹⁴

Situated 1 100 kilometres south-east of the capital Lima it benefits from weaker State control, facilitating the expansion of illegal activities of all kinds.

Extending cultivated areas in synergy with regional dynamics

However, new coca leaf-growing areas are emerging in regions that are naturally less favourable to plant growth but where there is little State pressure. This is encouraged by its proximity to the tri-border region (Peru, Colombia and Brazil). Cabalococha and the province of Mariscal Ramón Castilla are considered to be Peru's new hot spots for coca cultivation, but also for a wide range of criminal activities.¹⁵ The Loreto region illustrates this upward trend. In 2018, 5 072 hectares were recorded. In 2022, the area under cultivation is estimated at 13 844 hectares, or 14% of the country's total coca-growing area. The river network in this basin naturally converges towards the Amazon, which flows through areas covered by equatorial rainforest. The Putumayo river valley links Colombia to the north and the region of Puno to the south-east of Peru. Better still, it is part of a large-scale project led by the *Iniciativa para la Integración de la Infraestructura Regional Suramericana*¹⁶

11 Or *Valle del Río Apurímac y Ene* is an isolated region of Peru covering an area of 12 000 square kilometres where the armed insurrection movement, Shining Path (an offshoot of the Communist Party) has been active.

12 Instituto Nacional de Estadística e Informática (INEI), “*IV Censo Nacional Agropecuario*”, Lima, INEI, Perú, 2012, quoted by Romain BUSNEL, *Ce qui se joue dans la protestation : défendre la coca pour saisir l'État au Pérou*, in *Critique Internationale*, 2019/3 (No. 84), <https://lite.qwant.com/?q=cairn+info+critique+internationale+2019%2C+3+page+165&client=opensearch>, accessed 4/12/23.

13 Instituto Nacional de Estadística e Informática (INEI), “*Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza (ENAHO) 2013-2014*”, Lima, INEI Perú, 2014.

14 Ministerio de Agricultura y Riego (MINAGRI), *Plan de intervención a mediano plazo (2013-2016) del Ministerio de Agricultura en los Valles de los ríos Apurímac, Ene y Mantaro*, Lima, MINAGRI, 2012.

15 In particular, mining offences.

16 IIRSA is an initiative proposed by the Inter-American Development Bank (IDB) and the Corporación Andina de Fomento (CAF) at the Brasília Summit in August 2020. Since its inception, the aim of the IIRSA project has been to integrate all existing and planned means of communication (roads, airports, waterways,

(IIRSA) or South American Regional Infrastructure Integration Initiative. The aim is to revitalise the Pacific-Atlantic axis by creating a major communications link known as the *Eje de Amazonas* (Amazon axis), of which the Putumayo will be a key link. The construction of port and road infrastructures will link the river ports (Manaus, Macapá) and the Atlantic ports in Brazil (Belém) to the Pacific ports in the south of Colombia (Tumaco) and the north of Ecuador (San Lorenzo and Esmeraldas). An undeniable factor of economic integration between the Pacific and Atlantic coasts, this international-scale project is bound to have a favourable impact on the underground coca economy, which is looking for ocean outlets.

These political and economic decisions are not without effect on criminology as drug trafficking is above all a matter of logistics. In addition to the flows of cocaine grown and processed in Peru, there are also illicit Bolivian productions. In fact, this maritime-port dynamism supports drug trafficking, in spite of itself, by providing new and unexpected commercial outlets. Located 80 km north of Lima, the port of Chancay is set to become the gateway to one of the main trade routes between South America and Asia. Construction began in 2011 and is due to be partly completed by the end of 2024, with the commissioning of four berths. Chinese shipowner Cosco Shipping is the main investor, with a total budget of US\$3.5 billion. When completed, the 141-hectare port will house 15 berths capable of handling 18 000 TEU container ships. It will be linked to the *Panamericana Norte* motorway by a 1.8 km tunnel with three traffic lanes.

A structured underground economy

Historically, the processing of coca leaf and export of cocaine have been controlled by criminal organizations from outside the country. Mexican cartels have been present in Peru since the 1990s. Their influence extends from Andean villages to the consumer centres of the United States of America, which they supply.

Cocaine is exported to consumers in various ways, depending on the opportunities offered by the geography and the security situation. A landlocked region located 1,100 kilometres south-east of Lima, the VRAE benefits from limited control exercised by the national authorities. In fact, civil aviation is the preferred option. Light aircraft, such as Cessnas, are required to take the production of substances “out” of the Valley. Logistical arrangements for grouping freight have been put in place through air bridges, notably between Colombia and Peru in the 1980s and 1990s. Videos¹⁷ show immediate take-offs and landings on makeshift airfields following

railways, fibre-optic links, etc.) in South America, with the aim of promoting trade and commerce and offering the best conditions for free exports.

17 <https://www.courrierinternational.com/article/perou-bolivie-le-grand-retour-du-traffic-massif-de-cocaine-par-avion>, accessed 1/09/21.

deforestation. An average of 300 kilograms of cocaine per flight is loaded very quickly. At the peak of activity, it is estimated that there are around 300 clandestine flights each year in the VRAE region. The Peruvian armed forces then set up air interdiction operations against clandestine aircraft carrying drugs into the Peruvian valleys, but also to neighbouring countries (Bolivia, Brazil) considered to be the logistical hub for illegal exports. It would appear that strict air traffic control counter measures have been put in place by these countries, in particular using radar.¹⁸ The criminal organizations would then have adapted their *modus operandi* by transporting the freight to the Urubamba valleys to the east and the Palcazu river valley to the north. From these new positions, clandestine air manoeuvres are said to have taken off¹⁹ particularly towards Bolivia.

Exports by sea

The majority of exports take place by sea, which means that the illicit cargo is transported overland and stored in coastal regions, thereby thwarting any State controls. Peru's 2 414-kilometre Pacific coastline is the sixth longest in South America. The 'Costa' or coastal zone covers 10% of the country but is home to 60% of the population. The opposite is true of the Peruvian Amazon rainforest or '*Selva*', which borders on Ecuador, Bolivia and Brazil. This is where the coca leaf proliferates. The eastern slope has two key rivers – the Ucayali and the Marañón – which are the main headwater tributaries of the Amazon. The western watershed converges on the Pacific coast.

Peru's Pacific coast is a key departure point for cocaine exports to markets in North America and Europe. Several ports have already been identified, notably because of their logistical capacity and regional or international connectivity. The port's ambitions are determined not only by the hydrographic data for the maritime foreland, which has an impact on draught (and therefore the class of ships calling there), but also by the dynamism of the hinterland, which determines the level of equipment (handling cranes, quay surface area, rail network). However, other types of trafficking are likely to take place from other ports, depending on the *modus operandi* chosen by the traffickers. In particular, if discretion and autonomy are crucial to the success of the mission. These outlying or small ports are likely to attract criminal networks, buying the complicity or silence of villagers through corruption and threats. There are a number of proven cases of criminal activity along the coast. On 26 August 2014, for example, a stockpile of 7.6 tonnes of cocaine was discovered in a seaside warehouse in Huanchaco, a

¹⁸ CINDACTA (*Centro Integrado de Defensa Aérea e Controle de Tráfego Aéreo*) is the centre responsible for air traffic control in Brazil. It has four centres in charge of a segment of airspace. CINDACTA IV is based in Manaus at Eduardo Gomes International Airport. It closely monitors the Amazon region of Brazil.

¹⁹ See study conducted by Evan ELLIS, published 4/5/2017, *The Evolution of Transnational Organized Crime in Peru*, <https://theglobalamericans.org/2017/05/evolution-transnational-organized-crime-peru/>, accessed 31/10/21.

fishing village and picturesque seaside resort in the province of Trujillo on Peru's northern coast. This demonstrates the presence of criminal organizations responsible for exporting cocaine, acting as a link in a complex illicit logistics chain. Moreover, in this particular case, the lack of transparency of the criminal enterprise was based on 'front' companies whose corporate purpose was to export coal. The cargo's final destination was Belgium and Spain.

We will focus on three Peruvian commercial ports, presenting the port sector as a key factor in understanding the criminal environment. First of all, let us focus on the port of Callao. It enjoys the status of Peru's leading merchant port and sixth on South America's Pacific rim. The port is expanding rapidly, making it a highly sought-after South American stopover for international trade in containers, bulk solids and liquids. It acts as a maritime gateway to the capital Lima, which is not far from Callao. Ilo, in the south of Peru, is a fast-growing secondary port. It benefits from the positive effects of trade agreements signed since 2010 with neighbouring Bolivia, a landlocked country, to provide it with a coastline for its trade. Port quays are leased and logistics infrastructure projects (road and rail links) are under way, as in other ports in the sub-region. As a result, Ilo has become one of the main gateways to Bolivia. A genuine port logistics corridor to this landlocked State, a 90% increase in incoming flows has been observed in the space of a year. Chimbote is also a seaport in northern Peru, 420 kilometres from Lima. This renowned fishing port enjoys a favourable position at the mouth of the Rio Lacramarca. It is reputed to be a departure point for Peruvian cocaine exports which, in conjunction with neighbouring Ecuador, routes illicit consignments to Mexico, a veritable logistical gateway to North American and European consumer centres. On 11 June 2002, a stock of 1.76 tonnes was seized in a warehouse in the port of Chimbote, with an estimated resale value of US\$70 million. This criminal organization was linked to the Mexican Tijuana cartel. It was seeking to supply North America and the European Union via a staging point in Mexico. In order to conceal its activities, this cartel relied on fishing vessels that transshipped illicit cargo to mother ships on the high seas. The cocaine was processed in Ayacucho, 580 kilometres south-east of Lima. The public prosecutor provided the nationalities of the defendants. In addition to Peruvians, Colombians, Mexicans and Guatemalans were in the dock. This underlines the transnational nature of these criminal enterprises. The banning of a "narco-sub" on 7 December 2019, 180 miles off Pieta in northern Peru, is a first that demonstrates the avoidance strategies of narco-organizations. Loaded in the mangroves along the border between Peru and Ecuador, it was carrying a tonne of cocaine bound for Mexico.

Peru – the centre of attention for European organizations²⁰

On 2 September 2022, Poseidon, a joint operation led by the Peruvian and German police forces, the Italian *Guardia di Finanza* and the US Drug Enforcement Administration, neutralized a criminal organization involving Albanian and Italian nationals based in Peru. Backed by Peruvian citizens, it specialized in supplying large quantities of cocaine to the European market by sea. They were planning to import 3 tonnes of white powder destined for Italian and German ports when a coordinated operation put an end to their criminal enterprise.

To secure their traffic, they used a variety of techniques, such as using secondary ports (Tumbes in Peru, Avilés in Spain) for pre- or post-carriage, employing merchant ships. They also used transshipment operations with fishing vessels, particularly off the European coastline. In one case, two former Peruvian Navy divers were working to recover packages submerged below the waterline in Spanish waters.

Peru: a symbolic laboratory for internal challenges in the fight against drugs?

The Valley was originally populated by native communities, who have undergone various waves of colonization over the years, including in the 19th century by Quechua rural populations from the department of Ayacucho. Then, during the 1960s, economic development (construction of infrastructure, emergence of cooperatives and small businesses) led to new arrivals, particularly on the banks of the Apurimac, while the land reform of 1969 profoundly upset the socio-economic balance. Against this backdrop of tension between the State, social organizations and local self-defence groups, including the Maoist revolutionary movement Shining Path, took a stand and turned to guerilla warfare from the 1980s onwards. The intensity of the armed struggle seemed to diminish in 1995, when the last Shining Path columns took refuge in the remote areas of the Ene and Mantaro river valleys. During this period political violence began to emerge, and in response to growing global demand for derivatives of the cocaine alkaloid, coca production began to expand in the Valley in 1983. This major trend coincided with the collapse in the price of coffee on international markets as well as the security challenges severely impacting trade channels as a result of armed violence. The coca trade began to develop as a result of leaf processing into cocaine-based paste and the development of new illicit markets where demand was strong. Up until then it had been considered a traditional product of the local culture. The sale of coca has been an important economic resource for local people and, in turn, has helped to facilitate the purchase of firearms. It remains to be seen what role the drug traffickers actually play and the nature of their collaboration with Shining Path in the Valley.

²⁰ <https://ipys.org/noticias/periodismo/albanians-and-ndragheta-united-by-peruvian-cocaine>

Today, the normalization of the situation in Peru illustrates the challenges of combating the illicit coca leaf economy upstream, in the areas of cultivation. Contemporary history is particularly complex and illustrates the political tug-of-war at the heart of decision-making. In the Valley, the central government is seen as promoting the eradication of the coca leaf²¹, while local people are simultaneously demanding the economic development of a Valley that has fallen victim to 'drug trafficking and narco-terrorism' and the absence of a State. The balance of power would be incomplete without casting a light on the positioning of local socio-economic organizations. The latter juggle the defence of a local order against national and international injunctions, the opportunity to control a regional State in the throes of change by winning elective office, but also by acting as ambassadors for the implementation of public action intended to reduce the size of an illicit economy on which they are based.²² The internal armed conflicts of the 1980s and 1990s forged a collective identity characterized by a conflictual relationship with the institutions of the central State. However, in addition to the 'pressure' regularly exerted by the narco-organizations, opposition to the eradication policy has become a catalyst for unity of populations from four different departments crossed by these river arteries, as well as a source of incomparable income. In this sense, Peru is a laboratory for reflection on political strategies to combat drug trafficking and the roll-out of public policies at both national and international level. It illustrates the imperative need for a global strategy, not only in terms of security but also in socio-economic terms. Doesn't the Peruvian example illustrate the fact that drug cultivation develops primarily in regions where political and territorial control is weak? So how do we get rural communities out of the stranglehold of a repressive State and criminal groups that coerce them but provide them with a steady income? How can the State neutralise the influence of intermediaries who use this situation to their exclusive advantage? In other words, how can the public authorities assert themselves to the detriment of locally rooted structures that use a double language, destabilising and perverting socio-economic relations in these areas?

3.3. Bolivia: coca leaf production under control?

Bolivia embodies an autonomous approach to controlling coca cultivation based on traditional references.

21 DEVIDA (National Commission for Development and Life without Drugs) was set up in 2016. Reporting to the Presidency of the Council of Ministers, it is responsible, as a matter of priority, for implementing anti-drugs policies. On 24 May 2019, the Council of Ministers approved a new anti-drug strategy proposed by DEVIDA, which calls for the eradication of 35 000 hectares of coca nationwide by 2021.

22 Romain BUSNEL, *ibid.*

A constitutional guarantee based on Bolivian culture

Article 384 of the Bolivian Constitution, reformed in 2009, bears witness to the unique perception of coca: *'The State protects coca, an ancestral and indigenous plant, as part of Bolivia's cultural heritage and biodiversity, and as a factor in social unity. In its natural state, coca is not a narcotic'*. The cultural dimension predominates. Above all, coca is a remedy for altitude sickness, a source of energy and an appetite suppressant, and has been for thousands of years. The leaves are chewed or infused and drunk as a tea called *'mate de coca'*.

The dilemma between ancestral cultural references and pressure from cocaine-consuming developed countries is the common thread running through the management of coca cultivation by the Bolivian authorities. The war declared on coca cultivation was initially a reaction to the explosion in consumption on Western markets in the 1970s. Since then, military operations such as *Blast Furnace* have been carried out with the support of the United States of America. The legal framework is gradually evolving. In 1988, Bolivian President Victor Paz Estenssoro passed a particularly tough anti-drug law under pressure from the United States. Namely, it limits the area under cultivation to 12 000 hectares and increases criminal penalties for illegal cultivation and drug trafficking. The 1990s saw a number of confrontations between the State and farmers, culminating in the *Plan Dignidad* (Dignity Plan). Launched by President Hugo Banzer Suarez, it aims to completely eradicate coca cultivation.

In 2004, a new political direction was set in motion by President Carlos Mesa: he created *cato de coca* and legalized cultivation in two regions of the country: the Yungas and Chapare. A national ceiling of 22 000 hectares has been set. Plots called *cato de coca* are distributed to farmers. They correspond to 1 600 square metres in Chapare and 2 500 square metres in Yungas. This measure to liberalise cultivation is primarily intended to ensure that farmers have an honest and adequate means of subsistence. The aim is also to enable them to invest in other food crops financed with this initial cash flow. This policy of legalising coca cultivation, initiated in 1988, was subsequently reinforced by Evo Morales, himself a coca grower and President of the Bolivian Coca Growers' Federation. Elected President of the Republic in 2005, he launched the *'Coca Si, Cocaína No'* policy, the main measures of which are to reduce forced eradication, rigorously monitor production and hold producers accountable, promote agricultural development and encourage crop diversification. According to the United Nations Development Programme (UNDP),²³ the effects of this package of measures have been a real success

²³ In *Development Dimensions of Drug Policy: Innovative Approaches*, an article published in June 2019, [file:///C:/Users/flori/Downloads/Development_Dimensions_of_Drug_Policy%20\(1\).pdf](file:///C:/Users/flori/Downloads/Development_Dimensions_of_Drug_Policy%20(1).pdf), accessed 01/09/21 – 'By recognizing coca cultivation as a legitimate source of income, the (Bolivian) government has helped

and a model to follow in terms of public policy to control coca cultivation. On the strength of this support, President Evo Morales is strengthening his stance towards recognition of controlled coca cultivation in keeping with the history of his people. Thus, in 2008, true to his political policy, he decided to expel the Bolivian branch of the Drug Enforcement Administration. This specialized American body is part of the US strategy to combat international drug trafficking by positioning intelligence and intervention capabilities at the source of drug production. This sovereign political decision severely weakens the US position in regulating its own domestic illegal market. In 2009, a constitutional reform mentioned the obligation to '*protect the indigenous and ancestral coca culture as cultural heritage*'. Under President Morales, crop control in Bolivia has adopted an approach which is unique in South America. It is based on social self-control and a relationship of trust between producers and the State. This is achieved through various measures, the main ones are summarized below:

- social self-control by the growers themselves: developing the area under cultivation increases production, which in turn reduces its value;
- the public authorities through major eradication operations carried out with difficulty given the nature of the growing areas. They make seizures and dismantle clandestine laboratories;
- the authorities are betting on the agricultural and food balance: the expansion of coca-growing areas is reducing food crops, which are less lucrative than coca leaf.

As a result, the area of authorized crops, officially limited to 12 000 hectares, would in practice be extended to 20 000 hectares. Sounding very much like a confession, the government is now authorising an extension of cultivation to 22 000 hectares in 2017. Let's remember the spirit of the law: this area is supposed to provide for national consumption of an 'age-old product' at the heart of Bolivian culture. Has it really been assessed methodically? How can we understand this extension of the coca leaf? How can we explain such an increase in domestic consumption in such a short space of time? Without making any judgement of intentions, it seems legitimate to question the basis for such a far-reaching decision and to understand the objectives pursued in terms of both domestic and foreign policy. Isn't this a covert way of perpetuating political support within the country itself? What subsidies are expected? This increase in cultivated area necessarily leads to an increase in production. Does this meet a new need for domestic consumption? Is domestic demand capable of absorbing this surplus? Isn't there a real risk of

stabilize household incomes and placed farmers in a better position to assume the risk of substituting illicit crops with alternative crops or livestock. "

this age-old practice being hijacked for other purposes? If so, who will be the main beneficiaries?

It's easy to imagine that the 'surplus' production could be controlled by criminal organizations and rapidly exported to North American or European markets. Cocaine production in Bolivia is estimated to be on the rise.

Export methods specific to a landlocked country

The way cocaine is exported to consumer markets is particularly unusual in a landlocked country with no coastline. Bolivian producers are, in fact, dependent on the logistics networks of neighbouring countries. In reality, however, exchanges are more complex, particularly in border areas where police pressure seems to be lower. At the same time, cocaine outflows go hand-in-hand with the supply of precursors which are essential to processing the coca leaf. These chemicals are widely available and less expensive in Bolivia than in neighbouring Peru. Deliveries are made via aerial drug flights landing in clandestine shanty towns. The maritime openings resulting from agreements with Peru and Chile have already been mentioned. The profit expected by criminal organizations is essential. But this situation increases the pressure on coastal areas and creates an additional threat for local law enforcement agencies, who are already facing their own difficulties. Most of the production is transported through the Amazon rainforest via Brazil and many river and sea ports. More on this later.

4. *The criminal Eldorado to conquer*

The conquest of new markets is the *raison d'être* of profit-hungry criminal organizations. In Europe, the examples of the Iberian Peninsula (4.1) and the Northern Range (4.2) illustrate the process from a maritime and port perspective.

Gateways to major consumer markets

There is one prerequisite for conquering new retail markets: the creation and control of a logistics bridgehead. This involves identifying and securing 'favourable' access to a sea or river port, a terminal or a logistics zone located upstream, in the hinterland of the target continent. The success of this fundamental stage requires operational contacts based on trust with criminal organizations already established locally. As part of a strategy of territorial control, they offer this service to 'new entrants'. They facilitate the corruption of agents at key points in the supply chain. In fact, port facilities are a focus of tension for criminals, state services and private companies alike.

The choice of beachhead is strategic. It is conditioned by multiple factors linked to history, physical and economic geography, logistical considerations and local criminal practices. In many ways, this essential choice is also indicative of the many realities that characterise this socio-economic environment. It reflects the dynamism of maritime and port connectivity and the current state of international economic relations. In this sense, it reveals the relevance of public policies for the development of logistics infrastructures. It also describes the integration of the port city into its hinterland and the ability of local actors to control the area.

The Strait of Gibraltar: an outpost for drug traffickers?

La Linea de la Concepcion is a Spanish town in the shadow of the Rock of Gibraltar. Facing the sea and situated on a sandy isthmus, it is around fifteen kilometres from the Moroccan coast and Ceuta, the autonomous Spanish city in Morocco. Its beaches are used by criminal organizations to unload hundreds of kilograms of hashish carried by very powerful RIBs. With an unemployment rate of 30%, the authorities estimate that the thirty or so narco-organizations present in La Linea employ nearly 3 000 'collaborators' out of a population of 60 000.

There are currently two major shipping routes supplying drugs to the European Union along the western seaboard:

- the Iberian Peninsula;
- the Northern Range²⁴ (France, Belgium, the Netherlands and Germany).

4.1. The Iberian Peninsula: an outpost for international drug trafficking?

The Iberian Peninsula is a key transit area for international drug traffickers, not least because of its favourable geographical position in terms of shipping and maritime connections. In addition, it is a magnet not only for cannabis on the Mediterranean ferries, but also for cocaine on the transatlantic routes. As far as cocaine imports are concerned, Spain has been considered the historical gateway to the EU by the Colombian cartels since the 2000s.

The geographical location of the Peninsula is particularly favourable. Its coastline was the first to be touched in Europe during transatlantic voyages. Opening out onto the Atlantic, Galicia's 1 500 kilometres of coastline are sandwiched between France and Portugal. This positioning very quickly appeared to be an easy way to deliver illegal freight, often after

²⁴ This concept was developed by Alain VIGARIÉ in 1964. *Northern range*. Also known as the 'Northern Rail' or the 'Channel North Range'. In France, this includes the ports of Le Havre, Rouen, Boulogne-sur-Mer, Calais and Dunkirk.

transshipment on the high seas between mother ships and fishing fleets. This geographical advantage is still relevant today, as demonstrated by the interception in the Spanish territorial sea of a semi-submersible craft²⁵ in 2019.

As well as a linguistic community, meetings and human solidarity have confirmed the convergence of interests between criminal organizations. They have also made it possible to carry out these criminal projects in order to open up and supply a new drugs market within the EU. This new outlet complements North American consumers. Informal meetings have brought together Colombian cartels and Galician criminal organizations looking for ways to launder the profits from tobacco smuggling. Following the first arrests of South American traffickers by the Spanish authorities, strong friendships developed between inmates in Spanish prisons. They have opened up the networks to new recruits and laid the foundations for future cooperation. Arrangements, compromises and the sharing of illicit territories have thus been reached. Over time, Madrid has become both the hub and historic rear base for international cocaine trafficking to Europe. Beyond Spain's Atlantic coastline, the islands (the Canaries, etc.) as well as the Mediterranean coasts and ports have become gateways, like Algeciras, Barcelona and Valencia.

The Peninsula's advantages are also corroborated by imports of hashish from the Maghreb. The use of maritime vectors is part of a reduced area of action where powerful outboard boats are able to cover a short distance between Morocco and Spain.

Algeciras – a pivotal port for world trade

Since the 1960s, the seaport of Algeciras has undergone major economic development under the dual effect of a political decision driven by General Franco and, subsequently, a decision made by MAERSK. At the end of the 1980s, this Danish port operator placed the Andalusian port at the heart of the world's maritime port network, as a pivotal port on the world's maritime routes.

Over the years, the port of Algeciras has become a favoured observatory of the changes and restructuring of contemporary maritime transport. Although not at the head of international production or a mass consumption zone, this maritime area has become an essential stopover for the ships of the global fleet crossing the Mediterranean Sea. In the general economy of international logistics, this Andalusian port is seen as a hub at the crossroads of the maritime highways of world trade. It is a transshipment point for primary maritime freight, mainly from Asia, which are transshipped towards secondary destinations in Mediterranean Europe, the Northern Range and the American continent.

²⁵ See chapter 2, §3.

Moreover, the port's performance underlines its role as a benchmark logistics, maritime and port hub in the Western Mediterranean. It is the fourth largest port in Europe, behind the Northern Range but ahead of the port of Marseilles. The port specialises in the storage and redistribution of containers, as well as supplying merchant fleets with hydrocarbons and ship repairs. Algeciras' port facilities now make it a benchmark port in the Mediterranean basin. Not only does it provide north-south crossings between Europe and the North African coasts for freight, vehicles and passengers, it also offers a wide range of other services. It also operates strategic connections linking Asia, Europe and the American continent via the Suez Canal. The port is ideally located close to the natural barrier formed by the Strait of Gibraltar, which controls maritime traffic between the Mediterranean and the Atlantic.

Algeciras is Spain's^{2nd} largest container port, with 226 000 containers received by¹ December 2023. 90% of containers handled come from transshipment flows. Algeciras is at the crossroads of intercontinental routes linking Northern Europe, Asia and America and connected to 200 ports directly and without transshipment. CMA CGM, the French champion, operates a large number of shipping lines every week, such as Med Caribbean,²⁶ North Europe - French Guiana - North Brazil.²⁷

Directly related to our subject, the port of Algeciras connects the exotic fruit-producing regions of Colombia in 14 days and Costa Rica, before distributing it to the markets in southern Europe. The port infrastructure includes two container terminals (APM Terminals Algeciras and Total Terminal International Algeciras). By way of illustration, the APM Terminal covers 67 hectares of land reclaimed from the sea and is equipped with 19 ship-to-shore cranes. This terminal can accommodate container ships of over 18,000 TEU.

It is also very close to the Moroccan coast, and operates a number of links with Morocco's Mediterranean ports. It is the leading port on the Iberian Peninsula in terms of vehicle and passenger traffic. This trend is growing steadily, with connections to Tanger Med increasing by 20% a year. There are up to 58 daily ferry links between Algeciras and Morocco (Tangier Med, Tarifa and Ceuta), with an annual total of 4.5 million passengers and 1 million vehicles.

The statistics speak for themselves. In 2020, 45 contaminated containers led to the seizure of 18.5 tonnes of cocaine, half the annual total for Spain.

4.2. The industrialization of cocaine imports: the time of the container and the choice of the Northern Range

Spain has now been surpassed not only by the international ports of the Northern Range, but also by the Moroccan port of Tangier-Med, Europe's new Mediterranean gateway. This range of ports refers to the concentration of major European ports lined up along the southern coast of the North Sea in an arc stretching for 800 kilometres. It serves as the seafront over a vast area centred in Rhineland Europe. It is the world's second largest seafront after China's Yellow Sea ports. From west to east:

²⁶ Services include Algeciras - Malta Freeport (Malta) - Marseilles- Pointe à Pitre - Fort de France, Caucedo (Dominican Republic) - Cartagena (Colombia) - Moñ Limon (Costa Rica) - Manzanillo (Mexico) - Kingston (Jamaica).

²⁷ Services include Algeciras - London - Rotterdam - Le Havre - Degrad des Cannes (French Guiana) - Vila do Conde, Fortaleza, Natal (Brazil).

- in France Le Havre, Rouen, Calais, Dunkirk;
- in Belgium: Ostend, Zeebrugge, Ghent, Antwerp;
- in the Netherlands: Vlissingen, Rotterdam, Amsterdam, Helder, Delfzijl;
- in Germany: Emden, Wilhemshaven, Bremerhaven, Bremen, Cuxhaven, Hamburg.

This proximity stimulates competition and complementarity between northern European ports. Logistical links are very close, with feeder vessels redirecting grouped cargoes to other ports. This Channel-North Sea line feeds a hinterland corresponding to the most densely populated and wealthiest regions in Europe. From London to Genoa. This European backbone is centred on the 'European megalopolis', which is made up of Belgium, the Netherlands, Germany, north-eastern France, Switzerland, Austria and northern Italy. It's an area encompassing the regions at the north-south and east-west crossroads that facilitates commercial transactions. All the more so as it has a wide range of transport infrastructures (sea, river, road and rail). It covers a catchment area of more than 70 million inhabitants concentrated in a very dense urban fabric. Aren't today's illicit trafficking operations merely a revival of Europe's age-old trading traditions? Champagne fairs in the Middle Ages were at the heart of the influence of bankers and merchants from Venice, Genoa, Florence and Milan on the one hand, and Bruges, Antwerp, London and Amsterdam on the other.

Transiting illicit products through the hubs of Northern Range is a guarantee of success, which suggests a favourable integration into Europe's buoyant retail markets. This radical paradigm shift reflects, on the one hand, the irrefutable maritimisation of the global economy through the maritime container, the unit of account for international logistics and, on the other hand, the industrialization phenomenon observed in cocaine imports destined for the European market.

Average seizures for 2019 and 2020²⁸ indicate the new epicentre of imports into the European market, but also the industrial mode of arrival by sea. Antwerp, Rotterdam and Hamburg are, first and foremost, container ports that are perfectly integrated into international trade routes. The high degree of purity of cocaine found in seizures in both the European Union and North America bears witness to direct connections between production areas and consumption centres. It also suggests the criminal infrastructures needed to prepare the product before it is put on the market (cutting, packaging, wholesale and retail). They are located in the hinterland of the Range.

28 UNODC and EUROPOL, *The illicit trade of cocaine from Latin America to Europe - from oligopolies to free-for-all?* https://www.unodc.org/documents/data-and-analysis/cocaine/Cocaine_Insights_2021.pdf, Cocaine Insights 1, UNODC, Vienna, September 2021.

Record seizure in Rotterdam

On 10 August 2023, the Dutch judicial authorities announced a record customs seizure in the port of Rotterdam of a shipment of 8 064 packets of cocaine weighing a total of 8 tonnes, concealed inside a container of bananas from Ecuador.

In the first half of 2023, 29.7 tonnes of drugs were seized by customs, half of the shipments containing less than 100 kg.

Port of Rotterdam – leading European port in the Northern Range

Located on the Rhine delta, the port of Rotterdam covers an area of 13 000 hectares. It has 42 kilometres of quays, 131 jetties, over 30 million cubic metres of hydrocarbon storage capacity and 1 500 kilometres of pipelines. Initially located 25 kilometres from the estuary, the port facilities have now conquered the sea with the construction of two deep-water terminals (oil and containers) at Maasvlakte.

An import port ranked ahead of Antwerp (Belgium) and Hamburg (Germany), its activity can be broken down as follows: 50% liquid bulk (hydrocarbons), 25% dry bulk and 20% containers. It is a hub port that redistributes imported freight on secondary flows via feeders to other centres in the Northern Range, as well as to the British, Scandinavian, Baltic and Mediterranean seabords. It connects northern Europe with the rest of the world.

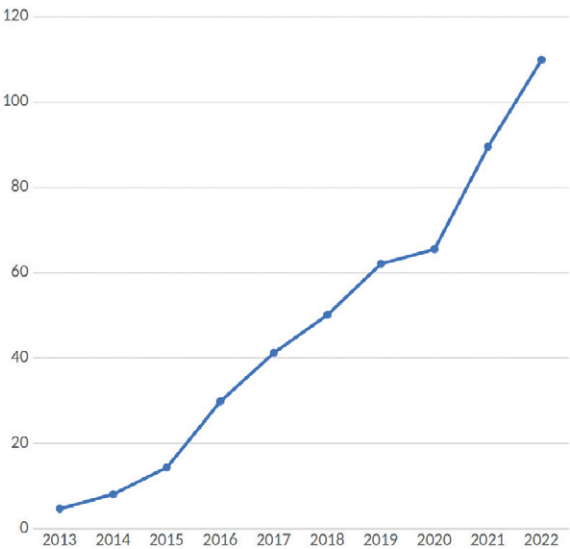
The port of Rotterdam is investing in cutting-edge technologies to improve the efficiency, safety and sustainability of the port. They are based on port automation to reduce waiting times for ships (automated cranes, automatic guidance systems for port vehicles, smart terminals). The port also uses the Internet of Things through sensors and connected devices throughout the harbour to monitor activities and facilities in real time. Rotterdam is exploring the use of blockchain technology to improve the transparency and traceability of commercial transactions between the port's stakeholders in order to make international trade more fluid.

Steady rise in seizures at the port of Antwerp (Belgium)

The port of Antwerp has become the main entry point for cocaine on the European continent. In eight years, seizures in Antwerp have increased 14-fold (from 4 tonnes in 2013 to 64 tonnes in 2020). Between 1 January and 31 August 2021, almost 64 seizures were made in Antwerp, representing a total of 61.5 tonnes of cocaine. In comparison, for the whole of 2020, the total figure for cocaine seizures was 137.7 tonnes, arriving in the port of Antwerp or bound for Belgium.

Figure 17. Seizure of cocaine at the seaport of Antwerp (Belgium), period from 2010 to 2023

Produced by Guillaume MANET



Italy: at the intersection of criminal influences?

Italy remains a secondary destination compared to other European Union countries. In a recent development, the port of Gioia Tauro in Calabria is set to overtake the port of Livorno in 2021. In fact, more than half of the volume seized nationally was in this Mediterranean hub, with 14 tonnes seized. According to the Italian authorities,²⁹ the combined or even coordinated influences of the 'Ndrangheta, the Camorra and Albanian networks appear to have been confirmed.

²⁹ <https://www.europol.europa.eu/media-press/newsroom/news/italian-operation-takes-down-corrupt-port-workers-facilitating-%E2%80%98Ndrangheta-drug-trafficking-activities>

5. Staging areas: providing a new lease of life for primary flows?

Whatever the psychotropic substance under consideration, primary flows from production areas require partner countries located in their immediate environment to be responsible for the structured distribution of drugs to centres of consumption.

5.1. South America: a logistical springboard for international expansion?

Latin and Central America acts as a transit hub for the primary flows of cocaine from the three producing countries. By studying these staging mechanisms, we can gain a better understanding of the structure of criminal organizations. It highlights the strengths offered by geography, but also by the maritimization of the economy.

The ups and downs of Ecuador: the cocaine exit window to Europe and the United States

Bathed by the waters of the Pacific Ocean and criss-crossed by the Andes mountain range, Ecuador lies on the doorstep of two of the world's major cocaine-producing countries. It shares a 590-kilometre border with Colombia in the north east of the country. To the south, Ecuador shares a 1 420-kilometre border with Peru. The geography of this region is highly conducive to the development of illicit activities. The Amazon rainforest forms a green border brimming with lush and often impenetrable vegetation. It is fed by a network of rivers that converge at an ocean outlet. What's more, the dense and wild natural environment makes it impossible to clearly demarcate the lands of neighbouring countries. Often imposing, these rivers are major arteries of communication for the population as well as for all economic activities. In fact, many ports are river-sea ports, particularly in Peru.

Furthermore, Ecuador has another geographical singularity that provides it with a wealth of fish stocks, as well as a strategic advantage: the Galapagos Islands. This volcanic archipelago is made up of nineteen islands, four of which are inhabited. It lies around a thousand kilometres off the coast of Ecuador, at the convergence of three ocean currents.

Turning to the sea for its development, Ecuador has a maritimo-fluvial port network. The port of Guayaquil is a dynamic international centre, absorbing 90% of Ecuador's foreign trade. The Contecon terminal, in particular, will have handled 46% of exports in 2021. These include bananas (69%), prawns (6%) and wood (5%). Port infrastructure is being developed to support business growth and facilitate exports from the vast fruit-growing areas (bananas, mangoes, sugar cane, coffee). Guayaquil, *the 'Pearl of the Pacific'*, is the

country's most populous city and the capital of the Costa, the coastal region. On 17 January 2022, the port set a regional record by receiving the largest ship in a South American port, the APL ESPLANADE, 382 metres long and 51 metres wide. This underlines the gigantic scale of international trade and prefigures the international connections made possible by ambitious work to deepen the mooring jetty.

The port's growth is evident in the number of TEUs transited through it. In 2019, 1 940,000 TEUs docked at Guayaquil's quays. 2 773 ships from all terminals moored at the grain terminal, chemical and petrochemical handling facilities, multi-purpose terminals and container terminals. The steady increase in drug seizures by the Ecuadorian security forces reflects the key role played by this country as a major transit point, as well as the political determination of the Ecuadorian authorities, which is reflected in reinforced security missions. The port of Guayaquil is a meeting place for criminal organizations, a storage area prior to export and an international exit point for illicit products destined for consumer markets. In the first half of 2021, authorities at the port of Guayaquil seized 44 tonnes of cocaine.

Ecuador's geographical location as a neighbour of the coca-growing countries and its proactive policy of developing a port with an international scope promote the export of national products as well as illicit freight. The country's contemporary history shows that organized crime³⁰ has a deep-seated history in Ecuador. This state has long been regarded as a refuge and buffer zone by neighbouring Colombians. Criminal organizations gained a foothold in the second half of the 20th century. Since the 1970s, the Colombian cartels of Medellín and Cali have exploited Ecuador's geographical position. This Andean state has been seen as a staging area and a springboard for drug trafficking to new destinations. It is also a hub for smuggling the chemical precursors needed to process the coca leaf. The demobilized Revolutionary Armed Forces of Colombia or FARC (*Fuerzas Armadas Revolucionarias de Colombia*) have long been present in this pivotal country. Established along the Ecuador-Colombia border, they directed international cocaine trafficking and, in particular, operated the seaports needed for international shipments. The FARC's 48th Front, one of the most powerful units in the Southern Bloc, was very active in this border area, as demonstrated by the regular police operations set up to weaken the criminal framework.³¹ Ecuador was also seen as a logistical hub, providing medicines, food and military equipment for operations in Colombia, as demonstrated by a raid carried out by the

30 Insight crime, published on 26/06/2018, accessed on 12/09/21, <https://insightcrime.org/ecuador-organized-crime-news/ecuador-profile/>

31 In May 2012, the Ecuadorian security forces arrested Wilson Tapiero alias 'Dumar' or 'Trincho', the alleged leader of the FARC's 48th Front in northern Ecuador. He played a key role in providing logistical support to FARC's Southern Bloc. Insight Crime published on 8/5/2012, accessed on 12/09/2021, <https://insightcrime.org/news/brief/ecuador-arrests-alleged-leader-of-farcs-48th-front/>

Ecuadorian army on a firearms factory in Ecuador controlled by FARC on 2 March 2011.³²

Despite the determination of the regalian authorities, Ecuador is playing a growing role in the export of illicit production from neighbouring countries. Exploiting previous criminal connections between FARC guerrillas and organized crime, the demobilisation of the FARC in 2016 left the field wide open for criminal organizations to control the cultivation areas abandoned by the guerrillas as well as to process and sell cocaine on consumer markets. Moreover, FARC dissidents have abandoned the political side of the struggle to concentrate on criminal activities.³³ They organized themselves into criminal groups known as BACRIM (or '*Bandas Criminales*'). Their areas of operation include Colombia and neighbouring Ecuador. In addition, criminal groups such as Los Rastrojos³⁴, Urabenos³⁵ and the Mexican Sinaloa cartel have been trying for years to control the drug market in Ecuador.

Finally, the nation of Ecuador also harbours a wealth of criminal skills. Although some nationals worked for foreign criminal organizations as subcontractors, as in Colombia, autonomous figures like Ecuador's Pablo Escobar, Washington Prado Alava, begin to emerge. The connection between Colombian criminal organizations specialising in drug trafficking and the Ecuadorian population has been forged over time, not least for political and financial reasons. The economic crisis that hit Ecuador hard at the end of the 1990s has profoundly altered relations between the two countries. This crisis is the result of a combination of low oil prices, a weak tax base in the non-oil sector and significant wage increases in the public sector. The Ecuadorian population has been encouraged to travel to neighbouring Colombia to buy consumer goods, taking advantage of the difference in prices due to the

³² Five people were arrested, and a cache of weapons containing 1 500 shells, a 9mm machine gun and several semi-automatic rifles were confiscated. Having become a refuge from offensives by Ecuadorian forces, the border province of Sucumbios is said to have housed an anti-personnel mine workshop, benefiting from resources of explosive materials such as ammonium nitrate, which is widely used in the flourishing mining industry in this part of Ecuador. *Insight Crime* published on 7/3/2011, accessed on 12/09/2021.

³³ *Ciudadanos extranjeros está detrás de ataques en Sucumbios*, *El Comercio* published 08/08/2016, accessed 12/09/21, <https://www.elcomercio.com/actualidad/seguridad/extranjeros-criminales-guerrilla-ataques-sucumbios.html>

³⁴ Born out of the powerful Norte del Valle drug cartel in 2002, Los Rastrojo was considered one of Colombia's most powerful criminal organizations until it was dismantled in 2012 following the arrest or surrender of its main leaders. Initially based on the Pacific coast, it developed its cocaine trafficking network as far afield as Ecuador and neighbouring Venezuela. <https://insightcrime.org/news/brief/ecuador-arrests-alleged-leader-of-farcs-48th-front/>

³⁵ Named after a region, Urabá, in the north-west of Colombia on the border with Panama, Urabenos rose from the ashes of the Colombian paramilitary movement in 2006 to become a dominant criminal force in Colombia. It is also known as the *Clan del Golfo* by the authorities. Its influence quickly extended to coca production areas and logistical routes facilitating exports by sea from the Pacific and Atlantic coasts and by land via the Venezuelan border. The Colombian authorities succeeded in neutralising this criminal organization in 2017 following a series of operations. Urabenos' criminal model is based more on a system of franchises issued to autonomous cells, often drawn from the local milieu, rather than a centralized cartel. In particular, it provides support and assistance in securing illicit operations (processing in clandestine laboratories, storage and international shipping of 'freight').

exchange rate. In addition, in order to prevent capital flight and hyperinflation, the national currency, the sucre (adopted on 22 March 1884 as a tribute to Marshal Antonio José de Sucre), was abandoned in favour of the US dollar on 9 September 2000. This dollarization³⁶ of the economy has had the effect of resolving the crisis and even boosting economic growth (+4.4% per year), which is much more favourable than the situation in other Latin American countries. By lowering international trade transaction costs, it facilitates exports to its key trading partner, the United States of America. Analysed from a criminological perspective, this political decision to dollarize the Ecuadorian economy has had a twofold effect, encouraging illicit trade. Firstly, the adoption of the dollar in Ecuador unified a criminal market made up of cocaine producers and consumers. This measure stimulates illicit trade just as it does in the real economy. Secondly, it provides a highly favourable framework for laundering funds derived from such trafficking. The flow of drugs to the North American market also reflects this dynamism.

The election of Rafael Correa to the highest political mandate on 15 January 2007 led to new symbolic direction in terms of policy. The same can be said of the non-renewal of the lease on the Manta³⁷ naval air base on 19 September 2009 which was used by US forces. This air base, located 170 kilometres from Guayaquil, was leased to US forces in 1999 in order to allow them to carry out anti-drug operations on the Pacific coast. In addition to changes in Colombia's domestic situation, the effects of this new policy have helped to increase the stranglehold of drug trafficking on this Andean state, which in the space of ten years has become the main point of shipment for Colombian cocaine outside Colombia itself.

Let's now look at how cocaine exits Colombia via Ecuador. This approach illustrates the methodical organization and logistical dimension of this multinational criminal enterprise. This case study from Ecuador demonstrates the value of a global analysis of flows and the importance of logistics involving multiple stakeholders. Two routes are emerging: one by sea to the west via the Pacific Ocean, the other by river to the east via the Amazon. Each of these routes serves an identified consumer centre, even if international trade has its own rationale. The Pacific route is used to transport the coca produced in the department of Nariño,³⁸ the most prolific in Colombia. There are two ways to enter Ecuador:

36 See study by SAM WANG published on 26/07/2016, *Examining the Effects of Dollarization on Ecuador*, <https://www.coha.org/examining-the-effects-of-dollarization-on-ecuador/>, accessed on 24/09/2022.

37 http://www1.rfi.fr/actufr/articles/115/article_82802.asp, consulted on 24/09/2021.

38 In 2009, the department produced 25% of Colombia's coca, or 12.5% of global production.

- or, by sea and river, by fishing boats using the poorly controlled waterways in the jungle converging on the Mataje River, which separates Nariño from the Ecuadorian province of Esmeraldas;
- or, by road, by vehicles heading for the Rumichaca international bridge in the province of Carchi, a major Pan-American trade artery between the two countries. Once in Ecuador, the shipments are hidden in coves or shelters close to beaches in the Esmeraldas region, or in farms or properties in the Carchi province.

The Amazon route links the Putumayo region, Colombia's second-largest producer, with the Ecuadorian province of Sucumbíos. Depending on the configuration of the site, entry is either by river via the San Miguel and Putumayo rivers³⁹ or by road via the San Miguel international bridge. The rivers are major arteries of communication and used regularly owing to their navigability and the inaccessibility of the jungle. They are also links between countries, like the Putumayo River, which has its headwaters in Colombia and flows through Ecuador and part of Peru before entering Brazil and flowing into the Amazon. Waterways are particularly attractive routes for traffickers of illegal substances. And yet so difficult to control by the public authorities.

Destination of cocaine seizures in Ecuador in 2018⁴⁰

The flow of narcotics destined for the North American market is transported either by fast boats launched from the north-eastern coast of Ecuador or by aircraft from platforms that are often rudimentary and clandestine. The point of entry to the continent is clearly identified: Mexico, which dilutes imports in neighbouring states (Nicaragua, Guatemala, Honduras, Belize). On the Atlantic side, the Caribbean also acts as a staging area and intermediary between exporting countries (Venezuela, Colombia) and North American ports (Florida, Georgia, Philadelphia, New York). The northern coast of Ecuador is ideal for these expeditions from Esmeraldas, Manabí, Santa Elena and, to a lesser extent, Guayas and El Oro. The boats used have powerful outboard motors. Given the distance involved, these operations require logistical support organized in advance, with prearranged meeting points on the high seas for refuelling. Furthermore, criminal organizations are obliged

39 The San Miguel River is 240 kilometres long and has a catchment area of 6 404 square kilometres. Rising in the Andes, it flows into the Putumayo before joining the Amazon. The Putumayo is 1 930 kilometres long and has a catchment area of 124 510 square kilometres. It can be navigated very quickly immediately after its source and along a large part of the river. Major infrastructure works carried out by the *Iniciativa para la Integración de la Infraestructura Regional Suramericana* (IIRSA) since 2010 have developed a structural Amazonian axis linking the Brazilian Atlantic ports of Manaus, Macapá and Belém with the Pacific ports of southern Colombia (Tumaco) and northern Ecuador (San Lorenzo and Esmeraldas). These rivers separate Colombia from Ecuador.

40 InSight Crime, *Ecuador Cocaine Superhighway to the US and Europe*, by James BARGENT, published on 30/10/2019, <https://insightcrime.org/news/analysis/ecuador-a-cocaine-superhighway-to-the-us-and-europe/>, accessed 17/10/2021.

to recruit experts to provide security for these journeys. A workforce of fishermen is considered a precious resource, much in demand and bought with generous bundles of cash.

The fall of 'Gerald', the fisherman turned Ecuadorian drug baron

Washington Prado Alava, Ecuador's biggest and most powerful cocaine trafficker, was in fact hiding behind the pseudonym 'Gerald' used in the criminal underworld. He is sometimes referred to as Ecuador's Pablo Escobar.

He was 35 at the time of his arrest following a complex operation known as '*Operacion Sol Naciente*' or 'Rising Sun', which began on 11 April 2017. He had become completely autonomous following the dismantling of the *Los Rastrojos* criminal organization that had previously been protecting him. He founded his own gang in southern Colombia and meticulously built up one of the most powerful empires in South America. In the words of the Director of the Colombian National Police, General Jorge Hernando Nieto Rojas⁴¹, '*There is no doubt that this criminal ran the most sophisticated and technical mafia organization in the Colombian Pacific*'.

'Gerald' secured a monopoly and rigorous control of the entire criminal chain, from coca cultivation to marketing in the United States and export by sea. By way of illustration, his criminal logistics networks covered the whole of South America. They relied on their own fleet of merchant ships of various sizes, often under the Ecuadorian flag. He is accused of transporting more than 250 tonnes of cocaine.

During Operation Rising Sun, his accomplice 'Thiago', a 25-year-old Ecuadorian, was in charge of the maritime side of the operation. The organization shipped up to 10 ships loaded with nearly a tonne of cocaine hydrochloride. It was also capable of operating in international waters with a dedicated fleet, refuelling crews on the high seas and transshipping drugs.

The raid also led to the arrest of 'Rocho', the supervisor of the clandestine laboratories set up in the municipality of Nariño, which were producing an average of 10 to 12 tonnes of cocaine a week.

Finally, 'Zorro' designed and managed the technological side of the organization, particularly in terms of real-time tracking of merchandise and secure communications between the various members around the world.

Brazil: South America's gateway to Europe?

Illicit freight reaches Europe mainly in contaminated containers or is smuggled into the superstructures of merchant ships from river or sea port areas or even offshore in territorial waters. Brazil is not a cocaine-producing country. However, its geographical position makes it a key actor in this trade. It is a buffer country in two respects. On the one hand, on its western margins, this country-continent is in contact with the three producer countries via the Amazon rainforest and the Amazon watershed. On the other hand, thanks to its Atlantic seaboard and eastern seaboard, it has trade links with North America, Europe and West Africa, as well as with Asia and Oceania further

⁴¹ '*Sin duda alguna, este delincuente lideraba la organizacion mafiosa mas sofisticada y tecnicada del Pacifico colombiano*', op. cit.

afield. In the context of the generalized maritimization of our economies, to say the role played, despite itself, by Brazil in this criminal economy is ultimately to pay tribute to the dynamism of a country connected to the world and experiencing remarkable growth. Ultimately, drug trafficking is a reflection, in its own way, of Brazil's potential as a maritime port.

Let's look at some of Brazil's key characteristics. These will enable the reader to gauge the scale of the security challenges facing Brazil as well as the countries to which these logistics flows are sent. Brazil has 7 500 kilometres of coastline and 175 seaports, 32 of which are under State authority. These seaports interact with a large number of river ports served by 50 000 kilometres of river arteries. These are often the only means of communication, particularly in the Amazon basin. River and sea ports are perfectly integrated into the logistics chains and economy of this country-continent. Production areas and consumption centres are thus linked by the logistical links provided by maritime transport. The Brazilian economy is genuinely dependent on the sea for its imports and exports. Expressed in terms of volume, this represents more than 90%, or 700 million tonnes of material handled each year in seaports. This fast-developing logistics backbone is based on a strong network of 36 deep-water ports that act as lungs between the Brazilian hinterland and the rest of the world. A regional economic power, its area of influence extends beyond Brazil and its 211 million inhabitants. It is widely distributed throughout the sub-region.

Figure 18. Ranking of Brazilian ports compared with American ports on the basis of freight transport (in metric tonnes)

Main sources : American Association of Port Authorities; Lloyd's List, Institute of Shipping and Logistics; Secretariat of Communications and Transport of Mexico; AAPA Surveys.

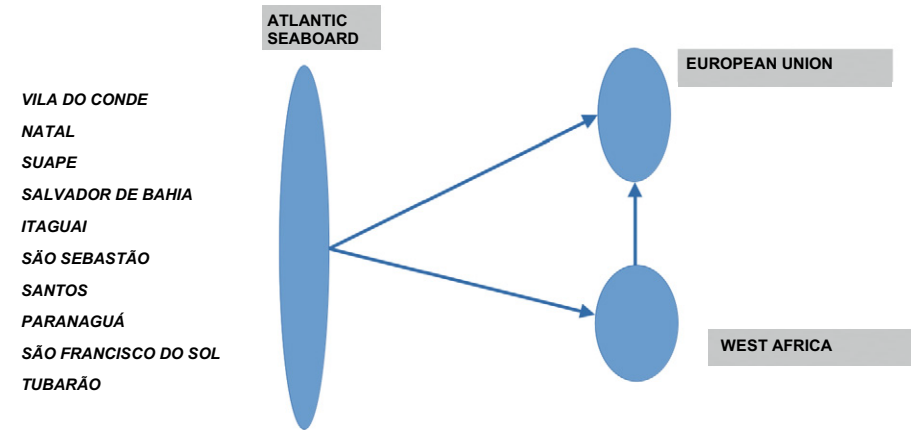
<https://atlasocio.com/classements/economie/transport/classement-ports-par-transport-de-marchandises-amerique.php> consulted on 5/11/21

Rank / America	Port	2005	2010	2015	2019	Comments
3	Itaqui (São Louis)	86 000	118 058	146 600	179 000 (2016)	Industrial and mineral exports
5	Tubarão	93 000	132 031	137 200	133 700 (2016)	Iron ore exports
6	Santos	72 000	96 026	119 931	129 800 (2017)	39Th largest container port in the world 50% dry bulk (soya, sugar, coffee, corn, fertilisers, etc.)

8	Sepetiba / Itaguaí (Rio de Janeiro)	67 000	90 475	110 300	112 300 (2016)	
20	São Sebastião (Almirante Barroso)	-	47 939	49 500	49 500 (2015)	
24	Paranaguã	-	47 939	49 500	49 500 (2015)	The largest bulk port in Latin America, and the main export port for cereals

Figure 19. Brazilian row and cocaine export routes to the European Union and West Africa

Produced by Guillaume MANET



Port of Santos (Brazil): the epicentre of cocaine exports to Europe?

Located in the state of São Paulo, the port of Santos is one of Brazil's most dynamic economic centres. 27% of the national trade balance passes through the port of Santos.

Its sales performance is growing rapidly. Lloyd's ranks it 39th among the world's container ports. It is the second largest port in Latin America and the largest in Brazil, connecting 600 ports in 125 countries.

In 2022, 5 million TEUs passed through the port. It is the largest container port in Latin America. Port facilities are supporting this remarkable development.

Spanning more than 13 kilometres, this seaport is home to 32 terminals and 65 berths covering an area of 78 million square metres. Versatile, it handles the full range of goods: dry bulk (sugar, coffee, soya, cereals, etc.), liquid bulk (ethanol, etc.), roll-on/roll-off of domestic automobile production.

As part of the *BR do Mar*⁴² project launched in 2020, the Brazilian government intends to develop the maritime transport offer, in particular by developing national cabotage within this country-continent and by modernising port operations.⁴³ The port of Santos has already set itself a target of 7.9 million TEUs by 2040. Since 2 March 2021, the port of Santos has been handling 14 000 TEU container ships of up to 366 metres in length. Until now, the largest ships received at the Port of Santos were 9 000 TEUs.

A gateway to cocaine consumption areas

This port vitality is also reflected in the prolific criminal activities observed, particularly in the illegal trade in narcotics. These international connections and the strong economic links with the region's hinterland, irrigated by a powerful hydrographic network, are attractive assets for organizations looking for new consumer markets. The annual volume of cocaine seized in Brazilian ports reflects a simultaneous increase in production, strong criminal pressure and an improvement in performance by the law enforcement agencies responsible for port security. According to the Federal Police, 10.5 tonnes of cocaine were seized in the first six months of 2023, including 6 tonnes in the port of Santos alone.

The road to northern Brazil

On 23 October 2021, 453 kilograms of cocaine were seized from a container in the port of Vila do Conde (State of Para, northern Brazil) during an operation carried out by the Federal Police and the Receita Federal (Customs). The drugs were concealed in a cargo of manganese bound for Rotterdam (Netherlands). This is the second seizure made in this port this year. Vila do Conde is one of the ports used by drug traffickers on the northern route. Drugs produced in Peru or Colombia are transported by river through the Amazon to this port near Belém (the capital of Para), where they are then shipped to Europe by sea.

⁴² 'BR' is the acronym used in Brazil to identify federal roads. BR do Mar' is a new federal road, a road of the sea, like a motorway of the sea. This name illustrates the firm political will to exploit maritime areas as an alternative to the all-road approach that currently characterises logistics flows in Brazil.

⁴³ *Ports and Logistics in Transition to Face Global Challenges: the Case of Brazil*, by Michel DONNER, p. 517, in *Dinámicas portuarias en el Caribe y Americana latina/ Ports in transition to face global challenges*, SEFACIL, Éditions EMS, Tome 7 des Océanides, February 2021.

The southern route

On 5 November 2023, during a joint operation in the port of Vitoria (State of Espírito Santo), the federal police and customs seized 1.5 tonnes of cocaine in 52 packages on board a ro-ro container ship. In addition to the fifty or so agents involved, underwater drones were also used to inspect the hull. The ship runs a circular route from Hamburg to various ports in Brazil, Argentina, then Dakar, the Canaries, Antwerp, and back to Hamburg.

The cocaine was concealed in metal partitions and ventilation ducts. The packaging of the cocaine was designed to make it easier to throw the packets overboard so that they could be recovered more easily by a boat.

5.2. Africa – at the heart of an international multi-product staging mechanism

Generally speaking, Africa acts as a staging area for a number of psychotropic substances, including:

- cocaine, mainly on the western seaboard;
- heroin, with an initial flow from the eastern coasts of the continent and a maritime redistribution zone from the west following a long transit by road;
- methamphetamines.

The shortest distance between the continents of South America and Africa is 2 850 kilometres, between the Brazilian state of Rio Grande do Norte and the Casamance river between Senegal and Guinea-Bissau.

The use of this route came to light in 2016 when the Moroccan authorities detected flows of cocaine imported from Brazil being transshipped on board fishing vessels. Subsequently, the experience acquired with cannabis resin and the connections made within the Moroccan diaspora working in the Netherlands have led to this channel being used on a regular basis. It has gradually affected the whole of the Maghreb, as shown by the major seizures made in Oran (Algeria, in 2018). The 'contamination' of West Africa became apparent in 2019 with the record seizure of 9.57 tonnes in Cape Verde in August 2019. It affects all the countries of West Africa (Senegal, Ghana, Côte d'Ivoire, Togo and Benin) before moving on to Central Africa (Nigeria). The flow from Brazil has become significant, as it is currently estimated that 60% of cocaine exports from Brazil to the EU transit the coast of West Africa. The seizures speak for themselves: 435 kilograms in 2014, 27 tonnes in 2019.

From this perspective, an analysis of the role played by the African continent in this type of illicit trafficking provides a unique insight into the domestic conditions in African states. The proven connections between drug trafficking, other criminal activities (firearms trafficking, prostitution, violence, etc.) and terrorism have an impact on the stability of a particular state, but also on a regional and international level. This phenomenon of criminal convergence

must also be seen through the financial prism, which is an attractive lever for organizations. The availability of banking facilities is an indicator to be exploited. Funds are often transferred via services provided by telephone operators. The reliability of the declared identity when activating accounts needs to be qualified, for example, in the light of massive thefts of large stocks of SIM cards.

What's more, Africa is also becoming a consumer market for all kinds of psychotropic substances, and its dynamism is raising questions.

Finally, a number of centres have been identified:

- the Atlantic seaboard (West Africa and the Gulf of Guinea);
- southern Africa (South Africa and the Mozambique Channel);
- East Africa (Somalia, Mozambique);
- the Maghreb.

In this way, these coastal states play a staging role, repackaging illicit cargo and breaking up flows as part of a multimodal strategy (land, air and sea). Geographical, historical and geopolitical realities are the keys to understanding this globalized economy.

West Africa and the Gulf of Guinea

Since 2019, West Africa has been a new staging area platform for cocaine, further obscuring the primary flows emanating from South America before reaching European or Mediterranean markets. This is a clever way to conceal the drug and confuse the authorities by splitting the logistical routes into additional stages. Primary illicit freight transported to African ports is repackaged into secondary flows. These logistics facilities, which are being developed, offer storage and transshipment capacities between different vectors, both by sea and land. Transatlantic shipping routes from South America naturally lead to the West African coast.

Today, international cocaine trafficking relies in part on staging points in West African to supplement direct shipments between South America and European consumer markets. This logistical alternative makes it easier to supply markets in Oceania and Asia. This major trend emerged in 2007 with an unprecedented cocaine seizure of almost 7 tonnes⁴⁴ which attracted international attention. This was followed by a few years of relative sluggishness, although there was an upturn between 2010 and 2012. As for 2019, it caused a real earthquake in terms of the volume of seizures (16 tonnes). This record reveals the deep-rooted nature of illicit trafficking on the West African coast.

⁴⁴ *West Africa's Cocaine Corridor, Building a sub-regional response*, Lucia BIRD, April 2021, Global Initiative against Transnational Organized Crime, <https://globalinitiative.net/analysis/west-africas-cocaine-corridor/>, consulted on 13/11/21.

Senegal in the front line against the South American white wave

On 14 December 2023, the Senegalese Navy patrol vessel WALO seized 3 tonnes of cocaine on board a fishing vessel, which was boarded outside territorial waters 230 miles (425 kilometres) away. The vessel was diverted to Dakar and the crew of seven included one Senegalese national, one Venezuelan and five Guinean-Bissau nationals. The affair was a success thanks to the support of the French Navy's Falcon 50 based in Dakar, which was able to guide the control units to the target. The value is estimated at 126 billion CFA francs, or €192.3 million.

This seizure is the third made in 2023 by the Senegalese authorities, with the support of the Maritime Intelligence Operational Centre (MAOC-N), involving a total of almost 7 tonnes of cocaine.

It is worth highlighting the multi-product flows that transit Africa, such as heroin, cannabis and synthetic drugs. Analysis of the regional situation calls for the identification of factors conducive to the development of organized crime in this coastal region, without omitting to take an in-depth look. The aim is to identify logistical connections with the hinterland via land routes. With a third of African countries landlocked, maritime transport remains the continent's main gateway to the global market. Indeed, Africa's international trade is heavily dependent on shipping and ports. According to the United Nations Conference on Trade and Development (UNCTAD), by 2022 Africa will account for only a small share of international trade in goods, in terms of value: 2.87% of exports and 2.67% of imports. In terms of volume, Africa accounts for a slightly larger share: African ports loaded nearly 7% of world seaborne trade (exports) and unloaded 4.6% (imports). In detail, West Africa accounts for 25% of African maritime trade, behind North Africa (36%) and ahead of Southern Africa (18%). An analysis of the performance of West African ports shows that the situation varies widely between economies, with some showing a high degree of maritime openness, characterized by international links that go beyond mere inter-port cabotage within the subregion. Togo has a high level of bilateral connectivity, with three African countries (Ghana, Benin, South Africa), three Asian ports (China, Singapore, Korea) and two European ports (Croatia, Slovenia) in the top 10. By contrast, Guinea-Bissau has a strong regional presence (Cape Verde, Mauritania, Angola).

The dynamism of West Africa⁴⁵ is based on the creation of international logistics hubs with a strong regional influence on the hinterland. The hub performs at least one of the following three functions: transit, production and distribution (BROWN, HERMANN, 2020).⁴⁶ The combination of a container port, an international airport and a dense road network means that supply chains

⁴⁵ Yann ALIX, *Histoires courtes maritimes et portuaires*, published by EMS, December 2023.

⁴⁶ *Transnational Crime and Black Spots, Rethinking Sovereignty and the Global Economy*, Palgrave MacMillan, 2020.

can be interconnected efficiently and effectively. These hubs are pivotal in the illicit trade, particularly in the container business. Thus, the Gambia has experienced an average growth in port traffic of 7% since 2008, 75% of which is based on container traffic.

The Gambia:⁴⁷ a new epicentre for Atlantic drug trafficking?

On 8 January 2021, the Banjul port authorities seized almost 3 tonnes of cocaine. It was packaged in 118 bags hidden in four separate containers containing industrial salt. The four containers were shipped from the port of Guayaquil in Ecuador to Europe. Three had been transshipped to the port of Algeciras in Spain. The fourth, loaded on another ship, had two intermediate stops at Antwerp in Belgium and Las Palmas in Spain.

The question of the destination of the product is worth asking in light of the previous case in the Gambia. Even if the criminals' mistake in targeting the container cannot be totally ruled out, the fact that the four containers were checked on the Banjul quayside suggests that they were destined for Africa. The instability of the Sahel-Saharan zone and the activities of armed terrorist groups are favourable factors for illicit trafficking in narcotics such as cocaine. They have been identified as a potential source of funding for terrorist activities, for which subsidies may be received both for transport to other intra-African or even European destinations and for consumption. Originating in the range of ports in West Africa, two road logistics routes are emerging in this sub-region:

- to Mali via the southern borders of Senegal, Guinea, Côte d'Ivoire and Burkina Faso;
- from Guinea-Bissau via Senegal and Mauritania, from where illegal cargo is transported to Europe by fishing vessels.

These land transport flows from coastal hubs are borne out by regular seizures made outside the coastal areas, such as the 72 kilograms of cocaine seized in April 2019 on the roads leading to Tambacounda. This Senegalese town is located at the crossroads of the road networks of Senegal, the Gambia, Guinea-Bissau and Mali. In March 2019, 789 kilograms of powder were intercepted in Guinea-Bissau in a lorry en route from Dakar to Mali.

The indicator on drug seizures by law enforcement agencies is admittedly incomplete and fragile. At a given moment, it reflects the commitment of the African and international authorities, particularly through the supply of criminal intelligence. However, this indicator does provide basic trends that can be used as a basis for further analysis. This data shows a concentration of risk and vulnerability in the West African coastal system, based on a threefold temporal pattern that highlights the following hot spots:

⁴⁷ See REUTER article published on 09/01/2021, *Gambia seizes 3 tonnes of Cocaine in one of West Africa's largest Busts*, <https://www.reuters.com/article/uk-gambia-cocaine-idUSKBN29E09R>, consulted on 14/11/2021.

- 2019: Senegal, Guinea Bissau and Sierra Leone;
- 2020: Côte d'Ivoire, Ghana and Benin;
- 2021: The Gambia, Côte d'Ivoire, South Africa and Algeria.⁴⁸

These logistical alternatives are limited to the perimeter of the sub-region and also reflect the connectivity of the ports within this range of ports. There is a redundancy of port facilities between bordering countries, some of which have a very limited coastline.

Figure 20. Maritime performance of West African States in 2020

Source: United Nations Conference on Trade and Development. Produced by the author

Country	Ports	Length of coastline in kilometres	Container port throughput 2020 in TEU	Number of stopovers in 2020	Connectivity index ⁴⁹ scheduled maritime transport (Q4 - 2020)
Senegal	Dakar	531	562 875	1 860	17.03
The Gambia	Banjul	80	71 470	199	6.17
Guinea-Bissau	Bissau	350	28 700	76	4.06
Guinea	Conakry	320	197 739	2 878	7.88
Sierra Leone	Freetown	402	78 413	291	6.17
Liberia	Monrovia	579	91 454	394	7.43
Ivory Coast	Abidjan, San Pedro	515	913 300	2 006	19.98
Ghana	Tema, Takoradi	539	1 100 205	2 379	39.99
Togo	Lomé	56	1 503 169	1 401	36.57
Benin	Cotonou	121	510 896	1 051	18.40
Cape Verde	Mindelo, Porto Praia, Sal Rei, Palmeira	965	52 378	1 961	4.23

This change in time and space can be explained by a number of factors. Firstly, it shows that criminal organizations are adapting to the repressive policies implemented by States and supported by international organizations. However, a certain amount of inertia is to be expected given the nature of

⁴⁸ Discovery of cocaine packages floating off the port of Oran in June 2021.

⁴⁹ The maritime transport connectivity index is an indicator of a country's position in global liner shipping networks.

maritime transport. What's more, the illicit trade only thrives on criminal alliances and opportunities, which are by their very nature ever changing. The balance of power is likely to evolve rapidly, and shifting alliances are to be expected. Lastly, the main breeding ground for development remains the informal economy, which is underpinned by corruption in the conventional workings of the economy. Both the private and public sectors are prime targets for criminal organizations. This is all the easier in areas where governance is weak or in border areas that are porous or disputed between two States. Generally speaking, Africa has an informal economy with one of the lowest rates of available banking facilities, favouring transactions in cash or those carried out by mobile telephony ('mobile money').

Focus on Côte d'Ivoire

On the night of 24 to 25 February 2021, the Ivorian national gendarmerie and the Port of Abidjan's anti-drug unit carried out an operation to dismantle illicit trafficking in the port area. More than 1 tonne of cocaine was seized.

On 3 March 2021, the Ivorian gendarmerie seized 5.7 tonnes of cannabis in Grand Bassam (a seaside resort in the south-east of the country, close to the capital Abidjan). It turned out to be a storage area prior to export. The drugs were transported in pinnaces, traditional boats from neighbouring Ghana.

On 21 March 2021, the cargo ship NAJLAN flying the flag of the Federation of Saint Kitts and Nevis in the Caribbean was boarded off the coast of Côte d'Ivoire by the French Navy. Six tonnes of cocaine were previously loaded at the port of Rio de Janeiro, Brazil, on 5 March 2021. This was a record seizure, demonstrating the intensity of transatlantic flows.

Guinea-Bissau:⁵⁰ an African narco-state?

Guinea-Bissau is a well-known hot spot for international cocaine trafficking. This West African State is an example of the strategies meticulously devised by South American criminal organizations to conquer European consumer markets. Through their financial power and determination, they demonstrate their ability to corrupt already weakened State structures. Independent from Portugal since 1974, Guinea-Bissau's political life over the last decade has been rich in lessons, given the influence of drug trafficking on domestic politics. Two coups d'état, the assassination of a president and a civil war have punctuated the last seventeen years.

By the end of the 1990s, the Colombian cartels had identified this state as an alternative route to Europe, at a time when security measures had just been stepped up on the approaches to the Spanish and Moroccan coasts. With a population of 1.8 million, this small country has many assets: a labyrinth of islands and peninsulas along the coastline, porous borders with Senegal and Guinea, high levels of poverty among the population, chronic political instability, weak political institutions and high levels of corruption among civil servants. Thus, in addition to air traffic from the Andes, the eighty islands of the Bijagos archipelago are natural transshipment points and a buffer zone for cocaine trafficking.

⁵⁰ See the *Breaking the vicious cycle* special report: *Cocaine politics in Guinea-Bissau* published on 11/05/2020 in *Global Initiative*, <https://globalinitiative.net/analysis/cocaine-politics-guinea-bissau/>, consulted on 14/11/2021.

The cartels know that they can count on the support of the security forces, who act, in particular, on behalf of leading politicians.

A few chronological insights will illustrate both the establishment of South American criminal organizations and the involvement of senior Bissau-Guinean authorities in international drug trafficking.

In the early 2010s, the international community's interest gradually focused on the internal situation in this former Portuguese colony. A number of events have raised questions:

- the seizure of power by the military led by the Chief of Staff of the Armed Forces, General Antonio Indjai⁵¹, in 2012;
- suspicions of international trafficking in anti-aircraft weapons for FARC;
- the importation of at least twenty aircraft loaded with Andean drugs;
- the absence of any cocaine seizures between 2014 and 2019, even though international authorities estimate the annual flow of cocaine imports at around 30 tonnes.

Joint operations are being set up with the support of the United States of America to dismantle drug import networks. During an undercover operation supported by the American DEA, José Américo Bubo Na Tchuto,⁵² Chief of Staff of the national navy, was arrested in April 2013 on his luxury yacht at sea. Investigators posing as FARC members obtained authorization from this high military dignitary to import cocaine in return for payment of a toll of US\$1 million per tonne imported.

In March 2019, as part of Operation CARAPAU⁵³, a police check by the Judicial Police led to the discovery of 800 kilograms of cocaine hidden in a load of frozen fish on board a lorry intercepted on the outskirts of the capital. This illicit cargo would be used to finance parliamentary elections scheduled for spring 2019. Investigators point to a flow of drugs crossing the border into Senegal, then Mali and Mauritania, where they are loaded onto ships bound for Europe.

As part of this positive trend, the NAVARA operation⁵⁴ set up by the Judicial Police led to the record seizure of 1.947 tonnes of cocaine in bags of rice on 2 September 2019. This special operation took place in a port in the north-west of the country, in Caio and Caxungo. It led to the arrest of suspects from Guinea-Bissau, Colombia and Mali. This was followed by the arrest of other state security officials.

Despite the many difficulties involved in investigating, the Judicial Police have demonstrated their ability to combat transnational organized crime in a state

51 On 19/08/2021, the United States of America promised up to 5 million dollars for any information leading to the location and arrest of Antonio Indjai. He is wanted for his involvement with FARC (cocaine trafficking, arms trafficking for FARC). See the US State Department fact sheet available at <https://www.state.gov/antonio-indjai-new-target/>, consulted on 16/11/21.

52 <https://www.reuters.com/article/us-usa-bissau-natchuto-idUSKCN124298>, consulted on 13/11/2021.

53 <https://www.unodc.org/westandcentralafrica/en/2019-03-15-seizure-guinea-bissau.html>, consulted on 15/11/2021.

54 <https://www.unodc.org/westandcentralafrica/en/02/09/2019-seizure-guinea-bissau.html>, consulted on 15/11/2021.

structure that is heavily involved⁵⁵ in drug trafficking. Will this situation last? The cartels have long been suspected of financing presidential campaigns,⁵⁶ influencing the course of domestic political life in exchange for pledges to facilitate their illicit trade.

On 9 December 2019, the government presented its first strategic plan to combat international drug trafficking and organized crime. Its historic approach is supported by international organizations such as the UNODC.

Narco-state or international trafficking protected by national elites?

West Africa is also involved in schemes to obscure the flow of psychotropic substances before they reach consumer markets.

West Africa – a hub for exports of hashish from the Maghreb

On 8 July 2022, Gabonese police seized more than 5 tonnes of cannabis resin in the port of Libreville. Arriving by sea from Morocco, the drugs were to be shipped back to Europe. The emergence of a new cannabis route is designed to muddy the waters. Moroccan shipments destined for Europe head for West Africa, which serves as a staging area for the Western market.

The role played by West Africa's coastlines is set to increase as a result of the continent's demographic growth over the last ten years and the rising rate of drug use among young people. It will then be a matter of satisfying an illicit domestic market which, according to the UNODC, is set to grow by 40% between now and 2030, accounting for most of the 11% increase in global drug use expected by that date. All the more so as a growing number of African countries have revised their national legislation to authorise the cultivation of cannabis for medical purposes. As this drug is the most widely used alongside tramadol, it is possible that legal uses could be diverted.

5.3. Macaronesia: a hot spot for Atlantic drug trafficking?

Macaronesia, the islands in the Atlantic Ocean off the coast of West Africa and Europe, is also a natural refuge. This group of islands includes – from south to north – the Cape Verde Islands, the Canary Islands and the archipelagos of Madeira and the Azores. With the notable exception of the Republic of Cape Verde Islands, the other islands fall under the jurisdiction of either Spain (the Canaries) or Portugal (Madeira and the Azores). All occupy key geographical positions in transatlantic navigation: they are the first islands encountered

⁵⁵ https://globalinitiative.net/wp-content/uploads/2021/01/Guinea_Bissau_RB1.pdf, consulted on 16/11/2021.

⁵⁶ UNODC report https://www.unodc.org/documents/ungass2016/Contributions/IO/WACD_report_June_2014_english.pdf, consulted on 14/11/2021.

during a crossing. Furthermore, isn't 'Macaronesia' the ancient Greek translation of 'islands of the blessed or fortunate'?

A geological hot spot characterized by volcanic activity, the Cape Verde archipelago comprises ten islands and eight islets, divided into the Leeward Islands or Sotavento Islands and the Windward Islands or Barlavento Islands. It lies off the Senegalese coast, between 570 and 830 kilometres from Senegal (with Boa Vista, the closest island to the mainland and Santo Antão, the furthest). Macaronesia offers just as many opportunities for maritime and port logistics manoeuvres, especially as it is located on the 10th parallel, the shortest route between West Africa and South America. As a transit country, Cape Verde is becoming a narcotic consumption zone. Moreover, it seems that a criminal ecosystem is taking root in the landscape, with tried and tested mechanisms for corruption and money laundering evident in the tourism and property sectors.

Cape Verde: a global hot spot for maritime drug trafficking?

On 31 January 2019, the Cape Verdean authorities seized 9.57 tonnes of cocaine from a merchant vessel flying the Panamanian flag. On an unplanned stopover – following the accidental death of a seafarer on board – this vessel was bound for the port of Tangiers from the port of Colon in Panama on 4 January 2019. This record haul was wake-up call and helped to raise awareness of the role played by Cape Verde in cocaine flows. The crew of eleven Russian sailors had deliberately brought 260 parcels of drugs on board during a stopover in the Caribbean. They received prison sentences ranging from ten to twelve years.

On 1 April 2022, 5.6 tonnes of cocaine were seized during a transshipment between a merchant ship and a sailing boat flying a US flag.

By and large, these Atlantic islands play a role in relaying and repackaging illegal freight, as well as a logistical function in maritime shipping. They act as a link between shipping areas and Western consumer markets. Following Macaronesia, a logistical alternative is emerging with staging areas in West Africa.

On 24 January 2023, in a coordinated operation, the Spanish authorities intercepted a livestock vessel 62 nautical miles south-west of the coast of the Canary Islands. On board, they discovered 4.5 tonnes of cocaine hidden in a food silo. The ship was en route from Colombia to Lebanon. The operation was conducted in collaboration with the US Drug Enforcement Administration (DEA), the Togolese authorities and the Maritime Intelligence Operational Centre for Narcotics (MAOC-N).

A similar system can be seen in the Caribbean, as well as in the Pacific with island states (Fiji, Vanuatu, Papua New Guinea, Tonga, etc.) or overseas collectivities such as Polynesia, Wallis and Futuna or New Caledonia, which are transit points for Australia and New Zealand. For example, between December 2016 and November 2017, 11 yachts were intercepted by the Pacific

States, taking 7.6 tonnes of cocaine out of circulation, most likely destined for Australia. These islands are clearly transit points but, as on the island of São Miguel, we mustn't overlook the contagion effect on the population and the criminalization of local actors.

Tonga engulfed in a white wave

On 29 July 2023, parcels of cocaine (worth more than US\$1 million) washed up on a beach in Tonga and handed over to the authorities by the locals. Tonga lies on a route used by Asian traffickers to supply the Australian and New Zealand markets. In 2017, the French Navy intercepted a yacht carrying US\$100 million worth of cocaine near Tongan waters.

5.4. Mozambique channel: a hot spot for multi-product trade?

The maritime zone to the west of the Indian Ocean has become a hub which is growing in importance for both the consumption and transit of a wide range of narcotics. Its geographical position between Asia and Africa makes it vulnerable, as it plays a logistical role in the global illegal trade. It lies at the very heart of the shipping routes for heroin, synthetic drugs, cannabis and cocaine. In this respect, a thalasso-centric analysis of illegal drug trafficking provides a wealth of information on transport methods, connections between criminal networks and socio-economic support specific to this maritime area. Acting as an antechamber, it also reveals the latest trends that will affect new consumer markets in Europe, America, Asia and Oceania.

The southern route involves transporting heroin from production areas in Afghanistan to consumer markets in Europe. Transit then takes place by sea from the Makran coast⁵⁷ to the eastern shores of Africa. Subsequently, the land route through Africa and along the Sahel-Saharan strip converges on either the Maghreb or West Africa to reach – via the Atlantic – the European or American market. This initial logistical transit route has had collateral effects, opening up new areas of consumption. Both the Seychelles and Mauritius are currently facing some of the highest rates of heroin addiction in the world. The Mozambique channel, the strip of the sea separating Africa from Madagascar, is emerging as a multi-product, regional and even international hub.

The volume of seizures of psychotropic substances and precursors is not a reliable indicator, particularly in this region, of the intensity of illicit trafficking. It relies, in particular, on expert maritime and criminal intelligence capabilities and seasoned law enforcement organizations. The level of economic development and the degree of corruption in state structures in this sub-region are hardly conducive to proven overall effectiveness. This

⁵⁷ Makran is a coastal region of Baluchistan in south-east Iran and south-west Pakistan. The coastline is 1 000 kilometres long, bordering the Gulf of Oman from Cape Rafrans al-Kūh in Iran, west of Jask, to the Lasbela district in Pakistan, near Karachi. Makran is the former Gedrosia of the Persian and Macedonian empires.

particular situation primarily concerns Madagascar, the Comoros, the Seychelles and Mauritius. Maritime geography sees this area as a break point between the South Atlantic and the Indian Ocean. It is a natural point of passage for commercial shipping and pleasure craft travelling east-west and north-south around the globe. This confluence of South American flows with those from Asia and the Pacific makes the area a major logistical crossroads.

On 18 October 2023, the South African police⁵⁸ inspected a container ship from Brazil on its arrival at the port of Durban, and discovered 200 blocks of cocaine concealed in 20-litre paint cans. The estimated street value of the drugs, which appear to have been destined for Gauteng province in the north of the country, is 70 million rand or €3.5 million.

This role as a transit point for illicit traffic sometimes ends up 'contaminating' local populations with new addictive practices. Consumption of the heroin-based narcotic known as 'roro' has exploded in Madagascar, which until recently was a transit country, but is now increasingly becoming a major consumer point.

58 <https://www.sanews.gov.za/south-africa/saps-leads-r70-million-drug-bust-durban-harbour>

New trends in international drug trafficking

International drug trafficking is a dynamic and agile business. In tune with the market, new operational procedures are emerging to secure transactions through the exchange of narcotic products (1), the extension of export zones in the Southern Cone (2) and the lack of transparency of international flows in the Indian Ocean (3). Lastly, technological progress is increasing the number of criminal activities (4).

1. A global exchange for psychotropic substances

1.1. Heroin¹

The western Indian Ocean has become a decompression zone for the primary flow of heroin in a market characterized by multiple, independent channels. However, the data is very fragile, allowing only provisional conclusions to be drawn. The region's role in international heroin trafficking increased during the 1990s under the triple effect of a significant increase in opium production in Afghanistan and Myanmar,² increased demand from the European market and the interdiction measures implemented on the northern route³ and the Balkan route.⁴ The peak of transit on the East African coast, in terms of the quantity assumed to be transported, was identified during the period 2000-2004.

From a logistical point of view, heroin is transported using fleets of traditional dedicated vessels, particularly in the Indian Ocean. This route is known as the

1 See the study *Changing tides, The evolving illicit drug trade in the western Indian Ocean*, conducted by Lucia Bird, Julia Stanyard, Vel Moonien, Riana Raymonde Randrianarisoa for the Global Initiative against Transnational Organized Crime, in June 2021.

2 Opium production quadrupled in Afghanistan during the 1990s. In Myanmar, production peaked in the 2000s.

3 Its destination is the Russian Federation via Central Asia.

4 Its destination is Western Europe via Turkey, Romania and then the Balkans.

'smack track'. Conventional techniques can also be used to contaminate vectors or containers, depending on opportunities or destination flows. Nevertheless, it appears that illicit shipments are made in multiple successive sequences, involving breaks in the load and, therefore, associating numerous intermediaries. Here are the main phases, although variants may be identified:

- from the Makran coast to the east coast of Africa (Kenya, Tanzania, Mozambique) by traditional boats – *dhow* – wooden fishing vessels;
- from the east coast of Africa to the Mozambique Channel (Madagascar, Mauritius and the Seychelles).

However, trade flows are likely to be used to transport heroin directly between the Makran coast and the island states of the Mozambique channel. High-capacity feeder vessels operate transshipments on the high seas to daughter ships off island states. They are responsible for the last-mile logistics, transporting the illicit cargo to the shores. Mauritius has a long-established domestic heroin market. It is the result of direct imports from India, where an ethnic and financial proximity⁵ can be identified.

In southern Europe, the Balkan route – the traditional route used to transport heroin – is now open to flows of cocaine that have passed through Turkey, the hub for the Balkans and the Black Sea, or through Greece.

A logistics transshipment point for Western markets?

Primary heroin flows have two possible uses:

- either supply the regional consumer markets of the island states (mainly Mauritius and the Seychelles);
- or repackage the cargo for shipment to the European market.

In this respect, Madagascar is the new staging point, facilitated by fragile governance, a coastal topography favourable to illicit trafficking and port facilities. The challenge of monitoring 5 000 kilometres of coastline is one that has to be met in a maritime zone where there is a great deal of activity. Other logistics opportunities are offered by the ports on Africa's eastern seaboard, to the north of the Mozambique Channel, which play a staging role for multi-product flows. Cocaine, heroin and methamphetamines are said to be redistributed via consumption areas in Africa, Asia, Oceania and Europe. The seizures made in Mozambique, Zambia and Tanzania demonstrate the transshipment of heroin concealed in fishing fleets and flows of

⁵ 70% of Mauritians are of Indian origin. Mauritius is a major source of foreign direct investment in India. Opium was first introduced in the early 19th century by Chinese and Indian immigrants. Heroin came much later.

containerized goods. Cocaine shipments arrive in Madagascar after passing through staging points in South Africa, with direct links to producer countries. Cannabis grown in Madagascar is destined to supply the regional domestic market on islands such as Réunion and Mauritius, as well as the Seychelles, Mayotte and the Comoros by sea.

Papa Freddy – a South African at the heart of Indian Ocean smuggling networks

The Indian Ocean drug baron was arrested in Andoharanofotsy (Madagascar) on 25 May 2019. Known by the alias Papa Freddy, this South African national, Lusinga Adam Martin, was a high-value target operating throughout the Indian Ocean. His capture was considered as a vital objective and, after many years, the Madagascan law enforcement agencies were able to take him down. He is suspected of organising shipments of narcotics in the Tanzania-Madagascar-Reunion and Mauritius area. He imported the drugs from Tanzania and then distributed them in Madagascar, Mauritius and Réunion. A few days before he was arrested, Madagascan customs officers observed heroin being transported to Sainte Marie by a speedboat from the coast of South Africa.

The logistical relationships between the shipping lane and the hinterland deserve to be examined in greater depth from a criminological perspective. We are seeing the emergence of global platforms for changing the composition of flows, hidden away in landlocked states. At the same time, we should not underestimate the existence of a compensation system based on the exchange of products such as hashish for cocaine prior to shipment to target markets. West Africa/South America flows have been identified as exporting the use of hashish.

Building up strategic stocks in landlocked countries in West and Central Africa

On 2 March 2022, the Niger authorities announced the seizure of 17 tonnes of cannabis resin from a warehouse in Niamey. The drugs from Lebanon were said to have passed through the port of Lomé in Togo via an Indian company. The cargo was then loaded onto a tanker truck and taken to Niamey. The thousands of packages were all carefully wrapped and addressed to the end customers. According to the authorities, the drugs were destined for Libya.

1.2. Captagon – an example of the dynamics of synthetic drugs

The Captagon market continues to grow in the Near and Middle East, but it is less prevalent in Europe. Captagon is a substance developed by a German pharmaceutical group in the 1960s to treat narcolepsy and attention deficit disorder. It contains various concentrations of amphetamine.⁶ From the 1990s onwards, the use of this drug became problematic and spread to the Middle

⁶ The main molecule, fenethylline, is included in Annex 2 of the 1971 UN Convention.

East, particularly Saudi Arabia, where it found its main market.⁷ Once linked to Islamic State jihadists, the use of this stimulant is now cause for concern. Syria and Lebanon⁸ have been identified as the main production centres for this substance. Laboratories have nevertheless been identified in Europe (Netherlands). The production chain for this drug appears to be decentralized: the technical phase of synthesising the molecules produces the raw material, which is then shipped in bulk to be refined, cut and packaged, primarily in Lebanon. Such an organization poses many challenges in terms of detecting flows and identifying actors spread across several continents.

On 13 August 2023, the Saudi Arabian Tax and Customs Authority (ZATCA), in coordination with the General Directorate of Narcotics Control (GDNC), discovered more than 2.2 million Captagon pills concealed in a shipment of baklava, traditional pastries common to the ancient Persian and Ottoman empires. The pills were hidden in a shipment of baklava, traditional pastries common to the ancient Persian and Ottoman empires, which had come from Iskenderun (Turkey) and entered the country via the port of Jeddah, the second largest port in the Arab world.

Assuming that all amphetamine seizures reported in the sub-region were captagon, they doubled from 2020, reaching a record 86 tonnes in 2021. The shipping routes for captagon all bear witness to an effort to make them more obscure. Maritime flows are rarely direct. They systematically include intermediate stops that are often far from the final destination (which, paradoxically, is very close to the shipping zone). Shipments of captagon leave the Levant (Syrian Arab Republic and Lebanon) for the Gulf countries, where they arrive either directly by land or indirectly via other regions such as Europe (northern and southern) or Turkey. The Austrian authorities highlight a specific case where 10 tonnes of captagon were seized in Austria from Lebanon via Belgium. In Austria, the illicit substances were repackaged in pizza ovens and washing machines before being shipped to Saudi Arabia. This technique is not exceptional, but once again demonstrates the importance of detecting transit flows. In addition, some entries suggest new destinations in North and West Africa, but more information is needed to determine whether these are newly established routes. Libya is not only a destination but also a particularly sensitive transit zone in terms of traffic, encouraged by the political instability that reigns in this country. Several seizures of narcotics (captagon, cocaine from South America) or medicines that are misused (Tramadol, Pregabalin) were made in Libya. In parallel with captagon trafficking, a methamphetamine market seems to be developing in the Near and Middle East, as illustrated by the increase in seizures of these drugs.

⁷ It is sold for an average of US\$20 a pill. But also in Bahrain, Kuwait, Qatar, Yemen and Oman.

⁸ *Captagon trafficking and the role of Europe*, Technical Report, EMCDDA, BKA, September 2023.

1.3. Cannabis and cocaine: the current drug barter between Africa and South America?

A recent trend seems to be confirmed: Moroccan cannabis is being exchanged for cocaine to supply the South American market. This suggests a new organization of criminal actors capable of supplying domestic consumer markets.

On 24 July 2023, the Spanish authorities announced the seizure of 6 tonnes of cannabis resin and the arrest of two crew members on a RAYA sailing boat flying the Dutch flag, 150 nautical miles south of the Canary Islands. The vessel had left the south of Portugal to set sail for the west coast of Morocco to load the illicit cargo, before planning to sail to Brazil.

2. The oil-spill phenomenon: the Southern Cone, a new Eldorado for drug traffickers?

The Southern Cone is a term coined in the 1960s to describe a geographical area comprising countries located around and south of the Tropic of Capricorn. It forms a large triangle the size of a peninsula, with Argentina as the dominant demographic power. Strictly speaking, it includes Argentina, Chile and Uruguay. However, it can also be extended to Paraguay and the southern states of Brazil.

Since 2019, the Southern Cone has emerged as a new corridor used by criminal organizations to export cocaine to consumer areas in Europe. These shipments can be direct, despite frequent South American cabotage. The African coast is used as a staging point. Analysis of this corridor shows the responsiveness and determination of the criminal actors. It also demonstrates their power to recreate favourable ecosystems far from production areas or processing laboratories. It underlines their ability to forge alliances with new operators, inevitably adding value to their experience. Finally, it suggests, once again, the reality of a systematic threat to the foundations of societies that can be very fragile. This phenomenon is further exacerbated by the search for maritime outlets by 'new entrants', i.e. countries that have recently become heavily involved in international cocaine trafficking. Triggering factors vary in nature. The strategies being pursued by the national authorities, both in the Andean countries and at destination, are finally bearing fruit, forcing criminal organizations to reconfigure their logistical solutions. In addition, conflicts or shifting alliances between criminal operators cannot be ruled out. This is likely to call into question criminal combinations (availability of essential logistical resources, loyalty of 'friendly' intermediaries facilitating operations, loss of influence of key actors,

change in institutional bodies in a port or among law enforcement agencies, etc.) on which the success of drug chartering is based.

We will be focusing specifically on the recent sea-river route, which offers new logistics opportunities to so-called landlocked states: the Bolivia/Paraguay – Argentina/Uruguay axis. This route presents new alternatives to the Atlantic outlets generously provided by the country-continent of Brazil. Far from being financial, the issue is above all one of safety: this emerging route is supposed to be less closely monitored by the authorities. This logistical change of scenery is also supported by a particularly favourable geography. The realities of crime are in line with age-old commercial logic, supported by centuries of interaction between human communities united around shared interests. Modern-day globalization is only increasing these practices, which are now integrated into international value chains. This illicit trade relies on logistical infrastructures such as the waterways of the Amazon basin or the La Plata basin. Understanding illicit traffic means highlighting the realities of geography in an environment with very strong constraints, against which man is ultimately very little. It also means connecting local realities to international flows.

Figure 21. Mapping cocaine export routes via the Paraguay-Paraná hydraulic network

Source: UNODC, *Global Report on cocaine, local dynamics - global challenges*, UN Publications, 2023. Produced by Ronan KERBIRIOU, January 2024

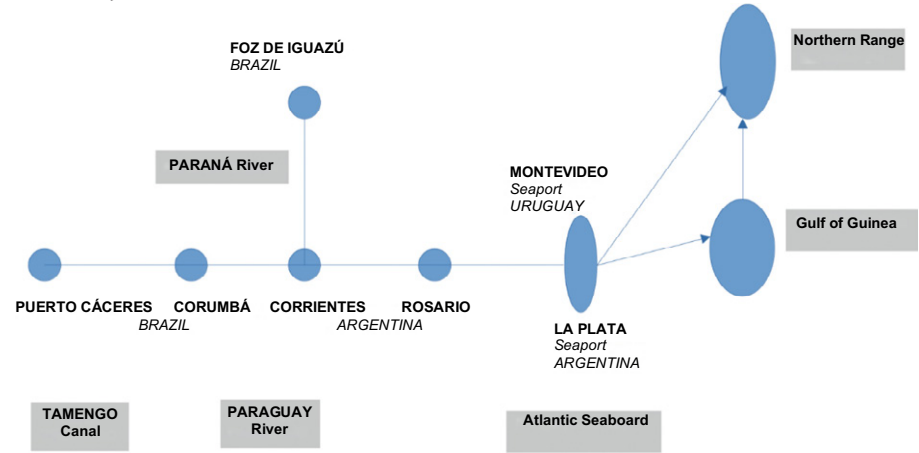


In the face of repressive measures that restrict illicit traffic, new methods of operation are being implemented by highly determined criminal organizations. It's all about finding ways to circumvent supply routes to get products to market in the West. With this in mind, Paraguay confirms its triple-layered position as a coca-processing zone and a storage and packaging area for illicit cargo bound for Europe. The use of rivers to transfer the drugs represents a new problem for the authorities, who were used to drugs from the Plurinational State of Bolivia being transported mainly by air and land. To achieve this, a powerful river basin acts as a link between producing and shipping countries. The Plata Basin is the fifth largest river basin in the world. Covering 3.1 million square kilometres, it stretches across Brazil, Bolivia, Paraguay, Argentina and Uruguay. Three major rivers – the Paraguay, Paraná and Uruguay – are the main waterways feeding the Plata

catchment area. A dense network of tributaries irrigates vast territories. The 2 695-kilometre-long river Paraguay⁹ is emerging as the new artery for transporting cocaine from landlocked states (Bolivia and Paraguay) to ports of departure on the Argentinian coast. Its catchment area covers 1 million square kilometres, twice the size of mainland France. It is the only unobstructed communication route that runs all the way to the mouth of the Rio de Plata, and exerts a strong influence over particularly large areas. This is of vital importance when it comes to illicit trafficking. It provides a natural link between the Brazilian state of Paraná, which straddles the borders with Bolivia (south-east), Paraguay (east) and, ultimately, Argentina. It is complemented by the Paraguay-Paraná waterway system (*Hidrovía Paraguay-Paraná* or HPP), which consists of 3 400 kilometres of uninterrupted waterways linking the Southern Cone to the Atlantic Ocean. This transnational link connects more than 200 ports in five states. Nevertheless, this hydrographic infrastructure imposes logistical uses adapted to the fluvio-maritime environment. This has a direct impact on flow control operations such as transshipment prior to ocean shipment. Thirty-six shallow-draught barge trains towing a payload of 54 000 tonnes.

Figure 22. Cocaine exports to Europe via the Paraguay-Paraná waterway system (*Hidrovía Paraguay-Paraná* or HPP) and staging points in West Africa.

Produced by Guillaume MANET



The port of Montevideo is the economic lungs of a country of 3.5 million inhabitants, considered to be the Switzerland of South America, with a reputation as a stable and peaceful state. 70% of its goods are imported by sea. To this end, given the small size of its domestic market compared with that of its imposing neighbours, it aims to become a regional hub, capturing

⁹ The River Paraguay is the fifth longest river in South America. It flows into the Paraná river in Argentina, of which it is the main tributary. It flows in a general North-South direction.

logistics flows ultimately destined for Argentina, Brazil, Paraguay and Bolivia. It is located at the mouth of the Río de la Plata, just like its Argentinian counterpart, the port of Buenos Aires. Its geographical position makes it the natural gateway to the Paraná – Paraguay river system, which supplies markets in the south-east and centre (landlocked states) of South America. Finally, the port of Montevideo benefits from the unique free port status it acquired in 1992 as the first port in South America. The resulting ease of administrative procedures has made Uruguay a preferred port of call for international container flows, particularly to Northern Europe and, to a lesser extent, the Mediterranean basin. Stimulated by this dynamic, Montevideo's port authorities are striving to increase the attractiveness of its facilities in a competitive environment. They have thus validated a long-term development strategy, doubling its container handling capacity from 1.2 to 2.5 million units per year. In spring 2021, the concession granted to Belgian port operator Katoen Natie was extended until 2080. In exchange, this international logistics company is investing US\$455 million over 10 years in the extension of the Cuenca del Plata container terminal. In addition, it has undertaken to build a second container terminal covering an area of 22 hectares, including a 700 metre long quay with a depth of 14 metres, capable of accommodating large ships. Increased capacity and greater digitalization of port logistics operations support the ambition to make the seaport of Montevideo the port of choice for international trade connections. This momentum will also have a major impact on the entire regional supply chain (product packaging and processing, transport and storage). In terms of security, these achievements will be appealing to criminal organizations seeking security and regularity in their illicit exports. Recent events illustrate these new realities:

Airlifts of chartered flights loaded with cocaine?

Following a meticulous investigation by the gendarmes of the Strasbourg Criminal Investigation Service (France), with the support of EUROPOL and the American DEA, a private twin-engine Gulfstream V aircraft was intercepted in mid-May 2019 during a stopover at Basel-Mulhouse airport. It was loaded with 603 kilograms of cocaine concealed in suitcases.

The Isle of Man-registered jet belonged to an international criminal organization based in the Balkans. It imported drugs from South America to supply the Swiss, German and Balkan markets. The three people arrested were Czech, Croatian and Montenegrin nationals. Coming from Cape Verde, this jet had a set flight plan between Carrasco-Montevideo international airport in Uruguay and France (Nice then Basel-Mulhouse). This flight was intentionally disguised as a business trip. The aircraft was loaded in a hangar at Carrasco airport.

More cocaine seizures on ships from Uruguay in 2019

Uruguay seized more than 1.5 tonnes of products during the first seven months of 2019. This upward trend was confirmed at the same time by seizures in the ports of destination of vessels that had anchored in the waters of the Rio de la Plata, on the Uruguayan side.

During a routine check, almost 4.5 tonnes of cocaine were found concealed in a container filled with soya. The 4 200 loaves of very high purity cocaine (over 90%) had been packed in 211 sports bags before being loaded into the cereal shipment. The port of departure was Montevideo and the final destination was the seaport of Hamburg (Germany).

Paraguay: logistical rear base for the Southern Cone?

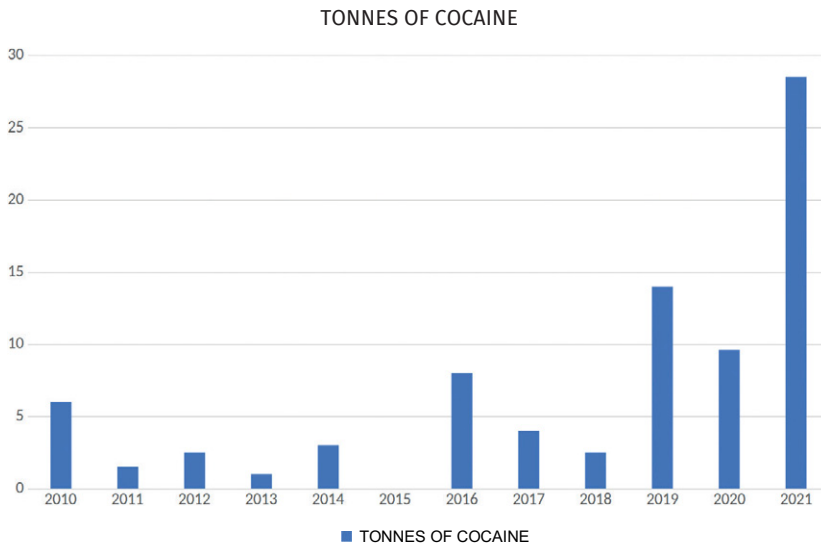
On 28 July 2021, the Paraguayan police discovered 3.4 tonnes in a warehouse in the capital region of Asunción. It represents the largest cocaine seizure in the country's history. Destined for Israel, it was due to embark at the port of Buenos Aires and transiting in Antwerp.

Paraguay is a landlocked country on the border with Bolivia and southern Brazil (the States of Mato Grosso do Sul and Parana, where the largest cocaine seizures are made). Over the period February 2020–July 2022, more than 10 seizures of cocaine in excess of 500 kilograms were made on shipments transiting via Paraguay and HPP. They were carried out in Belgium (11 tonnes), Spain, Portugal, the Netherlands, Germany (16 tonnes) and Côte d'Ivoire.

The substances seized were cocaine hydrochlorate and ready-to-use products including crack cocaine. This means that the laboratories are located between the production areas and the HPP.

Figure 23. Volume of cocaine seized on the Paraná – Paraguay – Rio del Plata river-sea route over the period 2010–2021 (in tonnes)

Source: UNODC - Cocaine Global Report, 2023 Produced by Guillaume MANET



This phenomenon of the criminal imbibition of territories, like an oil stain, deserves to be analysed in relation to other psychotropic products such as heroin, hashish and synthetic drugs and the corresponding production areas.

3. The Indian Ocean: a crossroads of influences?

The Indian Ocean is establishing itself as an area of international interest, acting as a transit region and a multi-product exchange point between growing/production areas and consumption zones. With its ‘compact shape and relatively narrow entrances’¹⁰, it is positioned at the crossroads of worlds, and traversed from all directions: Asia to Europe and the Atlantic to the Pacific. International shipping rubs shoulders with local fleets. It is a natural outlet for opium-producing countries (Golden Triangle, Golden Crescent), feeding the southern route to Europe known as the ‘smack track’. But this maritime area is also the logistical outlet for clandestine laboratories marketing precursors and synthetic drugs produced in Asia. It is also a staging area for cocaine flows from the South Atlantic to Oceania. There is still a

¹⁰ Hervé Couteau-Bégarie, *Géostratégie de l’Océan Indien*, Économica, 1993. The Indian Ocean is the only one of the three oceans that is not open to the two poles. It is divided to the north by the Red Sea and the Persian Gulf, to the east by the Malayan and Indonesian Straits and to the west by the Cape of Good Hope.

considerable amount of research to be done to refine our knowledge of the threat. Nonetheless, a few targeted focuses will help you to grasp the main issues.

2021 was a turning point in the transit role played by South Africa in the southern hemisphere. The maritime connections between the Brazilian port of Santos and the South African port of Durban facilitate imports of illegal substances. This new geo-economic reality has been fully exploited by powerful criminal organizations which have established themselves in South Africa, like Nigerian brotherhoods and Bulgarian groups. The deterioration in the security situation in these two areas can be analysed as a relevant indicator. The port of Durban is a major regional hub: Second container port in Africa, fourth port in the southern hemisphere (just behind Santos). This state of affairs is confirmed by the seizures made on flows leaving Durban in at least thirteen destination countries, including Australia, India, Hong Kong, China, Pakistan, Timor-Leste and the United Kingdom. Does the proximity of two Portuguese-speaking countries (Mozambique and Angola) accentuate the phenomenon? Moreover, the jihadist-inspired armed insurgency in the Cabo Delgado region of northern Mozambique has created areas of instability conducive to the development of illicit trafficking. In April 2021, senior members of the PCC, Brazil's powerful narco-organization, were arrested in the capital, while in October, five tonnes of cocaine were intercepted on the docks of the port of Rio de Janeiro en route to the former Portuguese colony. As in the Southern Cone, the oil-spill effect also seems to be operating on the eastern side of Africa, in Tanzania, Zambia and Malawi.

South Africa¹¹,

On 18 October 2023, the South African police inspected a container ship from Brazil on its arrival at the port of Durban, and discovered 200 blocks of cocaine concealed in 20-litre paint cans. The estimated street value of the drugs, which appear to have been destined for the northern province of Gauteng, is €3.5 million.

India: the new South American narco-kiosk?

On 5 April 2023, a Sri Lankan vessel was intercepted off the coast of Kerala (India), carrying 300 kilograms of heroin and weapons indicating that narco-terrorism is flourishing in Sri Lanka. India's Narcotics Control Bureau (NCB) has also stated that Mumbai, India's biggest centre for cocaine consumption, is now also the transit point for the main drug cartels supplying India. India is one of the world's largest manufacturers

¹¹ <https://www.sanews.gov.za/south-africa/saps-leads-r70-million-drug-bust-durban-harbour>

of potassium permanganate, a precursor chemical, and the Latin drug cartels are now suspected of moving cocaine processing there.

4. *Technology and maritime drug trafficking*

Drug trafficking constantly stimulates the appetites of criminal organizations faced with an expanding international market and ever-increasing earning potential in a highly competitive context (between criminal organizations and the increased mobilization of public authorities). Research and development of technical resources are therefore at the core of organized crime strategies. They are part of a drive to make both physical and intangible flows more opaque, while also contributing to a vital need for security and confidence in their illicit operations.

4.1. Underwater drones: the key to logistical autonomy?

Drug trafficking relies first and foremost on multimodal international logistics, with the confidential nature of its activities as its key feature. The previous chapters have illustrated the quest for complete autonomy (dedicated fleet) or sectoral autonomy (contamination technology) in maritime transport. The narco-sub flotillas demonstrates one of the extreme manifestations of a confidential and autonomous expedition based on quasi-military know-how and the search for stealth transport techniques.

The current prospect for development is the use of underwater drones, which has been democratized by the Russian-Ukrainian conflict, not only for land operations but also for maritime operations. It is already used by security forces as part of the State's actions at sea or during ship monitoring operations implemented by the port State (imposed by international conventions). Underwater drones are vehicles capable of operating without a human being on board, or even without remote control or human operation. Easily available and cheap, the drone imposes a strategy of the weak to the strong, multiplied by the vast expanse of the underwater domain. It therefore poses a diffuse threat to lines of communication and maritime missions. This singular field is undergoing major developments in terms of both technology and research. Several scenarios¹² for the use of underwater drones in drug trafficking can be envisaged:

- **Autonomous vector for transporting illicit substances** ensuring stealth and traceability for sponsors. The main issues are the

¹² See Australia's Trade and the Threat of Autonomous Uncrewed Underwater Vehicles, RMIT University, <https://www.rmit.edu.au/research/centres-collaborations/cyber-security-research-innovation/autonomous-uncrewed-underwater-vehicles>, accessed on 26/10/2023.

autonomy of the vehicle and the methods for launching and recovering the drone at its destination. This type of use has been deemed as highly likely.

- **Auxiliary for underwater operations** designed, for example, to attach/detach torpedoes from a ship's hull.
- **Coordinated physical attack by drones** on critical infrastructure and communication lines. The submarine would lay obstacles to maritime navigation (real or fictitious mines laid on the surface, by submarine or in ports, etc.). It could also carry explosive charges. Given the low cost of acquisition or design, this use case could be implemented by actors involved in organized crime as subcontractors for the benefit of other hybrid organizations. This scenario is deemed as probable.
- **Support for cyberattacks** targeting critical underwater, maritime and port infrastructures.

This complex *modus operandi* would seek to undermine the availability and integrity of data, particularly in relation to maritime safety systems (geographical positioning of ships, maritime cartography, communications, etc.). Through its cybernetic capabilities, it could take part in elaborate manoeuvres aimed at deceiving or duplicating maritime and port communications between different vectors but also between vectors and infrastructures (command and control device, electrical substations, etc.). To further increase the effects in a maritime or submarine theatre of operations, a massive coordinated attack could be envisaged using one or more swarms of drones. Stealthy by construction, it has the advantage of being difficult to attribute to its sponsor. This scenario, which still requires major technological developments, is seen as unlikely at present.

These ever-changing technologies are currently being developed through the use of Artificial Intelligence and Machine Learning. They do, however, raise a number of major questions, particularly in terms of the ethics of the ultimate decision. Can the decision to use such weapons be entrusted to algorithms? This democratization of the use of dual-purpose underwater drones also raises questions about the prospects for their proliferation to hybrid or even organized crime actors. Extending the use of drones in this way will require international coordination measures in the future, which are likely to have an impact on the principles of international maritime law.

Faced with these unresolved issues, these remotely operated vehicles need to mature. In the current state of the art, drones have limitations in terms of navigation autonomy and links between the pilot and his underwater vehicle, in particular the Internet, the range of which is slowed down in a marine environment.

4.2. Cyberattacks: an irresistible change in modus operandi?¹³

Organized crime is evolving in an increasingly sophisticated and digitized legal environment, to which it is adapting with agility and continuously. Maritime value chains and port coordination have become increasingly important as the actors involved, the infrastructure and the cargoes transported have become increasingly digital. Data – the driving force behind energetic and informational activity – passes through ocean spaces. In addition, maritime vectors are inevitably part of complex interactions and influences at sea and with land-based operators. Data is the umbilical cord. Finally, port communities have built their power on hyper-connectivity. As a space for the synthesis of multimodal logistics chains – a committed actor in the dynamic virtualization of exchanges – these strategic coordinations are at the heart of the pressing desires of malicious actors, who are members of a criminal thalassocracy to which narco-organizations belong. Greedy for profit, it has turned data sovereignty into a powerful means of blackmailing the maritime community.

To illustrate this standpoint, we will look at the interconnected supply chain as a point of vulnerability for port communities exploited by the most powerful narco-organizations. The complexity of international trade has made it necessary to develop interoperable management systems for the various actors in the port logistics chain. Designed from the outset with a multimodal and international approach, they help to consolidate the value chain, as the following examples demonstrate:

- **Port Community Systems (PCS)**: this software streamlines procedures for freight transport operations. Its purpose is to facilitate land-sea dialogue and data exchange. This is a fundamental prerequisite for the emergence of a flexible logistics chain that complies with customs requirements linked to the international movement of goods and merchandise.
- **Cargo Community System (CCS)**: this system links public actors (customs authorities, police, veterinary and phytosanitary bodies, etc.) and private actors (shipping agents, forwarding agents, handlers, exporters and importers, container depots). In other words, CCS connects the hinterland to all modes of transport, both pre- and post-carriage.

¹³ See *Bataille d'intelligence : les réseaux internationalisés de cybercriminalité Vs les coordinations stratégiques des communautés portuaires*, by Florian MANET, in *Intelligence portuaire, Opération, Innovation, Projection*, Les Océanides, Tome VIII, Fondation SEFACIL, 2024, <https://www.sefacil.com/literaturesecond/>

In total, the entire global port ecosystem has initiated and generalized the exchange of digital information¹⁴ between ports on maritime links, the management of calls and the dematerialization of documents at border crossings. Over time, ports have become truly integrated digital platforms in a one-to-many mode: many actors connect to their information systems via the PCS or CCS. The levels of security and risk awareness vary widely. Digitalization is undoubtedly a historic growth driver. Against a backdrop of malicious cyber threats, it is now time to make the choice to better harmonise or prioritise cyber issues versus business issues. To what extent can supply chain links accept having operations slowed down by cybersecurity protocols or lack of IT security updates?

Criminal organizations have already demonstrated their interest in the digitization of port operations and access to data. In effect, the recovery of illicit products in the port area is a high-risk phase. The information systems used to manage container movements at the Belgian port of Antwerp¹⁵ were infiltrated by hackers working for transnational criminal organizations over a two-year period starting in June 2011. The first stage involved sending an email containing malicious software or malware to company employees. Then, in response to the IT protection measures put in place, the hackers allegedly found an alibi to intervene in situ on the IT equipment, installing a keylogger device on the computers. In this way, they had access to the thread of exchanges and screenshots. This invaluable information then enabled criminal organizations to facilitate the delicate task of locating contaminated containers on the Antwerp quays. Thus avoiding all customs controls.

The prospects for digitalization of the port value chain give rise to further reflections on the overall resilience of the international trade system. Let's illustrate our point with the case of the deepwater port of Yangshan in China. An extension of the world's leading port, Shanghai, this container terminal has managed to fully automate its ship-to-shore gantry cranes since 2017. Reducing human intervention to a minimum, this global process of automating port facilities combines the facilities offered by information technology (IT) and the Internet of Things (IoT). Under the supervision of highly qualified staff, remote control delivers better performance and lower operating costs than traditional terminals. 130 automatically controlled vehicles (AGVs) operate in the terminal, along with 21 overhead travelling cranes and 108 rail cranes, covering an area of 2 million square kilometres, some of it reclaimed from the sea. It aims to manage the movements of more

¹⁴ The European authorities are encouraging the electronic exchange of information to ensure the smooth transit of goods. European regulation 2020/1056 of 15/07/2020 *Electronic Freight Transport Information* (eFTI) will apply to all Member States from 2025.

¹⁵ <https://www.bbc.com/news/world-europe-24539417>, consulted on 26/03/23.

than 6.3 million TEUs. What will happen when the cartels control the information systems of these smart ports?

As a result, the attack surface area of the ports increases accordingly. As well as putting port services out of action, it is feared that the previously manual sensors and computer control systems will be remotely controlled, as will port machinery (cranes, gantry cranes, gangways, etc.). Finally, there is a risk of data breach from all the goods handled by port equipment or stored on loading docks. Resold on the dark web, they can be used for blackmail, unfair competition or to destabilise organizations.

4.3. Can crypto-assets facilitate transactions and build trust?

The¹⁶ crypto-assets are part of a political project dating back to the 1980s, which aims to create a free electronic currency, outside the control of the State and its central banks. The idea is to create ex nihilo 'an internet currency based on an internet of money'. Based on a decentralized digital network, tokens are envisaged as electronic payment units. Satoshi Nakamoto's seminal paper¹⁷ published in 2008 describes precisely how a protocol works to produce an unforgeable ledger using the peer-to-peer computer network - the blockchain - as the technological layer of a new cryptocurrency called Bitcoin. This blockchain is the equivalent of an accounting ledger that is accessible to everyone, and can be consulted and verified. This eliminates the need for a trusted third party, which is generally required for transfers of securities. This disruptive IT revolution ensures the traceability and authenticity of transactions, whose history and chronology are certified by the time-stamping of the block and by an electronic signature. This is based on asymmetrical cryptography using a pair of keys, one private, the other public. These assets have been seamlessly integrated by the criminal thalassocracy which has developed uses in terms of acquisition and transfer of illicit funds, money laundering and even potential interconnection with the financing of terrorism.¹⁸

This digital financial system is remarkably flexible and adapted to specific uses. Some virtual assets are convertible between themselves or with fiat currencies (euros, dollars, roubles, etc.) via crypto-to-fiat or crypto-to-crypto exchange platforms. At the crossroads between the financial system for exchanging fiat currencies and that for crypto-assets, these platforms are neither regulated nor even harmonized internationally. Guarantees of Know Your Customer status and compliance with public authorities vary from

¹⁶ See Revue du Groupe de Réflexion sur la criminalité organisée, GRASCO, n°26, May 2019, Florian MANET, *La crypto-criminalité, défi de l'économie 2.0.*

¹⁷ Behind this pseudonym probably lies the collective of the founders of Bitcoin and the first *blockchain*.

¹⁸ TRACFIN, Annual Report, *Trends and analysis of money laundering and terrorist financing risks in 2017-18* '.

company to company. In fact, they open up unimaginable opportunities for criminal organizations, who have witnessed many of the obstacles and weaknesses inherent in their international financial operations removed. Especially as blockchain offers faster transaction execution, whatever the amount, than interbank networks. Here are some common examples of use:

Foreign exchange platforms – trusted third parties for criminal operators

While the majority of crypto-asset exchange platforms strive to comply with trust and transaction tracking requirements, some are receptive to the needs in terms of anonymity demanded by illicit actors.

For example, Operation Avaricious¹⁹ carried out by the US authorities targeted a Russian – the mastermind behind the BTC-e website – one of the most dynamic platforms for exchanging crypto-assets and fiat currencies. Arrested in Greece in July 2017, he is accused of operating an exchange site facilitating transactions based on ransomware, identity theft and trafficking in illegal products. This site enables anonymous transactions to be carried out, requiring only a username, password and e-mail address. Worse still, it provided advice on how to conceal these flows.

Cyber money mules

Like drug mules, criminal organizations seek out financial agents whose bank accounts they use to transfer dirty money. Targeting the unemployed or people in precarious situations, they offer genuine job opportunities with the promise of substantial commissions, for a low workload and little prior training. They then receive illicit funds in their own bank accounts. Once they have withdrawn the funds, they send them abroad either by post (letter/package) or via a money transfer service such as Western Union or, now again, via a crypto-asset exchange platform. In return for their services, the “couriers” receive a commission.

In this particular context, blockchain contributes to the investment phase of money laundering operations by making transactions anonymous and traceable.

Transferring funds worldwide

Crypto-assets are ad hoc instruments that facilitate the transfer of funds from one country to another through clearing operations, while making it more difficult to detect illicit traffic. Operation Tulipan Blanca²⁰ carried out in April

¹⁹ Quoted in “Virtual currencies money laundering typologies”, published by EUROPOL on 31/12/2017. Not classified.

²⁰ <https://www.google.com/search?client=ubuntu&channel=fs&>

2018 by the Spanish Guardia Civil with the support of Europol, the Finnish police and the US Homeland Security Investigations illustrates the modus operandi employed by criminal organizations exploiting the merits of blockchain. Aware of the vulnerabilities presented by placing illicit funds in multiple bank accounts, this Spanish criminal organization, which specialises in drug trafficking with Colombian cartels, converts its assets into crypto-assets via a foreign exchange platform based in Finland. So, on the same day, to avoid any price fluctuations, the Colombian traffickers take possession of the exact amount of the illicit transaction by accessing the wallets set up by the Spaniards when they bought Bitcoins and stored them on the blockchain. Transmission of the private key then unlocks the funds, which can be integrated into the legal financial system or used as such in Bitcoins or converted into other, even more untraceable crypto-assets via crypto-to-crypto platforms.

All in all, the digitization of financial transactions is an agile and timely accompaniment to the rise of international trafficking in illicit substances. It removes the biggest obstacle to this criminal capitalism: the lack of transparency of capital movements, in complete confidence. This facilitation of international financial transactions is also a rich source of support for investigative services.

Criminal thalassocracy: an unmasked actor in international drug trafficking?

International drug trafficking is emerging as a major international criminal activity. As well as the diversity in terms of the substances exchanged, it also bears witness to a wide range of operating methods observed in the chartering of increasing quantities. Stimulated by the globalization of trade in goods and encouraged by technological progress, it is part of the dynamic of a constantly expanding consumer market. Seemingly inevitable at first sight, this trend is confirmed both in terms of the volume of drugs consumed and the growing surface area of consumption areas and their yields. What's more, it demonstrates a high degree of logistical sophistication, embedding itself in globalized supply chains or deliberately creating its own chartering arrangements. Sometimes resorting to legal channels, this illicit trade unites a particularly varied, complex and efficient human value chain around these clandestinely processed materials throughout the process. How is such a mechanism coordinated across the continents? Who are the 'great watchmakers' of this industry, if there is such a thing? What are the regulating factors? How can we ultimately measure its impact on the overall socio-economic public order?

An active member of transnational organized crime (1), criminal thalassocracy benefits from a criminal capitalism (2) that has evolved over time from the founding fathers (3) to today's disintermediation (4). It disrupts the socio-economic balance of port cities (5).

1. Criminal thalassocracy: an active member of organized crime?

1.1. A maritime incarnation of organized crime?

Criminal thalassocracy is clearly an integral part of organized crime. Despite the absence of a universal definition of this criminal phenomenon, there has been an effort to unify the concept through international or regional

conventions which, once ratified, have seen their provisions incorporated into State national law. The Vienna Convention signed on 20 December 1988 on drug trafficking and money laundering and the two New York Conventions¹ are precursors to the Palermo Convention on organized crime, adopted by the United Nations General Assembly on 8 January 2001. It is true that the European Union had already included rules on certain serious offences in the 1997 Amsterdam Treaty, recommending the adoption of *'measures establishing minimum rules relating to the constituent elements of criminal acts and to penalties in the fields of organized crime, terrorism and illicit drug trafficking'*.² Thus, these international texts constitute unifying references for domestic law which, at times, has been able to deviate from them. In this ever-evolving normative backdrop, how can we define organized crime? What common features emerge beyond national legislation to allow for the international prosecution of these offences? These issues are fundamental to the challenges posed by international drug trafficking.

Firstly, in 1994, a UN world conference was held in Naples to determine a global strategy to combat transnational crime and money laundering. In the course of the work, a transnational criminal organization was defined as *'group organization to commit crime; hierarchical links or personal relationships which permit leaders to control the group: violence, intimidation and corruption used to earn profits or control territories or markets; laundering of illicit proceeds both in furtherance of criminal activity and to infiltrate the legitimate economy'*.

The Palermo Convention goes on to propose a highly operational definition of a criminal organization: *'a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit'*.

In addition, on 21 December 1998, the Council of the European Union defined³ the offence of participation in a criminal organization as *'a structured association, of more than two persons, established over a period of time and acting in concert with a view to committing offences punishable by deprivation of liberty (...), whether these offences constitute an end in themselves or a means of obtaining financial advantages and, where applicable, unduly influence the operation of public authorities'*.

¹ The Convention of 15 February 1997 deals with the suppression of terrorist attacks, while the Convention of 9 December 1999 deals with the financing of terrorism.

² Article 31 of the Amsterdam Treaty.

³ Quoted by Jean PRADEL in *Les règles de fond sur la lutte contre le crime organisé*, December 2007.

All in all, over and above these various conventions and national legislative provisions, the characteristic features of the concept of organized crime nevertheless emerge. They already have powerful echoes in the activities of maritime drug traffickers. There are two distinctive features: multiple perpetrators and the seriousness of the offences. Universally, at least two members are sufficient to characterise the existence of an organized criminal structure. This is the famous 'organized gang'⁴ in French criminal procedure, which differs from the 'criminal association'⁵ which is a fully-fledged offence and not an aggravating circumstance. French law accepts two people as the minimum number of gang members, while Spanish law is in line with the Palermo Convention and therefore requires three gang members. In the eyes of the legislator, the organization thus highlighted guarantees the effectiveness of the reprehensible undertaking and its durability over time. Let's apply this to the maritime and port sectors. No undertaking or expedition can be carried out alone. The crew of a sailing boat require at least two or three skippers. Contaminating a container or the superstructure of a merchant ship requires a number of different skills, especially when the loading site and destination are located on distant continents. Consequently, the criterion of multiple perpetrators is a commonplace that goes without saying when it comes to maritime drug trafficking.

The second fundamental element is the seriousness of the reprehensible acts. With this in mind, some laws specifically list the offences that fall within the scope of organized crime. In France, Article 706-73⁶ of the Code of Criminal Procedure lists 16 offences. Admittedly, the various offences vary from one country to another, but a common core emerges with a few nuances. These are essentially:

- offences against the person (organized gang [OG] murder; torture and acts of barbarism; drug trafficking offences; kidnapping committed in an OG; trafficking in human beings; procuring/pimping; facilitating unauthorized entry, movement and residence of a foreigner in France committed in an OG; undeclared work);

⁴ Article 132-71 of the Criminal Code states that 'an organized gang within the meaning of the law is any group formed or any agreement established with a view to the preparation, characterized by one or more material facts, of one or more offence(s)'. This is therefore an aggravating circumstance.

⁵ Article 450-1 of the French Criminal Code states that "any group formed or agreement established with a view to preparing, as evidenced by one or more material facts, one or more crimes or one or more offences punishable by at least five years' imprisonment constitutes a criminal association". This is a full criminal offence.

⁶

<https://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000006071154&idArticle=LEGIARTI000006577776&dateTexte=&categorieLien=cid>

- offences against property (robbery committed in an OG; extortion; destruction, damage and deterioration of property committed in an OG; robbery committed in an OG);
- counterfeiting;
- acts of terrorism;
- weapons offences committed in an OG;
- money laundering;
- and environmental damage (gold mining).

A brief analysis of the offences set out in this article of the French Penal Code shows that drug trafficking can involve many of them simultaneously.

Now that the legal definition of organized crime has been established, let us look at its operational characteristics. For this purpose, based on Maurice Cusson's 10 criteria⁷, the European Union defines organized crime according to whether the criminal structure involved meets at least six of the following 11 criteria⁸, but requires three fundamental elements to be present (points 1-5-11):

- 1. more than two people working together;**
2. specific tasks assigned to each person;
3. over a fairly long or indeterminate period of time;
4. with a form of discipline or control;
- 5. whose members are suspected of having committed serious criminal offences;**
6. acting at international level;
7. using violence or other means of intimidation;
8. using commercial or commercial-type structures;
9. engaging in money laundering;
10. exerting influence on political circles, the media, public administration, the judiciary or the economy;
- 11. acting for profit and/or power.**

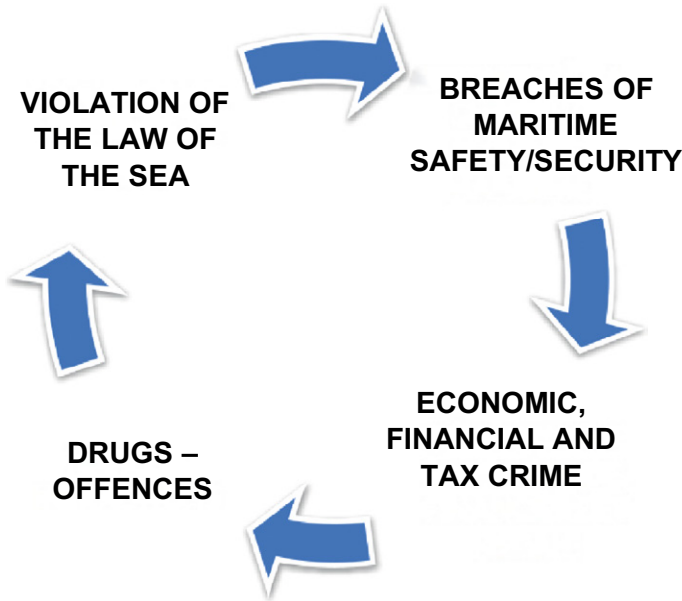
All in all, maritime drug trafficking offences meet most of the criteria set out by this famous Canadian criminologist. The various case studies presented in this book illustrate this on a systematic basis. Therefore, a criminal thalassocracy is undoubtedly an incarnation of transnational organized crime applied to the maritime and port ecosystem.

⁷ Born in 1942 in Montreal, Maurice Cusson is a Canadian criminologist and professor. He was head of the School of Criminology at the Université de Montréal. He has devoted his work to analysing issues relating to crime, from prevention to crackdown. He set out to describe the mechanisms of delinquency, emphasising the dimension of social control and the cycles specific to crime.

⁸ Criteria 1, 5 and 11 are imperative.

Figure 24. Modelling of the criminal ecosystem of international drug trafficking

Produced by Guillaume MANET



1.2. Is corruption a criterion for successful operations?

To conclude, it is worth shining the spotlight on the phenomenon of corruption as practised by the criminal thalassocracy. This is a recurring *modus operandi* that appears to be a fundamental success criterion, particularly in view of the financial stakes involved in shipping illicit substances. It aims to remove major obstacles in the logistics operation:

- by obtaining access to reserved areas;
- by remedying the lack of control over internal procedures for managing ships and containers;
- by making the journey of contaminated containers from the ship to exiting the port facilities safer and more reliable.

Using a variety of operating methods, from simple conviction to physical threats, the aim is to win the complacency or even the ‘active collaboration’ of people at all levels. They all have one thing in common: they are positioned at key points in the value chain. On the quayside, this includes security guards, agents in charge of controlling video protection systems at port facilities, cargo handlers, stevedores⁹, drivers of road vehicles, as well as port

⁹ The stevedore is a contractor responsible for stevedoring, i.e. the handling of goods (loading, stowage on board a merchant ship or unloading).

operations managers and public actors in charge of customs or security operations (police, private security) with access to port data such as the Port Community System. But concrete examples have regularly shown that seafarers are also in great demand for their essential skills, as are skippers, crew members on merchant ships or cruise ships, etc. We must not overlook the key target represented by the State forces responsible for policing at sea or surveillance of the maritime approaches. In summary, it is the comprehensive nature of the port ecosystem that can be the object of approaches and the target of corruption measures. A criminal organization will not simply target a single port. It must be able to adapt to changes in shipping routes, either sudden (e.g. damage requiring a diversion to another port) or deliberate (e.g. escaping police pressure concentrated on one port or anticipating changes of post by corrupt officials).

The seductive power of narco-organizations is often unsustainable for actors in the port value chain. The remuneration is, in fact, a share of the profit estimated on the basis of the added value provided by this temporary employee. It is either in kind ('the product') or in value (in cash). For example, agents involved in the safe extraction of contaminated containers can receive between 7% and 15%¹⁰ of the value of the illegal cargo, depending on their role. These include port gantry operators and container management staff. Other active members, such as recruitment teams, truck drivers and IT staff responsible for managing containers and movements at the port, can receive sums in excess of several hundred thousand euros. In Costa Rica, an operator in charge of scanning goods earns US\$90 000 for facilitating the passage of a contaminated container. In the case of the GAYENA, a merchant ship carrying 20 tonnes of cocaine, the ordinary Montenegrin seaman received more than US\$80 000 for facilitating transshipment operations on the high seas. How many months or even years of regular work does such a sum of money correspond to?

With that in mind, how could one resist the temptation of such a reward? How can port or public authorities protect their employees in view of such offers? What pay policies should be implemented to remain competitive with wealthy illegal organizations? What management measures can be devised to protect staff? This challenge is vital but particularly difficult to overcome. In addition, this situation is playing out against a backdrop of international competition between ports, where the performance of the workforce and the fluidity of port operations are the criteria of choice in the attractiveness of a specific destination.

¹⁰ See *Criminal Networks in EU Ports, Risks and Challenges for Law Enforcement*, EUROPOL, 30/03/2023, <https://www.europol.europa.eu/publications-events/publications/criminal-networks-in-eu-ports-risks-and-challenges-for-law-enforcement#downloads>, accessed 12/12/23.

The fight against corruption remains a priority for governments. It undermines trust, weakens governance and hinders economic development, exacerbating inequality, poverty and the social divide.

1.3. Seaports infiltrated by drug organizations?

What is more serious is the fact that the management committees of the seaports of Antwerp (Belgium), Rotterdam (Netherlands) and Hamburg-Bremerhaven (Germany), in association with the European Police Agency EUROPOL,¹¹ have uncovered mechanisms facilitating the infiltration of port organizations by criminal structures. The modus operandi demonstrates a mastery of port procedures and an exploitation of the vulnerabilities specific to the container management system on the rights of way. The criminal organization relies on insiders or agents who have infiltrated the port facility, either by corrupting legitimate actors or by sending members of the criminal network into the port facilities. They act in the same way as a team extracting contaminated containers from secure premises. They physically penetrate these enclosures in a concealed manner, as in a 'Trojan horse container' scenario. An accomplice with a legitimate business name transports a container in which this dedicated team is hidden. This procedure is based on prior knowledge of the reference codes specific to each container. The maritime logistics chain relies on a number of actors with well-defined roles. The key link between the shipper and the consignee is the sea freight forwarder, whose job is to organise the transport of the cargo. In addition to the physical organization, and in compliance with international Incoterms standards, it handles the administrative formalities associated with transport, including insurance certificates, legal and customs formalities, and the export file (bill of lading, packing, certificate of origin, commercial invoices). The Bill of Lading is a document issued by the carrier or its agent to the shipper. It certifies that the contract for the carriage of goods has been fulfilled. The bill serves as an acknowledgement of receipt of the goods, guarantees payment to the shipper and acts as title to the goods. It is legally valid. In this way, the shipping line assigns a unique code to the container, in the form of a PIN or QR code, which ensures traceability and also the legitimacy of the actors involved in handling or transporting the freight. The insiders then aim to share this identification code with the criminal organization.

¹¹ *Criminal Networks in EU Ports, Risks and Challenges for Law Enforcement*, EUROPOL, 30/03/2023.

2. Criminal thalassocracy and criminal capitalism

2.1. The criminal thalassocracy, a partnership enterprise

Drug trafficking is a truly commercial enterprise, operating from end to end. By construction, it involves a variety of professions associated with specific know-how. A wide range of professional skills are required in cultivation, chemical processing of raw materials, packaging, multimodal and international shipping, and marketing for consumption. The glue that binds this multinational criminal enterprise together is the precision with which it is coordinated on particularly vast spatial and temporal scales. by way of illustration, Lima, the capital of Peru, is 10 200 kilometres from Paris. A merchant ship, travelling at an average speed of 12 knots, covers 9 750 nautical miles, or more than 9 000 kilometres, to reach Northern Range ports such as Rotterdam from the Brazilian seaport of Santos. Sailing at an average speed of 8 knots, the journey is estimated to take 25 days. There's no need to mention other forms of overland transport (on foot, by vehicle, by pirogue or light aircraft, etc.) between production and processing sites and the main ports, particularly in the Andean region or Afghanistan.

The organization of these complex businesses reveals a criminal architecture that reflects a certain diversity adapted to the terrain of the business. It generally takes the form of a pyramid. At the top are the sponsors, the drug barons, the cartel leaders, who organise or, more accurately, have organized this prosperous trade. To be on the safe side, both physically and legally, they take a step back and leave their close colleagues 'with their hands in the powder'. To do this, they rely on relays, lieutenants - in the truest sense of the word - who take the place of the leader, responsible for setting the organization in motion. Lastly, the relatively broad base is made up of the labourers, the operatives who apply the skills which, combined with each other, contribute to the routing of substances throughout the logistics chain. They are often technicians and logisticians in charge of preparing and processing raw materials, drivers, lookouts, suppliers of equipment or mobility, intelligence agents including corrupt public officials in port authorities or operators, transport companies, customs or police services. Sailors, professional or by fortune, complete the gallery in order to equip the dedicated boats. They can also be recruited from crews that have already been formed, thus acting as relays for the criminal organization within the arms industry. The example of the MSC GAYANE is, in this respect, illustrative of the cartels' ability to identify, target, corrupt and retain the human resources essential to the smooth running of illicit trafficking. They are paid for their work in cash or in kind, in the form of a quantity of narcotics.

Alongside this pyramid, sponsors have built up a criminal toolbox in which they draw on rare, high value-added and often hybrid skills. These are service providers. There are multihull skippers and naval architects who can draw up plans in order to make optimum use of the hiding places in sailing boats and narco-sub. These talented individuals can work on several types of craft. For example, the Galicians in Spain produce boats ('*narcolanchas*') for both drug trafficking and migrant smuggling in the Mediterranean. Financiers are able to carry out transactions in order to acquire narcotic substances from suppliers as well as put in place the means to do so. They are also dedicated to conducting money laundering operations in international networks, mastering the global geography of non-compliance by financial institutions and public authorities alike. With their highly flexible and extensive network, they make the most of their knowledge of the law and the mechanisms of international finance. Other profiles deployed include digital officers responsible for facilitating and securing communications between key traffic actors. They use encrypted digital solutions, as recent court cases have shown.

ENCROCHAT – the WhatsApp for drug traffickers¹²

ENCROCHAT is a Dutch company offering encrypted mobile communication services. It offers Android phones enhanced with an encryption software overlay based on cryptography technologies such as off-the record messaging (OTR) or pretty good privacy (PGP), and encryption of VoIP telephone calls such as ZRTP. Encrypted exchanges do not pass through the traditional telephone network, but via servers hosted in France. In addition, an ENCROCHAT terminal can only communicate with identical terminals. Finally, as there was no sales outlets, the acquisition of a device required co-optation by a customer, often from the criminal underworld.

The first copies of ENCROCHAT devices were discovered in the Netherlands during raids on a criminal organization, the Mocro Mafia¹³.

In June 2020, the French Gendarmerie implemented a large-scale communications interception system targeting users of the ENCROCHAT encrypted network. This exceptional technical feat, shrouded in secrecy, allowed investigators to access the live conversations of around 60 000 users in real time. A total of 120 million messages were analysed, enabling investigators to 'sit at the criminals' table and listen in on their conversations'. This dive into the heart of organized crime¹⁴ has enabled us to disrupt numerous criminal networks, as evidenced by more than 1 000 arrests in addition to the 10 tonnes of cocaine, 1.2 tonnes of crystal methamphetamine and several hundred kilograms of cannabis seized, and the dismantling of 19 clandestine laboratories. The money laundering dimension gives us an idea of the prosperity brought by these illicit activities. During his operation, more than 80 luxury vehicles, pleasure boats, EUR25 million and GBP54 million in cash were seized.

¹² Violette Lazard, '*Hackers contre dealers*', *L'Obs*, no. 2924, pp. 56-59.

¹³ Mocro-Mafia is a Moroccan mafia-style organization specialising in the international trafficking of cocaine and synthetic drugs. It is mainly based in the Netherlands and Belgium.

¹⁴ <https://www.gendinfo.fr/enquetes/2020/retour-sur-l-affaire-encrochat>, consulted on 12/11/21.

More broadly, and beyond the major obstacles to criminal communication infrastructures, this immersion in the heart of transnational organized crime has enabled us to gain a better understanding of criminal organizations and to confirm the importance of the maritime vector in the dynamism of the criminal drugs market.

Lastly, it reflects the investigative capabilities of the European judicial police services, with the support of EUROPOL¹⁵ and EUROJUST in particular.

This pyramid structure is based on the firm principle of compartmentalization between the various links in an often highly autonomous criminal chain: each link is unaware of the activity and identity of the previous link. This organizational measure of absolute opacification is part of an ongoing search for operational security, a major factor in its eventual success. Its purpose is to undermine and defeat the law enforcement agencies.

However, the reality of transcontinental trafficking dictates a pattern regularly characterized by the juxtaposition of several criminal pyramids in charge of one part of the operation. Only the strongest organizations will be able to provide the whole package independently. The *Primeiro Comando da Capital* ensures end-to-end monitoring, from the purchase of the raw material, its processing, transport to Brazilian ports (in particular São Paulo), to the staging areas and even to the consumer markets. These different segments fall within distinct geographical areas which ultimately correspond to sequences of trafficking (harvesting/preparation, processing, packaging/multimodal logistics routing/recovery of illicit cargo for the resale market/repackaging/division/sale on the market). Coordination between these different pyramids is, in fact, a sensitive task given the financial stakes involved. How can you trust actors who are particularly distrustful and suspicious by nature? This is not the least of the paradoxes of this commercial activity.

Criminal organizations are constantly adapting their systems by setting up local offices or drug trading posts in new hubs. For example, it would appear that criminal groups from Brazil (PCC), Mexico (*Cártel de Sinaloa*) or even the Italian mafia have gained a foothold in the Southern Cone or in the staging areas in Africa (West Africa, Mozambique). They also rely on local recruitment to open doors, particularly in the port logistics chain.

Nevertheless, current trends are leading to the emergence of an alternative form of organization based on the self-employed entrepreneur model. The marketer endeavours to keep the number of intermediaries to a minimum, by visiting production sites in person. Favouring direct contact, he avoids using a regional criminal organization wherever possible. In a manner of speaking,

¹⁵ <https://www.europol.europa.eu/newsroom/news/joint-investigation-team-leads-to-dismantling-of-one-of-europe%E2%80%99s-most-active-albanian-speaking-networks-trafficking-cocaine>, consulted on 12/11/21.

it involves the application of the uberization principle to the criminal ecosystem.

2.2. The tortuous circuits of money laundering¹⁶

Revenue generation is the key objective of criminal organizations, as it is from this that they derive their power and influence. The business model for maritime drug trafficking is based primarily on a promise of sale from a distant consumer market. Capital is thus tied up for the duration of intercontinental logistics operations. But the pay-off is assured given the real growth in demand.

Whatever happens. Except in the case of loss of illicit freight due to competitive manoeuvres (coring), events at sea or customs seizures. The foreseeable profitability ensures a comfortable income for the entrepreneurs, who have to deal mainly with wage costs (including the remuneration of corrupt collaborators) and even transport costs if the option of logistical autonomy (chartered fleet) is chosen.

Illicit financial flows are defined as money generated, transferred or used illegally that crosses borders. Its characteristics are as follows:

- the activities carried out are themselves illegal (corruption, tax fraud);
- the funds are derived from illegal acts (drug trafficking, misappropriation of public funds);
- the funds are used for illegal purposes (financing organized crime or terrorism).

The financial circuits supporting this illicit trade are based on subtle financial opacification manoeuvres observed at all stages of the money laundering process:

- the placement or entry of illicit funds into the financial system;
- the amassing or separation of funds from their source, often via shell companies;
- the integration or return of money to the criminal from an apparently legitimate source (e.g. property).

The aim is to conceal the proceeds, sources or nature of their illicit activities. To do this, criminal organizations surround themselves with expert resources in financial operations, selecting the best tools and the least compliant financial centres in terms of international cooperation. Money laundering initially takes place ostentatiously and often locally, characterized by an exuberant lifestyle (luxury vehicles, vacations, jewellery), in durable

¹⁶ International Narcotics Control Board, UN, Vienna, 2022, Report 2021.

infrastructures (commerce, real estate, fleet of ships). Then, as success increases, the flow of money is divided up via shell companies created by front men, it becomes dematerialized, more opaque and, ultimately, takes refuge, in complete safety, in countries, offshore structures or tax havens where it brings, as discreetly as possible, the highest rate of return for its owner. This network provides traffickers and their loved ones with a foolproof life insurance policy, providing a lasting hedge against the vagaries of life. The secure and discreet prospects offered by mobile phone payments (mobile money), informal money transfer systems (hawala)¹⁷ and the various blockchains further facilitate the financial operations of narco-organizations. They clearly call into question the ability of governments to implement effective anti-fraud and anti-money laundering policies as required by international organizations. Finally, there is a third way in which illicit money flows into the formal economy, in addition to the conventional financial system and the physical movement of money: Trade Based Money Laundering. It is a system of money laundering based on the physical movement of goods through the international trading system. The Financial Action Task Force¹⁸ defines it as *'as the process of concealing the existence, illegal source, or application of income derived from a criminal activity, and the subsequent disguising of the source of that income to make it appear legitimate'*. In practical terms, this can be achieved by misrepresenting the price, quantity or quality of imports or exports. Given the current logistics of international trade, maritime transport is in fact one of the vectors combined with other money laundering mechanisms. It is a growing channel for criminal activity and, given the increase in international trade, represents an additional vulnerability that is difficult to detect in terms of money laundering and terrorist financing.

These insidious mechanisms at the heart of the laundering of illicit funds contribute to the corrupting of social institutions. This has numerous consequences for the real economy, which is perverted by the influx of illegitimate financial flows. It spontaneously creates its own autonomous value chain. Devoid of any foundation, this nurtures a lasting process of distortion of competition within the legal markets. The valuation of assets is therefore skewed, as money does not have the same value for some as it does for others. More broadly, drug trafficking has a major impact on State governance. Through its hidden financial wealth, the pressure it exerts and its power to bribe, it has established itself as a direct competitor to the authority of the State.

¹⁷ Hawala is a parallel system of international money transfer based on trust. It is widespread in South Asia and the Arab world.

¹⁸ The FATF (Financial Action Task Force) is a global intergovernmental organization dedicated to combating money laundering, terrorist financing and proliferation. Composed of 39 members and is based in Paris.

Organized crime is a constant source of funding for terrorism. This convergence of interests manifests itself in different ways depending on the cause. For decades, the FRAC-EP¹⁹ financed violent operations to destabilise the established order in Colombia through cocaine trafficking. In Afghanistan, the Taliban profited from the income from heroin trafficking, exercising priority control over the areas where poppy cultivation was most developed. It is estimated that this illicit traffic generates sales of over US\$3 billion a year. Other similar analyses could be carried out with interest on the Sahel-Saharan strip.

Accurately determining the volume and scale of illicit financial flows relating to drug trafficking is a major challenge. This calculation is the result of extrapolations based on data relating to crops, purchases of chemical precursors, the potential for illegal drug production, seizures made by law enforcement agencies, estimates of wholesale or retail sales and consumption figures. The following is a summary of these illicit traffic:

- the amount likely to be laundered by the financial system is equivalent to 2.7% of global GDP, or US\$1 600 billion (2009 estimate)²⁰;
- drug trafficking is estimated to account for 20% of world crime as a whole and 50% of organized crime, or between 0.6 and 0.9% of world GDP;
- in 2014, the global drug market was 'worth' between US\$426 and US\$652 billion, i.e. a third of transnational organized crime (estimated at between US\$1 600 and US\$2 200 billion).²¹

These figures need to be updated in light of the upward trend in production and demand, combined with the worldwide democratization of the use of psychotropic substances and the opening up of new, more lucrative markets.

2.3. Future markets?

The driving force behind organized crime is above all the pursuit of profit, which makes it possible to exert influence over criminal territories and markets. The price of a gram of cocaine available on a market can be a tool for anticipating future conquests. The same applies to other substances.

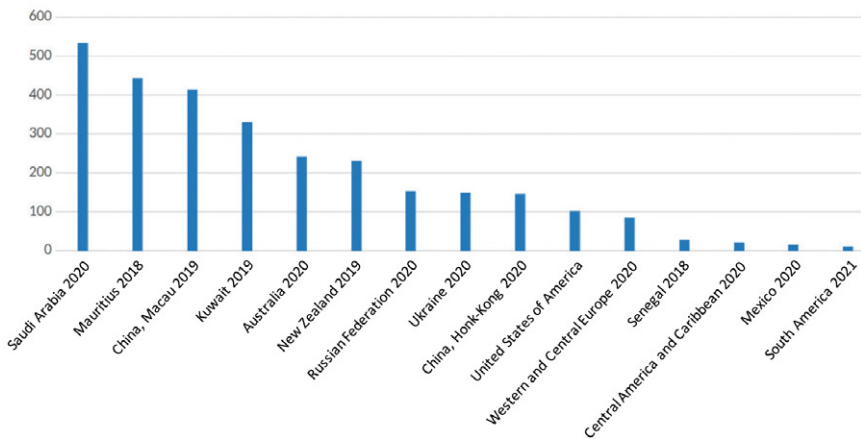
¹⁹ Steven C. McCraw, Assistant Director, Office Intelligence, FBI, testimony before the Senate Judiciary Committee, Washington, 20 May 2023.

²⁰ UNODC Report, 2011, *Estimating Illicit Financial Flows Resulting from Drug Trafficking and Other Transnational Organized Crime*.

²¹ Channing May and Christine Clough, *Transnational Crime and the Developing World*, Washington, Global Financial Integrity, 2017, Cited by UNODC, 2011.

Figure 25. Price of a gram of cocaine by country, period 2018-2020 (in US dollars)

Source: UNODC, *Global Report on Cocaine, 2023*. Produced by Guillaume MANET



The countries of South-East Asia and Oceania are emerging as some of the most lucrative markets. An economic powerhouse, a maritime and port champion and a demographic colossus, China could become a target market of great interest. At present, despite little knowledge of local criminal activity, it appears that illicit shipments of cocaine have been seized in Chinese ports (Guangdong province, Hong Kong and Lufeng). Of course, these facilities naturally appear as transit hubs before reaching Australia, for example. The trend appears to have increased since 2018, according to the UNODC. Nevertheless, we need to keep a close eye on changes in the population's addictive behaviour, particularly in Hong Kong, Macau and Taiwan. The same is true in Saudi Arabia, where the high price can also mean strong demand despite reduced availability of cocaine. These criteria can attract criminal operators.

3. Historical times: the founding fathers

In the early 1980s, an integrated, even monopolistic, system emerged in the cocaine market, in the exclusive hands of Colombian organizations. The main target was the North American market. The Colombian cartels send their cocaine shipments via the Caribbean by sea and air. However, the American authorities succeeded in banning these import methods. Thus, crossing the 3 600-kilometre Mexico-American land border became the objective to supply this rapidly expanding market. In fact, Colombian criminal organizations turn to the Mexican cartels, which have mastered the techniques of crossing the border safely.

The division of roles is clearly defined. The Colombians supply the drugs, while the Mexicans market them. This service is initially paid for in cash, then

gradually in cocaine, up to 50%. This change in remuneration helps to change the attitude of the Mexican partner, who gained a level of autonomy as a result. As the sole point of contact for American consumers, and with an increasing number of products at its disposal, it begins to impose its own rules on illicit transactions and consolidates its monopoly once and for all. The Colombians were gradually reduced to the role of suppliers of psychotropic substances.

This observed distribution of roles is coupled with geographical specialization. The Colombian cartels concentrated on the European market, which is considered to be much more lucrative. In fact, they set up a commercial strategy based on much more complex logistics, requiring them to cross the Atlantic Ocean. In the 2000s, Colombian cartels began to invest in Europe, exploiting the linguistic proximity and experience of tobacco smuggling networks and relying on criminal organizations based in Galicia²². This market is seen as more attractive and less risky than the US market. The truth is that Europe is seen as an open market, with no barriers and no great risk in terms of importing or repressing trafficking. All the more so as the European authorities are considered to have little influence in the fight against criminal organizations based in Central America and the Caribbean. Estimated figures²³ reveal the radical change in cocaine markets. In 1998, 267 tonnes were shipped to the United States, while Europe received 63 tonnes. 2008 was the turning point, with a 40% fall (160 tonnes) in sales to the United States and a significant rise of almost 100% in Europe (estimated at 124 tonnes). The financial results for 2009 definitively confirm the balance between consumer centres: Europe provides more than 50% of the profits for South American criminal organizations, while North America accounts for a third of revenues. As confirmation of this new trend, a record 142 tonnes of cocaine²⁴ were seized in 2022 in Europe and Turkey. EUROPOL estimates the value of the cocaine market in Europe at between €7.6 billion and €10.5 billion.

3.1. The Italian mafia – forerunner of Colombian decartelization

The monopoly, which was previously under the tight control of the Colombian cartels, has been eroded as other experienced actors entered the market and sought direct contact with producers.

²² Galicia is a Spanish autonomous community located at the north-western tip of Spain, bordering northern Portugal. It has 1 300 kilometres of particularly wild Atlantic coastline.

²³ UNODC, *The transatlantic cocaine market*, April 2011, https://www.unodc.org/documents/data-and-analysis/Studies/Transatlantic_cocaine_market.pdf

²⁴ <https://www.eurojust.europa.eu/publication/operation-los-blancos-dismantling-one-europes-most-active-albanian-cocaine-trafficking>

In the early 1990s, the Italian mafia (the 'Ndrangheta) emerged as the forerunner of a movement that has now become widespread. Having benefited from the successful introduction of heroin on to the American market, it made the most of the criminal infrastructures already in place and redirected the networks involved towards a new substance – cocaine – and a new production area: South America. Since then, it has established a foothold in Colombia by setting up wholesale buyers, traders and logisticians in situ. The death of Pablo Escobar in 1993 accelerated the reshaping of the criminal landscape. From a monolithic criminal organization, multiple independent structures have emerged. This disintermediation and even liberalization of control over production and placement on the market has been seen as a crucial opportunity for European criminal organizations. In fact, the Italians have implemented a global strategy aimed at controlling the entire supply chain, including stock negotiation, purchasing, safe transport and marketing in Europe. Export companies were created intentionally to act as legal fronts for legitimate economic activity, while in reality transporting illegal substances initially from Colombian ports. These legitimate legal entities were also intended to increase the capacity to launder the funds acquired through intercontinental trafficking and the substantial profits from resale. In addition to Colombia, this network of commercial companies has expanded to include neighbouring countries such as Brazil, Peru and Costa Rica. In 2008, it was estimated that 80% of the cocaine available on the Old Continent was supplied by the 'Ndrangheta.

European criminal networks have long cooperated with South American organizations. In particular, they took part in identifying the key levers within the supply chain. In the past, national communities have been key operators. Between 2016 and 2018, Italians and Balkan networks took over from the Spaniards and Dutch, who dominated during the period from 2006 to 2008.²⁵ This involvement of the European networks is also reflected in their close contacts with producers, and their presence is also reported in coca leaf processing laboratories to check the quality of the finished product before shipment.²⁶

25 UNODC - Response to the annual questionnaires sent to South American countries for the years 2006-08 and 2016-18. Quoted by EUROPOL 2021.

26 Jeremy Mc Dermott, *La nueva generación de narcotraficantes colombianos post-FARC: 'Los invisibles'*, InSight Crime, 14 March 2018, <https://insightcrime.org/colombia-organized-crime-news/urabenos-profile/>, accessed 27/11/2021.

4. Contemporary Uberization²⁷

The avant-garde trend initiated by the Italian mafia has generated a correlative phenomenon of democratization of international cocaine trafficking. The entry ticket to this once highly selective court has now been significantly lowered, as evidenced by the arrival of numerous new entrants from all criminal communities, particularly those based in Europe. The Balkan countries of the former Yugoslav Federation²⁸ (Serbia, Bosnia, Croatia, Montenegro) and Albania are major actors in this market.

The current fragmentation of actors in a criminal market previously perceived as monopolistic is the result of a slow process that needs to be clarified. The domestic situation in Colombia has reshaped the criminal landscape as a result of political decisions that have had the indirect effect of marginalising the 'Ndrangheta and diminishing its power. In 2006, the Italian organization's long-standing partner, the *Autodefensas Unidas de Colombia*, a far-right paramilitary group called AUC, was disbanded. This decision was the trigger that led to the 'Ndrangheta losing its monopoly on the transatlantic cocaine trade. Ten years later, in 2016, a second indirect blow was dealt to the 'Ndrangheta with the signing of the peace agreement between the Colombian government and the communist FARC-EP guerrillas (*Fuerzas Armadas Revolucionarias de Colombia - Ejército del Pueblo*). This peace agreement put an end to FARC's integrated command structure. It has de facto led to the emergence of various dissident groups exercising control over several cocaine-producing regions. This fragmentation of actors has encouraged the development of new alliances and partnerships with criminal organizations that were previously absent or had little presence. This is the case of criminal operators from Albania, Belgium, France and Turkey.

The fragmentation of the narco-organization landscape has provided an opportunity to diversify flows. This is also reflected in the opening up of new destinations and, consequently, the conquest of new markets. In a sense, the democratization of direct access to sources of supply has led to an internationalization of drug use.

27 UNODC and EUROPOL, *The illicit trade of cocaine from Latin-America to Europe - from oligopolies to free-for-all?*, Cocaine Insights 1, UNODC, Vienna, September 2021, <https://www.europol.europa.eu/publications-documents/cocaine-insights-1>, consulted on 26/11/2021.

28 The Balkan wars of the 1990s opened up the world to landlocked criminal organizations, which quickly and successfully spread across the globe. They are multi-connected and involved in drug trafficking (heroin from Afghanistan, cocaine from South America, etc.), arms trafficking and human trafficking (prostitution in particular). Hardened to violence in civil wars, they have invaluable military experience and rely on community links through a diaspora established throughout the world.

4.1. Are Albanian criminal groups an emerging power?

Over the last ten years, Albanian criminal groups have shown the strongest growth ever recorded in this segment. Albanian criminal identity is rooted in the history of a poor country where the majority of Albanians live outside the 'land of the eagles'.²⁹ These powerful criminal organizations rely on clan structures that are impervious to any outside infiltration, united by a customary code (the Kanun) based on blood ties and the law of silence. The permanence of the leadership of the structures contrasts with the interchangeable and mobile 'workers' whose recruitment pool is extended to the whole of the Albanian-speaking diaspora. The use of physical or armed violence is facilitated by the past of certain members within the Kosovo Liberation Army (KLA) or even among the forces of law and order. This criminal practice has been put to the test by recent involvement in cigarette, heroin and human trafficking in the Adriatic. In addition to the Montenegrin port of Tivar, the hub of these activities remains the seaport of Durrës. For a long time, it has acted as a terminal on the southern Balkan route, transporting heroin from Turkey to the major ports of Italy. Today, multi-product flows converge – both inbound and outbound – including cocaine as well as domestic cannabis production. Laboratories were detected in the town of Elbasan, demonstrating the ever-increasing role played by cocaine processing in Europe. According to EUROPOL, it appears that these organizations have acquired strategic autonomy in importing cocaine and placing it on the European market. They are now in a position to set up and supply huge end-to-end distribution networks in Europe. They have transnational coordination capabilities, forging direct relationships with suppliers in South America and with logistics operators. Since 2012, the influence of Albanian-speaking groups has been growing in major seaports not only in Latin America (Venezuela, Brazil, Colombia and Ecuador) but also in the European Union (Belgium, Netherlands, Germany, France and Spain).

The end of the exclusive monopoly of the Colombian cartels has stimulated international competition, leading to an increase in global consumption and a proliferation of increasingly opportunistic and less regular import methods. But does this new capital structure, characterized by a growing number of wholesalers upstream in the chain, lead to lower prices for these psychotropic substances?

Alongside the historical criminal operators, new entrants have burst onto the scene of this highly profitable criminal market. They come from the Balkans (Serbia, Albania, Montenegro), France, the UK, Belgium, Ireland, North Africa (Morocco, among others) and Turkey. The Balkan networks are now among

²⁹ The Albanian settlement area includes Serbia, Montenegro and Macedonia. The Albanian diaspora is very present in Western Europe, but also in Turkey and the United States.

the most active, having set up 'representations' in key production regions or shipping logistics zones. For greater efficiency and security, they act like genuine multinational companies, with trading posts rigorously positioned at key stages in the logistics supply chain. These sectors make good use of the commercial traditions that have historically focused on the sea. Unsurprisingly, they can be seen in all these port and maritime operations, both at the start of shipments and at their destination. They then connect the maritime flow with the consumer market where they are particularly well established. All in all, they demonstrate both ambition and overall mastery of the entire chain, from end to end. This trend is shared by all European countries, as shown by UNODC surveys. Initially very active in Western Europe, their presence is now recorded in Central Europe as well as in Southern Europe (Bulgaria, Greece, Romania). This is leading to new shipping routes opening up to the Aegean and Black Seas. In general, Albanian criminal operators are very active in port areas, managing contaminated containers in order to extract illicit cargo. For example, the German authorities have dismantled an Albanian criminal network dedicated to importing cocaine from Ecuador disguised in banana shipments. The investigation revealed connections with Paraguay, the Netherlands and Albania.³⁰ These Albanian-speaking organizations use the Balkan region as a springboard for the countries of the south-east of the European Union. The volume of seizures in Balkan ports is steadily increasing, as are those on the shores of the Black Sea. For example, the Romanian port of Constanta is becoming a gateway for cocaine traffic as a result of criminal coordination between Romanian- and Albanian-speaking actors. Furthermore, police authorities are noticing a convergence of drug routes in South-East Europe. Routes dedicated to heroin and synthetic drugs intersect with gateways for South American cocaine. They exploit the port connectivity offered by Mediterranean hubs such as Gioia Tauro in Italy, Piraeus in Greece and the ports of Turkey.

Albanian-speaking criminal organizations are emerging on the European scene as major actors in the illicit trafficking of narcotics. They have effective international coordination, with privileged access to suppliers in cocaine-producing countries in particular. What's more, according to police reports, these groups have succeeded in establishing a lasting presence in ports both in South America (Bolivarian Republic of Bolivia, Brazil, Ecuador and Colombia) and in Europe. Flexible and sensitive to market developments, they adapt their logistics systems to the realities of international trade. Thus, after creating bridgeheads in the Northern Range, initially in Belgium and the

³⁰ See Bundeskriminalamt, Rauschgiftkriminalität, Bundeslagebild 2018, September 2019. Cited by UNODC - EUROPOL 2021, <https://www.bka.de/SharedDocs/Downloads/DE/Publikationen/JahresberichteUndLagebilder/Rauschgiftkriminalitaet/2018RauschgiftBundeslagebildZ.html;jsessionid=F79C50F2A304B0C6BD8804E7B6D8636C.live292?nn=27972>, consulted on 28/11/2021.

Netherlands, they are expanding their presence in Germany, France³¹ and Spain. They have networks dedicated to marketing illicit products in Europe and elsewhere in the world, even as far afield as Australia. From the port hubs, they then spread to all European countries, where they have active relays. In 2018, the Greek authorities reported that 35% of those arrested were Albanian speakers, the second largest criminal group behind Greek nationals.

Albanian criminal networks:³² the Kompania Bello case

Albania is neither a cocaine producer nor a consumer country. However, its nationals are proving to be very active in this market in Europe. This poor country has found a way to increase its economic prosperity.

Initiated by the Italian State Police five years ago, Operation 'Los Blancos'³³ came to fruition in September 2021 with the complete dismantling of the Albanian-speaking criminal group known as Kompania Bello. With the support of EUROPOL and EUROJUST, a major operation involving the judicial and law enforcement authorities of ten countries led to the arrest of 20 people suspected of international drug trafficking, acts of violence and murder. Prior to this, other operations had led to the arrest of 84 people in Europe and Ecuador. Nearly four tonnes of cocaine and over €5.5 million in cash were seized on this occasion.

This investigation reveals the *modus operandi* developed by Kompania Bello in importing cocaine for the European market. Seeking autonomy, it controlled the entire logistics chain, from the shipment and chartering of narcotics from South America to their introduction onto the European market.

This criminal organization is therefore in direct contact with the South American cartels in charge of controlling production. As a result, it achieves economies of scale that have an impact on the European market. This has led to an increase in product purity and a significant drop in prices, particularly in the United Kingdom and the Netherlands. In fact, the Albanians are exploiting long-standing links with the Italian 'Ndrangheta mafia, who already employed them as henchmen. What's more, they were well versed in illicit trafficking and had proven experience of international logistics, which they learnt on the Adriatic Sea – an area reputed to be a maritime smuggling route between Italy and Albania.

In fact, Kompania Bello has set up an integrated system for importing large quantities of high-purity cocaine. The Italian prosecutors investigating the case referred to 'a transnational criminal federation made up of 14 Albanian-speaking gangs'.

31 Ports such as Montoir-de-Bretagne are regularly targeted by Albanian organizations, as in January 2018 when 294 kilograms of cocaine were seized in a container. The ship had left Santos (Brazil) and sailed to Cristobal (Panama) and Antwerp. Montoir's container flow is often *feeder*ing from ports on the Northern Range.

32 *Albanian Crime Story: Hostage to the Cocaine Supply Chain*, published in *Balkan Insight*, 1/07/21, by Klodiana Lala, <https://balkaninsight.com/2021/07/01/albanian-crime-story-hostage-to-the-cocaine-supply-chain/>, accessed 11/11/2021.

33 EUROJUST, <https://www.eurojust.europa.eu/publication/operation-los-blancos-dismantling-one-europes-most-active-albanian-cocaine-trafficking>, consulted on 11/11/2021.

A 40-year-old Albanian national, Dritan Rexhepi,³⁴ ran the criminal organization from his cell in a detention centre in Ecuador. He negotiated the purchase of large quantities of cocaine directly with the Colombian cartels using encrypted communications operated by ENCROCHAT. He then organized the chartering of cargoes from South American ports to Europe. He relied on accomplices based in the United Kingdom, the Netherlands and Albania, who transported the drugs to the points of sale using vehicles equipped with sophisticated concealment systems.

Generating millions of euros in cash, this illicit trade requires an informal financial system for transferring funds.³⁵ Established outside the conventional banking system, it is based on the principle of trust and avoids the transfer of cash between actors in a transaction that is often international in scope.

The money laundering mechanism was backed by a system for the physical or traceable transfer of alternative funds of Chinese origin known as 'fei ch'ien'.³⁶ Users of this system deposit funds in a 'branch' of the network established in a country. Another operator withdraws the equivalent amount elsewhere in the world and forwards it to the original recipient. Kompania Bello is said to have laundered several million euros through the 'fei ch'ien', leaving no trace.

Groupa America: symbol of the Balkan Connection in South America?³⁷

Serbian Zoran Jaksic was arrested on 17 July 2016 in Peru (in the department of Tumbes) as he attempted to cross the border into Ecuador. He is known as one of the historical figures of *Groupa America*, a highly reputed Eastern European criminal organization specialising in importing cocaine into Europe across the Atlantic. It handles supplies directly from Peruvian producers, who do not have their own channels for exporting the white powder to consumer markets. Jaksic was introduced to the three largest Peruvian families controlling production. The growers simply packaged the coca leaves, which they then transported to Lima. Operating under the radar and in total secrecy, *Groupe America*'s tour de force was to play the role of exporter and marketer of tonnes of cocaine in Europe. With its multiple locations around the world, it has established itself as a prime intermediary, providing services to other criminal organizations. Particularly flexible, it responds to all situations, even the least predictable. On 28 January 2009, Jaksic learned from a 'loyal' crewman on board the MV SENATOR of the change of ownership of this vessel, which was carrying a cargo of cocaine with an estimated market value of over US\$8.2 million. On this occasion, the new shipyard decided to change the crew. However, Jaksic had an accomplice responsible for securing this import. With less than two days' notice, he succeeded in creating a solution for recovering illegal freight in the port of Durban in South Africa, where he initially had no contacts. Zoran Jaksic, a two-metre-tall force of nature, hid

34 Originally from the Adriatic port city of Vlora (Albania's second largest commercial port, located 100 kilometres south of Tirana), he is known in many European countries, as well as in South America, for his involvement in international drug trafficking and acts of violence. In Albania, for example, he was convicted of the murder of a police officer. In 2014, he was arrested and sentenced to 14 years in prison in Ecuador.

35 Or IVTS (Informal Value Transfer System).

36 Or 'flying money' in Chinese. In the Middle East, this is known as the 'hawala', and in South America as the 'Black Peso Exchange'.

37 *Insight Crime* published 15/09/2016, *Arrested Serb Highlights South America's Balkan Connection*, <https://insightcrime.org/news/analysis/arrested-serb-highlights-south-americas-balkan-connection/>, accessed 27/11/2023.

under some forty aliases, multiplying his nationalities with various passports. He was wanted by the Argentinian, Greek and Peruvian police. In April 2019, he was sentenced to 25 years in prison.

Since 2009, or even earlier, Zoran Jaksic and his compatriots have been operating in South America to trade in cocaine. Telephone intercepts reveal transactions involving 3 tonnes of cocaine, some of which was destined for the port of Antwerp in Belgium. He is also known to have liquefied cocaine in order to conceal it in bottles of Argentinian wine destined for the European market. According to police reports, this criminal organization has managed to control the majority of illegal cocaine shipments from South America to Europe.

The scale of this organization is difficult to establish precisely. However, the volume of seizures is estimated at more than 5 tonnes over twenty years in twelve different countries. How many trips were not detected at the same time?

Groupa America's sales are difficult to assess. Nevertheless, it is accepted that he was able to buy a tonne of cocaine in Peru for US\$1.7 million and selling it in Europe for more than US\$40 million. Admittedly, operating costs covered part of the fixed costs, but the profits were still impressive. Other criminal activities attributable to this Balkan organization include murders committed in both Europe and South America.

Nationals of Balkan countries are also heavily involved in this international illicit trade. They are Montenegrins, Bosnians, Croats and Serbs. The trend observed since 2018-19 is towards greater involvement, as suggested by the arrests and seizures made. Montenegrins predominate in this landscape.

MV Aressa³⁸: the beginnings of a Balkan network for importing cocaine into Europe?

The MV Aressa, a cargo ship flying the Russian flag, sailed from Surinam to the Greek port of Thessaloniki via the port of Guaranao in Venezuela in February 2020. Following police investigations facilitated by international police cooperation³⁹, it was intercepted on 25 February by a joint team of Dutch and Colombian coastguards in Aruban waters⁴⁰. Searches on board led to the discovery of 5 tonnes of cocaine. Several crew members of Montenegrin nationality were arrested as part of the dismantling of an international drug trafficking operation. The investigation began in Macedonia in February 2020, when a kilogram of cocaine was seized hidden in banana crates in a fruit and vegetable warehouse on the outskirts of Skopje. It came from Albania.

As well as the European market, these Balkan organizations – which are responsible for more than 30% of cocaine imports – are opening up new trafficking routes in Oceania and Asia, according to EUROPOL. To do achieve

38 <https://balkaninsight.com/2020/02/26/montenegrin-crew-of-cocaine-ship-arrested-in-caribbean/>, consulted on 28/11/2021.

39 United Kingdom, Montenegro and Serbia.

40 a Dutch island in the Caribbean Sea off the coast of Venezuela, it is part of the Lesser Antilles. Aruba has been an autonomous state of the Kingdom of the Netherlands since 1986.

this, they rely on local criminal networks who are currently in charge of placing the products on the market. When will they have the capacity to act autonomously in these regions? Their presence in these far-flung territories and their involvement in regional supply chains deserve to be monitored with the utmost attention. These inter-community criminal consortiums are a new trend that has also been observed on the European market. Circumstantial alliances between Albanian, French, Italian and Turkish speakers – not forgetting South American networks – are emerging against a backdrop of fierce competition among criminal operators.

4.2. Are South American cartels still active in Europe?

However, South American cartels from producer countries have also set up branches in Europe to control the entire supply chain feeding the cocaine market on the Old Continent. They want to take advantage of the high prices on European markets to increase their financial profits. However, their presence remains limited. Moreover, there are close connections with European criminal organizations in the form of consortia. These Latinos receive the products at the ports, ensure that they are delivered to the Europeans and monitor the collection of payments. They also play a key role in liaising with providers of money laundering operations. Some of these organizations provide an undercover service in international trafficking for South American cartels. Having evolved in their criminal activities, these *Oficinas de Cobro* or *de Envigado*⁴¹ are debt collection agencies based in Europe.

This is the case of the Colombian cartels, which have established themselves in key locations in the European Union, such as Spain, Belgium and the Netherlands, in order to take advantage of the cocaine trade. These intermediary representatives oversee the arrival of shipments, delivery to customers and the collection of payments. Mexican organizations are also very active throughout the supply chain. In particular, they offer an integrated system in four distinct segments:

- trafficking itself: supply of precursors, processing of coca into drugs, storage, transport and distribution;
- operational security: they have dedicated 'services' such as professional killers called '*sicarios*';
- legal assistance in the event of legal proceedings;
- financial transactions (payments, money laundering and investments).

⁴¹ InSight Crime 28/10/2020, *Oficina de Envigado*, <https://insightcrime.org/colombia-organized-crime-news/oficina-de-envigado-profile/>, consulted on 25/11/2021. The *oficinas de Envigado* was originally a Colombian drug cartel operating in the Medellín region. It was created by Diego Murillo Bejarano.

The precise involvement of South American criminal organizations still needs to be studied in greater depth to gain a better understanding of the dynamics of the European market. What exactly is the role played by the European Union in the economic model of the South American cartels? How involved are these cartels in cocaine imports? What role do they play in the logistical choices made, either for transatlantic voyages or for routes with successive stopovers? What are the agreements between European producers and buyers, particularly those based in the growing areas?

5. What impact does drug trafficking have on port cities?

5.1. A subject that requires further research

The impact of drug trafficking on law and order in port cities is a particularly sensitive issue: it raises questions about the quality of life, attractiveness and commercial competitiveness of the port. It examines the governance of both port activity and the adjacent urban area. In view of these key issues, this is an area that requires further research, as the destinies of the city and the port are intrinsically linked. The impact of drug trafficking on a port city has become clearer recently, when its violent or financial manifestations (the proceeds of money laundering, for example) have spread beyond the port's boundaries and into adjacent areas (industrial and logistics zones, residential areas). Threats linked to terrorism and human trafficking are legitimate concerns for the authorities, particularly within the European Union.

5.2. Segregated spaces but a shared destiny?

This innovative approach requires a prior twofold effort: to put city-port (or port-city) relations into perspective and to offer an accurate assessment of the international criminal threat. As a result of history and choices in terms of governance, these unique cities follow a number of patterns that influence the impact of organized crime.

Figure 26. The nature of port-land relations from the point of view of crime (local/international)

Source: produced by the author

Type of port	Interactions with the region	Relations with local crime	Relations with international organized crime	Interactions between local and organized crime
Integrated port	Strong links with the local community (production, infrastructure), international outlook	Preferred territory for illicit activities	Present but in opportunity mainly in secondary flows (feederling)	None
Connected port	Present but priority given to the global and international socio-economic context	Low	Strong and well-built, focused on international flows by contamination or chartered fleets	Possible
Isolated port	Non-existent, as it focuses on the global socio-economic ecosystem	None		None

The question posed thus invites us to look more closely at the ways in which port areas and the adjacent territory are constructed. The port is a strategic infrastructure hub for multimodal flows. It is also a dual border point: internally within the EU, but also externally with the rest of the world. This legal regime has consequences for the mobility of people (visa regime) and goods (customs legislation), which are deliberately exploited by organized crime. The provisions of the post-September 11 international conventions (ISPS code) have helped to strengthen the security dimension (access control, gates, checkpoints, dedicated public security officers, etc.) for international connections. In practice, the port area has become inaccessible to residents of the port city unless authorisation has been duly obtained. The operational systems and processes are designed to make container terminals and loading bays watertight. This segregation of port and urban areas has become a factor of regulation and selective integration into the circuits of the global economy. Finally, it is the gateway to international consumer markets. At a single point, therefore, intense tensions are crystallising between criminal organizations themselves and port and maritime operators. Access to the port is a key factor in the value chain for cocaine brokers. Against a backdrop of fierce

competition, it brings together global flows of goods in an irreversible dynamic and fixed sites, customs control points and distribution points for trade flows. Commercial priority is given to the fluidity of both physical and immaterial flows, reinforced by the security logics of social and spatial confinement. This is where local and international criminal organizations interact. They are conspicuous in adjacent urban areas, particularly in logistics and industrial zones, which make it easy to disguise illegal activities as legal ones.

5.3. The emerging face of a polycriminal ecosystem

Drug trafficking has visible consequences for port cities, whether they are at the origin or the destination of legal or illegal trade flows. We will be looking at clear breaches of public order and peace in connection with port activities. We will exclude incidents relating to the transfer, sale and use of illegal substances in these unique areas and other incidents of general delinquency not closely linked to illicit trafficking activities.

Drug trafficking by sea mainly involves attacks on individuals, such as kidnapping, violence and even homicide. The major challenge is the physical monitoring of illegal freight both on loading and unloading in port areas. Finally, financial crime thrives in port cities, often discreetly, but sometimes conspicuously. This criminal capitalism is expressed in the laundering of funds through investment in property (housing, commercial or industrial premises, etc.) or through complex financial arrangements made possible by the creation of shell companies that facilitate the opacification of financial investment operations. Such economic and financial activities can explain, in part, the economic dynamism of coastal regions. On a more prosaic level,⁴² points to the very (too?) comfortable lifestyle of fishermen, for example in the small-scale maritime fishing sector in northern Ecuador. The latter are now showing off at the wheel of luxury vehicles in unusual and, therefore, provocative ways. Their financial affluence is linked to their involvement in the export of cocaine to the Galapagos Islands, as well as embezzlement of government fuel subsidies.

All in all, a specific type of delinquency is emerging, unconnected with the town where the port facilities are located. This imported crime is made up of international actors assigned to carry out a specific task. The authors do not have a permanent local presence, but belong to large-scale organizations that exploit the logistical facilities available. The example of the Brazilian PCC, which is opening outposts in Europe, Africa and even Asia, illustrates this trend towards disintermediation, by assuming a degree of strategic autonomy in overseas theatres of criminal operation. This does not rule out

⁴² OEEC, report quoted.

rivalries and struggles over control of the port city's territory. There are various types of interaction between these projected organizations in the port city and local facilities:

- indifference: everyone works on an autonomous segment;
- cooperation: the locals facilitate and act as intermediaries for the projected;
- rivalry expressed on the territory or on the product itself.

The public authorities therefore need to decipher the composition of the criminal fabric in situ in order to determine how criminal actors should interact. The detection of incoming flows (arrival of nationals of such countries or already known for criminal activities), places of residence and attitudes are all prerequisites that facilitate perception.

5.4. South America or the concentration of risk

Bonnaventure, a port city on Colombia's Pacific coast, is a logistics hub connecting Colombia to North America and Asia, particularly for the export of agricultural and mining products and the import of industrial and manufactured goods. This area has experienced scenes of violence involving drug organizations. The extension of the terminals has necessitated substantial urban redevelopment, encroaching on historic districts and amplifying the spatial segregation between the city and its international port. At the height of the armed clashes, the violence always stopped at the port gates, considered to be a red line recognized by all parties. The aim is not to affect the international flow of goods. The result is a kind of decoupling of two worlds with no visible interaction between them. Criminal gangs such as the narco-paramilitaries make a living from this commercial activity and have no interest in seeing these flows distracted from the port. What emerges is a new urban geography with boundaries that are invisible but very widely perceived and respected by the stakeholders.

Guayaquil, a major seaport⁴³ and the economic capital of Ecuador, is a flagrant illustration of the impact of drug trafficking on a territory. The port is nestled at the head of a bay at the mouth of the Guayas River, which is 680 kilometres long and has the largest catchment area in the whole of South America. All interests – legal and illegal – converge. For the narco-organizations, the main issue is the export of very large quantities of products to Western consumer markets. As a result, this city is at the heart of an escalating and ruthless war for territory to gain access to the Gulf of Guayaquil and, in particular, the River Guayas. *Los Choneros*, *Lagartos*, *Tiguerones*, *Aguilas* allied with the Colombian cartels, Colombian guerrilla

⁴³ 7 000 containers of bananas are exported to Europe and the United States from the port of Guayaquil every day, with an annual value of around US\$3.3 billion.

groups and traffickers from the Balkans - such is the criminal panorama of Guayaquil. In addition to the fragmentation of the actors involved, it reflects the internationalization of illicit trafficking and the issues involved in controlling logistical access to consumer markets. This fragmentation of the Ecuadorian criminal landscape is reflected in internal wars that undermine the *Los Choneros* monopoly following the arrival of foreign actors (Colombian, Balkan, etc.). The extreme violence seen in the country's second largest city, with a population of over 3 million, reflects the fierce competition between organizations. It ultimately manifests itself in homicide. According to the Observatory of Organized Crime in Ecuador⁴⁴, the number of homicides doubled in the first half of 2023 compared to 2022. A total of 1 400 violent deaths were recorded in the first half of 2023, equivalent to the annual total for 2022. The number of homicides recorded in Guayaquil is rising rapidly and alarmingly: in 2006, the rate was 6.9 per 100,000 inhabitants, compared with 47.77 per 100,000 in 2022. These alarming figures put the 'pearl of the Pacific' in twenty-fifth place in the world in 2022. This violence also manifests itself regularly in the prison environment where, on several occasions in 2021 and more seriously in January 2024, riots broke out between the various gangs of drug traffickers incarcerated in Guayaquil's four prisons. In 2021, more than a hundred people were killed in several days of rioting. The realities of international narco-competition now have no borders in Ecuador, where protected institutions are unable to confine internal struggles to these areas.

5.5. Northern Europe and the realities of South America

The Northern Range has not been spared the import of drug-related violence into its leading port cities. It implies two different realities, which are certainly complementary, but which have divergent rationales:

1. ensure the recovery of illicit cargo from port facilities at the end of the maritime shipment which immobilized a significant capital value for several weeks This is the logic of the wholesaler who ensures that his goods or orders are delivered correctly;
2. ensure that the product is successfully marketed locally or even regionally, and sold to semi-wholesalers.

We will focus on the first case, which has an immediate link with the subject of maritime drug trafficking. The illegitimate use of physical, armed or psychological violence can be explained by the crystallization of tensions at the key moment of freight delivery, after a long 'black box' period which imposes a loss of physical control over one's property during the

⁴⁴ This observatory was set up in 2023 by the US Department of State/Bureau of International Domestic and Anti-Drug Affairs and the Pan American Development Foundation. *Caracterización del crimen organizado* report, <https://oeco.pdf.org/caracterizacion-del-crimen-organizado-en-ecuador/>, consulted on 07/12/2023.

transatlantic crossing. The real or genuinely assessed risks and threats are commensurate with the promise of gains attached to this investment. These risks are specific to any maritime shipment (loss at sea of contaminated container(s), theft during logistical handling, diversion of the ship to another port, mechanical damage, etc.). There is also the possibility of malice linked to competition with other criminal organizations or even the behaviour of unfaithful employees, not forgetting state operations based on police or customs intelligence.

Violence around port facilities plays several roles in this illicit trade:

- an internal policing role for the organization's 'employees'. It is designed to ensure their complete loyalty, full commitment and total discipline to the criminal hierarchy;
- a deterrent to criminal competition, by neutralising any desire to wangle or appropriate the products;
- a loyalty-building role for private or public-sector employees recruited into the port logistics chain. The aim is to use fear and intimidation to seal the pact of corruption between the operators of the gantries, the agents in charge of video-protection of the unloading docks and access control, not forgetting the public authorities (customs, police).

The range of means available is very wide and varied: targeted seduction to satisfy the person's vital needs (money, sex, promotion, good reputation, etc.), verbal and psychological intimidation of agents and their family or network of friends, physical violence or even torture, kidnapping and, sometimes, homicide. This arsenal has an impact on public order in the port city. These complex manoeuvres are not confined to the administrative boundaries of the port area, but extend far into the surrounding urban area. In fact, violent scenes are taking place in city centres, residential areas, industrial zones and on major roads. The most illustrative example is that of drivers who - in all good faith - transport a container to its rightful destination on their truck combination. However, they were unaware that these containers contained illicit substances that the criminal organization had been unable to recover from the port area. So, whatever the cost, it's a question of regaining possession of the goods. There are frequent cases of lorry drivers being held hostage in the vicinity of major seaports. In Le Havre, for example, a lorry driver was hijacked in Gonfreville-l'Orcher (Seine Maritime) just outside the port area, near the container terminal, on 1 October 2021. At around 8.30 am, the driver of a lorry was forced to stop by an armed commando. One of the criminals seized the vehicle in order to sequester it and to recover 687 kilograms of cocaine distributed among boxes of prawns from Ecuador. The convoy was intercepted by the gendarmerie. This is an illustrative example, but hardly exceptional.

The emblematic situation of the influence of drug traffickers in the public space is illustrated by the activities of the Mocro Mafia in Dutch and Belgian ports. This was made famous to the general public with the publication in 2014 of a novel entitled '*Mocro Maffia*' by a Dutch author, Marijn Schrijver. This criminal octopus, which emerged in the 1990s, is made up of mafia-style criminal organizations, the majority of which are 'mocro', i.e. Moroccan nationals who have emigrated to the Benelux countries. Its motto is self-explanatory: '*Wie praat, die gaat*' or 'He who speaks will die'. Often from the Rif region of Morocco, they specialise in trafficking narcotics (cocaine, synthetic drugs). They are perfectly integrated and dominant in the international underground drug economy.

Characterized by an overwhelming rise in power, it marks its territory and its determination by an uninhibited recourse to violence. This is illustrated in particular by the murders of high-profile personalities (lawyers,⁴⁵ politicians, journalists⁴⁶) and also by settling scores in the open. After importing cannabis resin, the organization turn to specializing in cocaine (which is much more profitable) especially as it has succeeded in forging close links with South American producers. To facilitate imports, the Mocro Mafia also established itself in the ports of the Northern Range, particularly in Belgium (Antwerp) and the Netherlands (Rotterdam). Through corruption, intimidation and violence, it has gained control of the key workings of port logistics. The large seizures regularly made by the security services of the Range countries in their ports bear witness, in their own way, to the supposed intensity of the illicit traffic. The violence perpetrated by this group is carried out in public, with many collateral victims among the population and the port ecosystem. Because the driving force behind the Mocro Mafia's activities is fear, which ultimately enables them to obtain the cooperation they need to do their business. This narco-terrorism aims to silence talkative witnesses and to dissuade public or moral authorities from carrying out their duties. These methods and the leaden climate they instil are similar to what is currently witnessed in certain Latin or Central American countries. Recent judicial operations at European level have made it possible to eavesdrop on the biggest traffickers by infiltrating encrypted telephone networks. This is how torture chambers set up in containers were discovered in the Netherlands, and how assassinations were foiled.

⁴⁵ Derk Wiersum murdered in September 2019. He was the adviser of a repentant mobster who agreed to testify against the Mocro Mafia.

⁴⁶ Investigative journalist Peter R. de Vries on 15 July 2021. After a shooting in Amsterdam city centre on 6 July. In June 2018, two media outlets, Panorama and De Telegraaf, were attacked with a rocket launcher and van which was set on fire following reports that denounced this criminal organization.

The infrastructure of international relations: the port, the ship and the TEU

The maritimization of economies is reflected in the infrastructure of international relations through ports, ships and the container, the amphora of the 20th century (1). It is reconfiguring the maritime-port arena (2), with consequences for safety (3) and maritime capitalism (4).

1. Logistization – the offspring of globalization

International globalization has led to a logistization¹ of international relations based on the primacy of economics at the heart of commercial exchanges. This neologism aptly describes the silent logistics revolution that has taken place in our economy. It is true that it was encouraged by another revolution: a digital revolution. It interconnects actors wherever they are in the world and enables instantaneous exchange of large quantities of data. Through its power, it provides a tenfold increase in the organizational capacities of mankind, whose limits quickly appeared as a real obstacle to expansion, which was thought to be infinite. The chaos which occurred following the NOTPETYA ransomware attack on 50,000 terminals managed by Maersk on 27 June 2017 following an encryption of their IT systems revealed the dependence on digital media in container management. As a result, a new division of roles has gradually emerged within a unified global economy. Some countries successfully play the role of factory or craftsman for the benefit of Western consumers insatiable for raw materials and processed products, while others meticulously act as staging points by sorting, with a coarse granularity, the ‘packaged’ goods or supplying energy to an increasingly hungry global fleet. Moreover, this irrefutable trend towards the maritimization of international trade is accompanied by the emergence of new global logistics hubs and the commissioning of vectors with ever-increasing load capacities and geographical reach.

¹ La Logistisation du monde, A. Rouquet, N. Fabre Coste, PUF, 2019.

1.1. The world in a box

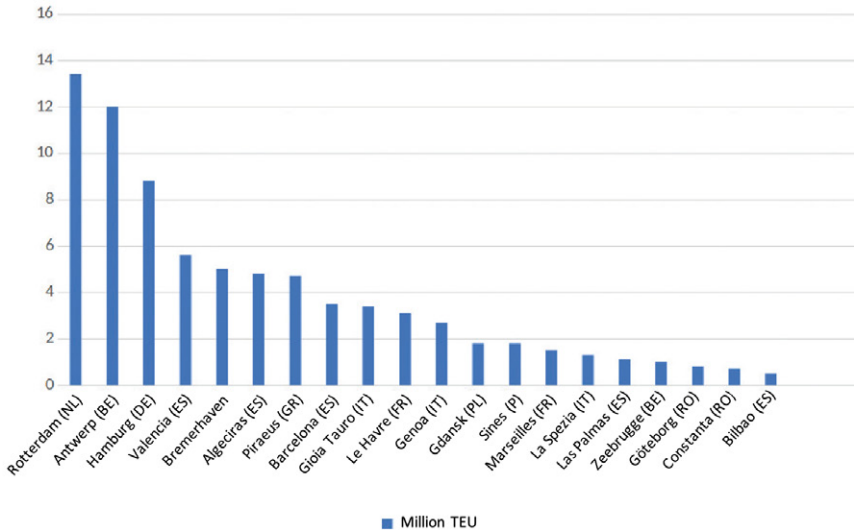
Twenty-foot or forty-foot equivalent steel parallelepiped containers have become the basic unit of international trade. The shipping industry is responsible for the carriage of around 90% of world trade. In the modern world, the container has become an intermodal transport vehicle with no means of own propulsion. It is considered as a packaging, super-packaging or storage vehicle as well as a handling unit in the factory. This door-to-door traffic covers a wide variety of goods (bulk, vehicles, animals, frozen products, raw materials or manufactured goods, etc.) naturally includes sea transport within a unified global economy. This standardization of trade has structured international logistics by imposing a system of intermodality: the container can be transported by road on heavy goods vehicles, or by air or sea on container ships. Maritime transport offers a number of advantages for logistics operators, both legal and illegal, such as low transport costs, greater carrying capacity than other modes of transport, larger volume of freight, longer distances in circumterrestrial maritime traffic. In addition, criminal organizations see it as a possible means of concealment and security for the transport of illicit freight, given the sheer volume of global trade, with only 2%² subject to checks. In Europe, 10% of containers originating from South America are inspected.³ In terms of volume, a quarter of goods arrive in Europe's major seaports in containerized form, i.e. more than 100 million units a year. 80% of the traffic is handled by 20% of European ports, particularly in the Northern Range. We need to bear in mind the material reality facing public authorities. A merchant ship with an average capacity of 20 000 twenty-foot equivalent units or boxes corresponds to a rail equivalent of 120 kilometres, or the distance between Paris and Orléans. This transcription onto a land transport mode simply illustrates the challenge of physically controlling containerized traffic, which are also subject to time pressure.

² EU Commission - EU Science Hub, *Monitoring container traffic and analysing risk*, https://joint-research-centre.ec.europa.eu/scientific-activities-z/monitoring-container-traffic-and-analysing-risk_en

³ Europol, *Report of meeting with Security Steering Committee of the ports of Antwerp, Hamburg/Bremerhaven and Rotterdam*, The Hague, 25/01/2023.

Figure 27. Volume of containers handled in the main ports of the European Union in 2021 (in million TEUs)

Source: Eurostat. Produced by Guillaume MANET



Finally, the organizational fragmentation of the international supply chain offers a host of loopholes that can be exploited. All the more so, as these logistical movements, of the vector as well as the containers, are part of a meticulously regulated choreography which works like clockwork. Every day, more than 210 000 containers are handled around the world, weighing in at more than 9 billion tonnes of sea freight per year. In other words, freight volume has doubled in twenty years.

Malcolm McLean⁴, 'the greatest revolutionary in maritime trade'⁵

Sitting on a quay in New Jersey, Malcolm McLean, an American lorry driver, had to wait a whole day for the cargo he had previously transported in his lorry to be unloaded. He came up with an idea for packaging goods in a large steel box suitable for both road and sea transport. In this way, the driver could be better occupied with his work and reduce the time required for loading and unloading at the quayside.

⁴ Malcolm Purcell McLean (1913-2001).

⁵ Extract from an editorial in the Baltimore Sun, quoted by Michael BOHLMAN, President of ISO/TC 104, at a tribute to Malcolm Mac Lean in 2002. http://www.lomag-man.org/animation/conteneurs/superstructures-legendaires/hommage-a-malcolm-mcLean_inventeurgenialduconteneur_isotc104-2002.pdf

As a result, Malcolm McLean came up with this brilliant idea: to create an intermodal freight packaging unit, that could fit on a truck, train, ship or in a plane. He had the ingenious idea of separating the body from the axles of his trucks to turn them into multimodal transport vehicles. The story is well known: he purchased a shipping company, which he named *Sealand Corporation*, and had a cargo ship converted into a container ship. This invention was the start of a successful career for McLean.

1.2. Data in a box?

This type of packaging satisfies the fundamental objective of a logistics chain, which is to exchange goods as quickly and smoothly as possible. What's more, this universal, multimodal unit of account has constantly adapted to the demands of trade by offering new services such as refrigeration. As a result, the supply chain has undergone a digital transformation, involving the increasing availability of a wide range of information both upstream and downstream. Thus, a widespread trend has evolved towards greater integration of the actors in the supply chain. This effort is essential when 35 million containers are traded around the world. In this context, the challenge of controlling the container chain and its contents in real time is a strategic necessity at the heart of the value chain. Capturing data in real time is imperative both for logistics operators and for the owners of the freight being transported. Without neglecting the customer who often produces on a tight schedule. Mastering this essential information fosters a competitive advantage, to every link in the chain. The maritime world has thus entered the era of the Internet of Things (IoT), with the aim of improving supply chain management, ensuring the integrity of goods being transported and, ultimately, anticipating logistics operations. The smart container project, for example, produces a container connected by an integrated box. It communicates via a relay placed on the ship or in the port. This information is transmitted by satellite or GSM network in real time. It is then distributed to customers via smartphone or online. These IoT installations provide two essential functionalities:

- to identify the location and transmit physical parameters such as temperature, vibrations, door openings, etc. ;
- to change settings remotely (temperature settings or defrosting, for example).

In this way, the smart reefer container remotely shares the conditions and status of refrigerated goods throughout their journey. It communicates GPS coordinates, temperature or gas curves, reports many other indicators using GPS technology, detects anomalies, sets alert parameters, humidity levels, vibration intensity and monitors handling operations (loading/unloading).

Numerous applications are emerging, all of which improve the quality of service. Controlled atmosphere environments require rigorous monitoring of

oxygen, carbon dioxide and nitrate levels. If the acceptable ranges defined by the operator are exceeded, corrective measures can be taken quickly, such as modifying the loading plan. Full knowledge of the weight of the units as well as their contents contributes to better management of container filling and emptying operations on the quayside. It contributes to better performance in ship preparation and container fleet management.

Finally, the digitization of containers brings real added value to risk assessment and compliance. It enables customers to ensure strict compliance with the provisions of the transport contract, remotely and in real time. Tracking the ship's route makes it possible to take into account security risks by checking, for example, the physical execution of the transport, ensuring that the ship is not sailing in an exclusion zone subject to embargo or geopolitical risk, and anticipating areas where piracy is still rife. In this context, the quest for transparency in an interconnected, intelligent and flexible supply chain provides visibility and predictability. However, the real progress observed in the traceability of maritime freight must be seen in the light of malicious intent. These digital technologies have the potential to undermine supply chains through the vulnerabilities they undoubtedly present. The theft of data, its re-use for criminal purposes, the encryption of information systems, the loss of control of tracked mobiles or the falsification of transmitted data are all illustrations of the cyber risk applied to container management. This analysis needs to be re-evaluated in view of the large number of actors involved in the maritime sector. Controlling this data offers a strategic advantage that embraces the entire supply chain. Thus, as in other business sectors, registering these precious assets on the blockchain appears to be an alternative, guaranteeing integrity and traceability in the interests of all concerned. This decentralized registry technology is reputed to be traceable, tamper-proof and reliable.

1.3. The container ship – a symbol of the magnitude of the maritime industry

Tankers or container ships are the fundamental instrument in the infrastructure of international relations. By themselves, they symbolise the immensity of an increasingly insatiable economy.

Human ingenuity has managed to push the technical boundaries and defy mother nature who, nevertheless, regularly reminds us of her power through the vagaries of maritime weather (storms, etc.) and, at the same time, the insignificance of mankind.

The era of gigantic maritime transport

The CMA-CGM container ship Jacques Saadé, the flagship of the French champion, was put into service on 23 September 2020 on the FAL 1(French Asia Line), with the round trip taking 84 days. With a length of 400 metres, a draught of 16 metres and a container carrying capacity of 23 000 TEUs, it is the ideal vessel for a wide range of applications. Its energy footprint has been reduced thanks to an LNG engine and advanced hydrodynamics owing to a straight bow with integrated bulb. The Jacques Saadé is the first of a series of eight sister-ships registered in the French International Register (RIF).

2. A reconfiguration of the contemporary maritime-port chessboard?

The reconfiguration of the merchant fleet has truly reshaped the whole of today's maritime and port landscape. Shipping companies are hyper-powerful economic actors who shape the economic centres of gravity to suit their own interests. The example of the Strait of Gibraltar provides a concrete illustration of these new realities and their consequences, particularly in terms of safety.

This unique observatory of the infrastructuring of trade relations has its roots in the opening of the Suez Canal in 1869, which became a key gateway for maritime navigation between Asia and Europe. Suez and, indeed, Gibraltar became crossing points on the route to India, delivering both Asian manufactured goods and Arabo-Persian oil. However, at the end of the 1980s, Danish shipowner Maersk⁶ saw the port of Algeciras as the global hub shaping the flow of containers by sea. Reclaimed from the sea by major maritime works, dozens of hectares of quays⁷ are becoming a key stopover point in the Mediterranean for the world's largest commercial fleets on the East-West maritime motorway, linking the Indo-Pacific region with the Atlantic. What's more, these port facilities are becoming specialized by becoming both a storage and redistribution area for containers on an international scale, as well as a refuelling area for the fluids needed for shipping (oil, fuel, water). The Port of Algeciras is currently Spain's second largest port, ranking 34th in the world for containers.⁸

6 In 1975, the shipping company Sealand set up in Algeciras, followed by Maersk in 1986 and the Korean company Hanjin in 2010.

7 Maersk's Juan Carlos terminal covers an area of 69 hectares, while Hanjin operates the 121-hectare Isla Verde Exterior terminal.

8 According to figures from the World Shipping Council 2019, <https://www.worldshipping.org/top-50-ports>, consulted on 3/10/2021. Performance: 5.11 million TEUs in 2020, compared with 4.76 million TEUs in 2016.

General Franco conferred the status of port of national interest on Algeciras as part of his policy to develop industrial centres in 1965. In similar fashion, the King of Morocco announced the launch of a large-scale development project 40 kilometres to the east of Tangier on 30 July 2002. The idea centres around the creation of a deepwater port *ex nihilo*, structured mainly around container terminals. Its success was soon realized, as the port experienced remarkable growth, receiving a greater volume of TEUs than Algeciras.⁹ What's more, the high transshipment rate is set to increase even further with the massive investments currently underway,¹⁰ the ambition is to have a capacity of 9 million TEUs handled per year. This would put Tanger Med among the top 20 container ports in the world.

like the Maltese port of Marsaxlokk, Algeciras, Tangier Med and Piraeus embody the new logistics strategies of the world's biggest shipping lines, which serve all the world's ports. These are hubs and spokes,¹¹ in other words a real marshalling yard and a maritime signal box that receives and redistributes containers from one line to another, both regionally and internationally. From these hubs, which are ideally placed close to international shipping lanes, the boxes are redistributed to secondary lines, forming a genuine commercial network. This short-distance transport activity is known as *feeder*.¹² Ports in Spain, Portugal, North-West Europe, West Africa and North Africa are all served.

These new logics at work in international logistics chains are based on economies of scale linked to the massification of containerized and globalized freight. Beneficially, they also generate an increased service area thanks to the secondary network provided by *feeder*. These international hubs are above all crossing and linking points for lines in the operators' functional networks¹³. By way of illustration, the port of Tangier is the hub of Africa, connected to 35 ports and 21 countries in West Africa. It also provides regular connections to nearly 180 ports and 70 countries on five continents, with a handling capacity of 9 million containers. In fact, integration into the

9 According to figures from the World Shipping Council 2019, <https://www.worldshipping.org/top-50-ports>, consulted on 3/10/2021. Performance: 5.77 million TEUs in 2020, compared with 2.96 million TEUs in 2016.

10 <https://www.usinenouvelle.com/article/reportage-le-port-de-tanger-prend-le-large.N864575>, consulted on 3/10/21.

11 Hub and Spokes: in international logistics, a hub is a sorting and routing centre for goods. This is the central point of a logistics organization designed to group together a large number of parcels, from which spokes are set off to transport the goods from their country of origin to their destination. Source: The international trade dictionary.

12 The feeder is a low tonnage vessel which carries out the pre- and post-transport of containers to ports where the regular liner mother ship does not call. It allows cargo brought to a main port by a large vessel making few calls to be split between different ports, or conversely to collect goods and consolidate them at the main port. Source: le dico du commerce international.

13 <https://www.tangermed.ma/ar/pole-portuaire/Fonctionnalite> port, consulted on 3/10/2021.

hinterland – the maritime hinterland – often proves to be a weak link unless an overriding regional development rationale governs this type of investment. The project to develop the Tanger Med hub is part of this strategy. The public agency, Agence Spéciale Tanger Méditerranée (TSMA), has both port and land-based responsibilities. It has developed the special development zone, which includes integrated business parks and logistics, commercial and industrial free zones¹⁴ such as Méloussa, which covers more than 600 hectares. An ambitious €650 million investment plan aims to increase the capacity of the Tanger Med passenger and HGV terminal, as well as the import zone, from 2024. Building on this international success, in 2016 the Kingdom of Morocco embarked on an ambitious new port infrastructure project: the port of Dakhla-Atlantique. Located on the southern Atlantic coast, in the heart of the western Sahara, it is a strategic tool for economic development, comprising a deepwater port, an inshore and offshore fishing port and shipbuilding facilities. A 1 650-hectare industrial-logistics zone will provide quality services for international trade. As an interface for maritime integration and a focal point for regional influence, it is not only intended for national trade but also aims to establish itself as a regional hub for West Africa and an international hub within the Africa-Asia-South America and Europe connectivity networks. What impact will this have on maritime connections with the American continent? Will the port of Dakhla-Atlantique be able to play the same transshipment role in the Atlantic as Tanger-Med does in the Mediterranean? What are the implications for the fight against illicit trafficking? These strategic projects create logistical realignments that criminal operators exploit with agility.

On 7 April 2022, customs intercepted 800 kilograms of high-purity cocaine at the port of Marsaxlokk. The drugs were concealed in a banana reefer en route from Turbo (Colombia) to Mersin (Turkey). The boat was targeted by the authorities and a scanner revealed anomalies which led to a physical inspection of all the fruit boxes. The resale value of the goods is estimated at €105.2 million. Malta is increasingly emerging as a gateway to the European market for South American networks.

South America is not exempt from major port projects that will create new trade routes with the Asian market. The port of Chancay, 80 km north of Lima, is set to become the gateway to one of the main trade routes between South America and Asia. Construction began in 2011 and is due to be partly completed by the end of 2024, with the commissioning of four berths. Chinese shipowner Cosco Shipping is the main financier, with a total investment of US\$3.5 billion. When completed, the 141-hectare port will house 15 berths capable of handling 18 000 TEU container ships. It will be linked to the

¹⁴ The Tanger Med industrial hub brings together more than 1 100 companies with annual sales of €5 300 million in a range of sectors including automotive, aeronautics, logistics, trade and textiles.

Panamericana Norte motorway by a 1.8 km tunnel with three lanes. Bilateral trade between Peru and China was worth more than US\$34 billion in 2022.

3. What are the safety implications?

This new face of international trade has major consequences for risk analysis in maritime transport. The globalization of trade has shaped logistical arrangements on an international scale. Maritime highways link raw material areas of production to processing centres and, ultimately, to centres of consumption in a global village. Scarce but ideally located at the heart of routes, logistics hubs redistribute freight to secondary hubs and provide maintenance for ships and crew. The following points should be borne in mind in order to better assess the risk associated with maritime shipping and the freight transported.

Understanding the global logistics process for maritime shipments

The organization of international trade certainly evolves according to geopolitical, logistical or health crises¹⁵. A strategic surprise – the permacrisis is likely to affect the fluidity of maritime routes – which depend on the freedom to navigate through choke-points. However, it obeys major absolute principles determined by production or transformation capacities but also by the technical constraints of vectors and facilities. These include:

- the connectivity of a port, which reflects its integration into the global or regional system;
- networking reflects its level of integration into the networks of transport operators;
- the port/hinterland relationship, which determines the security of port facilities.

Contextualising the logistics flow of international trade

Hierarchical in terms of origin/destination, hubs and feederings, international logistics also conveys geopolitical realities that are projected onto transit or destination territories obeying an entirely different logic. Let us illustrate our point. A container of fruit loaded on the quayside at the Amazon port of Manaus in Brazil reveals the reality of trade in South America. This reality is imposed directly on the customs officer or dockworker in the Romanian port of Constanta on the Black Sea coast, for example. His actions are determined

¹⁵ SEFACIL, Permacrisis and Logistics: from assessment to foresight, EMS Publishing, 2023.

by his own cultural, geopolitical and logistical situation. Do port agents have all the information they need to understand the container's background? So how can we make it easier to understand the context and develop a security strategy?

Identify the key points of the global network and their foreseeable evolution

Port connectivity, logistics ports of call, hubs, etc. are landmarks in logistics processes. They need to be assessed in terms of competitiveness and safety, with particular emphasis on interactions with the hinterland. As a result, the Mediterranean basin appears to be a prime maritime transit area. Beyond the geostrategic state of affairs in the Eastern Mediterranean (the Russian-Ukrainian conflict, the Middle East, etc.) or in the Western Mediterranean (Libya), there appears to be a concentration of criminal risk, as shown by the following characteristics:

- the convergence of all drug routes (cocaine, heroin, hashish and synthetic drugs);
- heavy criminal pressure (illegal immigration, smuggling of alcohol, tobacco, weapons and fuel, etc.);
- the legal status of a free zone (Malta) and the unique situation of British-controlled Gibraltar;
- traditions of smuggling rooted in the northern Maghreb region, which is connected to the Sahel-Saharan zone.

Locked by the Suez Canal to the east and the Strait of Gibraltar to the west, the Mediterranean is an crossing point for trade between Asia, Europe, the Middle East and Africa. It includes major hubs in the global economy: Port Said, Piraeus, Gioia Tauro / Marsaxlokk, Algeciras / Tangier Med. They, in turn, feed secondary ports. This is reflected in the intensity of intercontinental ferry traffic, both commercial (containerized and LDV/HGV) and passenger.

Risk assessment leads to operational measures that determine traffic control processes according to established priorities. International cooperation based on the transparent exchange of information and best practice is the key to success.

Hinterland environment to reduce risk in logistics operations

A port's ability to develop as a logistics hub depends on both internal and external factors. These various elements are linked to the space and even, where appropriate, to the port system, which fully integrates the maritime foreland and the hinterland. A port system is defined as 'a group of ports sharing identical geographical characteristics (coastline, bay, etc.) and, to a

certain extent, overlapping hinterlands'.¹⁶ This system cannot be reduced solely to the national administrative borders confirmed by international law. Nor is it exclusive to the possibilities offered by road, rail or even river networks.¹⁷ More specifically, it must be accepted that it follows the contours of a logistics zone of influence both upstream and downstream of the port facilities. In this respect, the hinterland has an impact on the conditions under which international criminal organizations can set up shop and control their illicit cargo. To understand the port system, you also need to know about the criminal fabric, both existing and planned.

Knowing the flow of incoming goods

The anonymity of containerized freight massed on a container ship and on loading docks requires prior analysis and questioning in order to remove any doubts or non-compliant situations.

4. The benefits and advantages of maritime capitalism: the second- and third-hand market

Criminal organizations are also likely to use chartered fleets to transport illicit cargo autonomously, and to recruit from within the port ecosystem. The need to make the chartering operation transparent is a key success factor.

To do this, it is necessary to identify a competent maritime operator on the market able to offer a maritime service and resources under a legal company name. This fleet is generally part of the second- or even third-hand market. This market can be explained by the existence of maritime overcapacity, reflecting an excess of productive capacity in relation to the potential offered by economic activity. This is known as the 'toxicity of maritime overcapacity'.¹⁸ These medium-sized vessels, or even service vessels such as ocean-going tugs, use old-fashioned technology that is incompatible with the performance required on the international market. The general state of the fleet is regularly not, or only slightly, compatible with the international regulations in force, but benefits from a flag state or port state with few rules. It often operates outside the major shipping lanes where most of the national high seas navies are concentrated. Yan Giron and Caroline Britz analyse in

16 Notteboom, T.E., *The Interdependence Between Liner Shipping Networks and Intermodal Networks*; IAME Panama Conference Proceedings, Panama. Quoted in Regional Hub Port Development - The Case of Montevideo, Uruguay, in *International Journal of Shipping and Transport Logistics*, July 2011.

17 Notteboom, T.E. and Rodrigue J.P. (2005), *Port regionalization: toward a new face in port development*; Maritime Policy and Management.

18 Y. GIRON, C. BRITZ, *Toxicité de la surcapacité maritime*, Revue Sécurité globale, n°13, May 2018.

detail the factors leading to the criminalization of legitimate maritime actors who assist illicit trafficking by providing high value-added resources:

- a solution for adding value to a maritime vector that is experiencing real market depreciation against the backdrop of a deteriorating economic climate. The resale of the vessel to unscrupulous operators is a profitable solution for the shipping company;
- the laundering of services or assistance provided to criminal operators by a shipping company in search of revenue. It won't hesitate to embrace illegal activities given the low risks involved. For example, fictitious services in return for a false invoice;
- administrative opacification of the real operators with those officially displayed through the flag, relations of responsibility to the vessel;¹⁹
- the opportunity to enter the maritime ecosystem (shipping, port services) by reducing the entry fee. This applies to both vectors and port services, encouraging the emergence of a criminal microcosm that facilitates illicit trafficking.

All in all, the deterioration in the deregulated shipping and trading markets is having a major impact on the development of criminal activities. They encourage the necessary opacification of the illicit through the provision of resources or services.

¹⁹ The Lloyds files provide for six liability positions (beneficiary owner, commercial operator, declared beneficiary, technical manager, third-party operator, nominal beneficiary).

Conclusion

1. Unstoppable globalization of criminal networks

Drug trafficking is an international phenomenon based on the illicit trade in refined natural or chemical substances. It reflects an irrepressible globalization of crime, both spatially and operationally. The variety of products on offer, the complexity of the production, refining and packaging processes, the multi-modality of exports and the marketing of consumer goods all require an underground ecosystem backed up by international trade facilities. Given the financial stakes involved in the promise of gain or power, drug trafficking is a perfect operational synthesis of the legal and the illegal. It overturns the conventional socio-economic foundations, successfully exploiting the assets and potential that have been multiplied by technological progress and the liberalization of trade in people, goods and data. This crime multinational is constantly expanding its customer base. It is continually adapting its services to meet new and evolving demand. In this respect, logistics is truly the keystone to the success of this business. Both wholesale and retail. From tonnes to grams. Understanding drug trafficking also means thinking about the logistical arrangements, their efficiency and the developments to be envisaged. The preference for maritime transport is certainly a response to the need for low-cost, long-distance mass transport and the need to reach hubs connected to consumption areas. But it also contributes to the opacity of an illicit shipment that is drowned in the flow of 90% of goods traded around the world by sea. The financial stakes give free rein to the imagination and stimulate some of the most innovative technological and organizational solutions. The various cases presented in this study demonstrate that criminal thalassocracies have real entrepreneurial qualities, operational agility and a well-developed strategic vision. The bold logistical solutions seen from coca or opium plantations to

the front rows of the international seas rely on sophisticated strategic planning and intelligence capabilities, as well as multi-media financial transactions. These illegal operators raise questions about the globalization of trade in an interconnected global village.

Political consideration of the global problem of drug trafficking focuses above all on its visible effects in terms of public order and peace. Admittedly, the public health consequences of addictions are mentioned and prevention policies are legitimately developed for the benefit of target populations. However, the main focus is on disturbances in certain disadvantaged urban areas where the authority of the State may be challenged and where there are rivalries for control of territory. Sometimes this violence even spills over into the public sphere, with drug traffickers settling scores and fatally injuring strangers to the trade. A rise in tensions and even a radicalization of behaviour are currently being observed both in production areas and on consumer markets. Is this a sign of strong competition between criminal actors? Does it point to the democratization of international trafficking? Is this a sign of the high availability of substances? Does it indicate an increase in security measures taken by governments?

2. Is criminal thalassocracy threatening the maritime giants?

This criminal industry naturally affects maritime public order based on international law and internationalized operational coordination. Whatever the product in question, it has taken to the sea at least once during its journey. Maritime transport is the strategic vector for the supply of addictive substances to drug consumption areas. It multiplies export capacity and, therefore, the expected profit. Moreover, it brings consistency and transparency to logistics operations. The entire value chain of the maritime and port sector is being affected by a shift away from shipping, fishing and yachting.

The techniques used to contaminate freight and the superstructures of ships illustrate the limitless determination of drug organizations and the security challenge facing shipowners and port authorities. This interference of the illegal in the legal raises the question of the integrity of logistics processes and, ultimately, the sovereignty of the shipowner, shipper or port operator over its own area of responsibility. These legitimate actors find themselves, despite their efforts, exposed to direct competition from masked operators who relentlessly pursue their commercial objectives of delivering narcotics to expanding markets. Worse still, this criminal determination is also reflected in attacks on the safety and security of shipping in maritime areas. Maritime go-fast fleets operating in high-traffic areas such as the approaches

to Gibraltar, the Caribbean or the Gulf of Mexico are likely to disrupt legitimate traffic flows. Similarly, the use of narco-substances, opaque navigation practices, the integration of freight in certain parts of the ship or the creation of unmarked and unmarked buffer zones at sea are all new risks that crews need to take into account. Despite the provisions of the law of the sea.

In addition, a similar reflection should be developed on the port area, which crystallises the strong tensions of narco-organizations eager to get their hands on illicit freight, the promise of extraordinary gains. It turns out that these illicit operators strive to control the logistics process from start to finish. The inevitable digitization of operations is a new challenge, shared by all stakeholders. Legal. And illicit.

Nevertheless, it is important to recognise that these flows represent only a tiny fraction of the millions of containers shipped around the world each year. On a transatlantic route, this is at best 10 contaminated containers, or 0.05% of a 20,000 TEU container ship. However, disturbances to public order in port areas and on the outskirts of port cities require a structured and coordinated response on an international scale. Each stage of the shipping process is mutually dependent. All the more so as the profit margins of narco-organizations provide them with virtually unlimited resources in terms of skills and human resources. The cybersecurity of logistics processes is becoming even more urgent, not only for the regularity of international trade but also for the stability of international relations. In this respect, the human element remains the essential link in this challenge. They need to be supported, trained and protected in the face of systemic threats. Pursuing efforts to make maritime transport safer means truly anticipating the occurrence of crises of all kinds on land and within interconnected societies that depend on the sea for their survival. The facilities developed by the criminal thalassocracy are multi-faceted. Instead of 'white powder' or tablets, it covers 'human trafficking, counterfeit medicines or products, stolen goods or, worse still, explosive or radioactive substances, goods subject to embargo'.

Beyond the efficiency of maritime or port operators, it is also the image and reputation of economic actors that are tarnished by these breaches of maritime transport security, despite the fact that the maritimization of economies is an extraordinary human achievement.

3. International relations: vulnerable to drug trafficking?

The fight against drug trafficking is a critical emergency. This is because the illicit trade in psychotropic substances destabilises States and, by extension,

international relations. By its very nature, organized crime creates the institutional conditions that are conducive to help its business to flourish. To achieve this, it uses its power of seduction and terror to bribe public institutions and private operators. This commercial development strategy is leading to a dual process of criminalising politics and politicising crime. The immediate effect of drug trafficking is to undermine and weaken the stability of both public and private institutions. This systemic crisis provides fertile ground for the emergence of narco-states from the ruins of failed states. This weakening of the State is also generating a global crisis, as both society and the economy are losing their bearings. The visible result is an unstoppable rise in crime and the systematic use of illegitimate violence beyond the control of the public authorities. The consequences are hardly confined to national territory. They are also imposing themselves on the international scene, by facilitating criminal activity (the safe haven scenario offered to organizations), destroying any desire for international cooperation and exporting the ingredients of disorder and destabilization overseas.

The drug trade is the most financially prolific criminal segment alongside cybercrime. Admittedly, this is a perilous exercise, but an assessment of the global turnover of narco-organizations reveals sums greater than the budgets of certain States. At the very least, these illicit profits finance the daily existence of several hundred thousand people around the world. This social reality also illustrates the extent of the challenge facing the public authorities, who are responsible for taking the place of employers who are not on their own registers. Lastly, it stresses the vital need to ensure that its powers are fully exercised in areas that are often far from national decision-making centres. Doesn't this drug trade call into question the State's ability to be the master of its own house?

This criminal activity is currently undergoing a change of scale, made possible by globalization. It has come to rival the State, and even to be on a par with it, as it sees no visible limit to its empire. In this respect, the criminal industry is highly intelligent at exploiting the infinite possibilities offered by essential service infrastructures, the keystone of the globalization of international trade. This is the international backbone of maritime transport, made up of vectors, highways and hubs. It also involves the digitization of data exchanges, logistics operations and financial transactions. Ease, immediacy, disintermediation - these are the outcomes. These are all fundamental criteria for ensuring the development of unlimited illicit activity. As such, they reveal many holes in the armour of inter-state relations.

4. Combating drug trafficking requires a multidisciplinary approach

Against this backdrop, and in addition to the EU Roadmap to combat drug trafficking and organized crime announced on 18 October 2023, a number of major challenges emerge:

Increasing the density of criminal and financial intelligence

Intelligence enables us to gain a deeper understanding of criminal processes and anticipate threats. The revolution generated by the dismantling of the ENCROCHAT encrypted communication network has encouraged us to prioritise legal strategies focused on dismantling service infrastructures used for criminal purposes. Communication services, logistics operations, setting up trading companies and money transfers are all priorities. The use of legal proceedings relating to drug trafficking is a prerequisite for refining coordinated combat strategies. This approach must be fully integrated into the framework of international judicial cooperation and facilitated through police cooperation and criminal intelligence agencies such as EUROPOL. In addition, the leading role played by the European Analysis and Operational Cooperation Centre dedicated to combating maritime drug trafficking (MAOC-N) in Lisbon should be highlighted as a genuine success at community level. In 2023, it contributed to the seizure of almost 100 tonnes of cocaine in the Atlantic on moving maritime vectors alone.

PROPOSAL 1:

Duplicate the MAOC-N structure for each coherent maritime area, prioritising the Mediterranean and the Indo-Pacific, and anticipating new phenomena by integrating a forward-looking capability.

Similarly, MAOC's mandate could be extended to monitoring containers on connections identified as being at risk, in liaison with other institutional and private actors.

A major complementary effort is to increase knowledge of the links between maritime space and land consumption areas. Of course, the criminal thalassocracy is a particularly complex ecosystem in itself, requiring both an international and a maritime outlook. But it is not autonomous. Connection with the entire value chain is essential to anticipate operations and understand the dynamics of bringing products to market.

Identifying criminal assets

The driving force behind criminal action remains the lure of profit. Controlling the economic model of the narco-business, tracing the physical and

intangible financial flows, identifying the assets laundered in this way - these are the key levers for action against the criminal thalassocracy. Capturing the profits from this illicit trade and making money laundering operations more difficult are strategic areas that need to be developed. Especially in view of the blockchain solution, which supports crypto-transactions in digital assets, opens up the prospect of new facilities.

Understanding global logistics flows by sea

Maritime logistics obey their own rationality and the low cost of maritime transport means that shipments can be placed at staging points on several continents. The example of synthetic drugs is illustrative of this practice. Shipments of Captagon, which is produced and consumed in the Middle East, make stopovers on the Northern Range and in Central Europe, as a means of concealment. In addition, techniques for contaminating containers and vectors keep transport costs down, while following conventional shipping routes. A forward-looking approach needs to be developed for future maritime infrastructures, including an understanding of the maritime foreland and hinterland. The same applies to the physical and administrative tracking of container shipments. These factors provide food for thought on the overall threat of crime and risk to maritime and port actors.

PROPOSAL 2:

Develop and share **strategic intelligence** for the benefit of law enforcement agencies on foreseeable developments in maritime and port logistics architecture, shipping and yachting practices and new modes of maritime transport.

Intelligence on maritime traffic

This intelligence is a priority in the detection of vectors potentially involved in illicit trafficking. An analysis of the ship's ownership, capital structure and technical life sheds light on its actual purpose. This data, cross-referenced with other intelligence and investigative data, provides an accurate picture of a maritime traffic. This complex work calls for an increase in the strength of the maritime gendarmerie's specialized maritime Criminal Investigation Service, especially as it has already proved its worth in this area. The challenge is to use a harmonious combination of legal and administrative tools to decipher a situation that may appear to be compliant, but which could be masking criminal intent.

PROPOSAL 3:

Create a judicial office for the sea combining the judicial capabilities of the maritime gendarmerie with those of the other members of the State action at sea, and working closely with private actors seeking greater protection. Its role would be to act on all breaches of maritime safety and security. The complexity and uniqueness of the international maritime and port environment militates in favour

of the principle of specialising law enforcement services that are commensurate with the challenges and responsibilities of France, the world's second largest maritime power. It would naturally play the role of expert and facilitator in investigations carried out by the lead criminal investigation departments, such as the Office Anti-Stupéfiant français (OFAST), as well as those specialising in real estate and environmental crime, etc. in their own areas of competence.

Detection of psychotropic and narcotic substances

The detection of substances has become a major challenge due to current developments in transformation processes and the nature of the materials being shipped. It seems that – in the specific case of cocaine – the product exported is increasingly cocaine hydrochloride, which does not have the same appearance as ready-to-use cocaine. In addition, the frequent use of dual-use materials such as precursors or synthetic drugs complicates detection by the services. This requires more complex analyses based on cross-referencing information. The logistics flows of precursors do not coincide with those of commodities. It remains, however, a destabilising factor in the process of transforming substances.

Relocation of raw materials refining laboratories

The relocation of laboratories has been observed, in particular, in consumer areas. This dynamic demonstrates a quest for further opacification by diluting risk taking. A new organization for the marketing of substances is gradually taking shape. The mapping and distribution of missions should be monitored to take account of this balloon effect of shifting criminal centres of interest.

The management of mass data and the challenge of its strategic and operational exploitation

Understanding maritime and port activity certainly requires the collection and aggregation of complex, high-volume data, but it also requires the use of analysis to focus law enforcement action on legitimate and, if possible, high added-value targets. One telling illustration is the example of containerized flows which converge from the hinterland towards consolidation points such as loading bays, and which are distributed into secondary and tertiary flows at ports of call. The aim of this analysis is to determine the existence of a vulnerability in the logistics process and to focus on these points of attention. The same applies to the monitoring of maritime navigation through the use of AIS, the automatic system for tracking ships in maritime space. This data can be used to detect atypical behaviour at sea which, when combined with other information on the crew, the cargo, etc., helps to establish an overall risk analysis.

Decomartmentalizing control strategies

Drug trafficking is a matrix criminal phenomenon, meaning that it generates other connected or autonomous illicit phenomena. Let us not forget the opportunistic nature of organized crime, whose main motives are financial gain and the quest for power. In fact, strategies to combat the illicit trade in substances require a global vision rather than solely focusing on the illicit trade. Beyond the absolute necessity of operational coordination between investigation services and administrative entities at both national and international level, the contribution of the forward-looking role is fundamental. As such, research must exploit the data collected, expand on it and make its own contribution. The aim is to gain a better understanding of the complexity of the perceived mechanisms and to guide services towards anticipating ways of breaking down the networks. When it comes to drug trafficking, this report demonstrates the importance of integrating logistical, thalassopolitical and not just geopolitical strategies into the criminal sciences.

PROPOSAL 4:

Develop a multi-disciplinary forward-looking function on the evolution of organized crime, involving the world of university research in conjunction with the activities of law enforcement and administrative services.

Maritime awareness

The study of this criminal phenomenon, which is ultimately expressed on land, can be summed up in one requirement, namely to focus on our national issues from a maritime perspective. Therefore, let us take a seat on the bridge, in the Pacha's chair. Let us cast an eye over the lands of the European Union as we sail along the Ushant shipping lane. Let us enter the Brest narrows and observe our equilibrium with the fresh eyes of a sailor who has crossed the line!

5. *Thalassopolitics and geopolitics*

Drug trafficking is a true illustration of the land-sea-land security continuum based on international logistical realities. As such, it is an excellent educational tool for reflecting on the global safety issues affecting our countries, which are dependent on the maritime environment. It invites us to look at current and future threats from four angles:

- **time:** maritime activity is part of a long-term equilibrium. Building a fleet of container ships, a loading berth or even a new port requires strategic planning and major investment. A South America-Europe expedition requires between 20 and 40 days at sea. This leaves time for forward planning and anticipation. But, paradoxically, there is a sense of urgency: the time in port is

running out, and the ship has to set sail again. The duration of the dockside inspection is therefore greatly extended.

- **space:** maritime activity takes place over large areas, often on a global scale. The industrial and commercial organization of the world is being stimulated by the liberalization of mobility and trade, which is gradually erasing the notion of borders. The port area is expanding and conquering the sea, with deep-water infrastructures. But it remains small compared with its area of influence, which can be continental in scope. This means taking a global view that is necessarily supranational.
- **logistics:** the centre of gravity of illicit trafficking remains the logistical process that facilitates the transformation of substances and makes it possible to place them on the consumer market. Without strategic logistics, you can't supply key accounts! Both flexible and scalable, it is, by nature, multi-modal and internationalized. Moreover, its presence is discreet against a backdrop of ever-increasing mass of global traffic and it blends into the lawful to such an extent that it merges with it.
- **geopolitics:** the state of international relations – the geo-economic and geo-political situation of States determine the general economy of organized crime. It would be foolish to ignore these key ingredients. Especially as the criminal thalassocracy is a key actor in international relations. Admittedly, it does not have a seat at the United Nations, nor does it have permanent representation at the International Maritime Organization or the European Commission. Which is why it is not a signatory to international conventions. Nevertheless, through its opaque activities, it interacts, influences and helps to determine the evolution of the equilibrium. In essence, in this report, we have tried to lift this veil of secrecy.

To conclude, the fight against drug trafficking calls for the reconciliation of these two complementary approaches: one focused on maritime areas considers the territories by projecting the geopolitical balances of the last ports of call. While the other, focused on land-based approaches, has a distant view of maritime traffic. It is from this standpoint that France will showcase its national sovereignty and strengthen its powerful position in the concert of nations, relying on its distant jewels – the overseas territories and communities.

Afterword

Pierre VERLUISE, Doctor of Geopolitics, founder of DIPLOWEB.COM

I have the honour of concluding this fascinating journey into the murky waters of blue crime with an insight into maritime drug trafficking – a worrying reality that transcends all continents without distinction. At the end of this expertly documented report, nagging questions still remain as to whether the information highlighted by Florian Manet have actually been taken into consideration. What lessons can we learn from this trial? How does the thalassopolitics of drug trafficking enrich our understanding of the world? How can political and economic decisions be made in the light of the immersed reality of globalization that these underground economies have come to represent?

These analyses, based on undeniable facts, call for strategic choices and structural decisions to be embraced. First and foremost for France, but also for the European Union. The challenges posed by this transnational criminal threat are protean. They clearly address the central issue of public health, which has been altered by the devastating effects of psychotropic and narcotic substances. But they also call into question the health of populations affected by a growing dependence on these everyday escapist substances. In fact, the whole of socio-economic fabric, in turn, has been impacted: its legitimate foundations have been permanently shaken by the imposition of new rules linked to an irresistibly expanding illegal market. In its most seductive guise, it is in direct competition with the public order, of which the State is the ultimate guarantor. In spite of its efforts, it calls into question its ability to exercise its constitutional powers within its own jurisdiction. The power of international narco-organizations is now posing a serious threat to States with their own limits, exposing them to a transnational threat. The turnover of crime syndicates is equivalent to several percentage points of the world's gross domestic product. States undermined by drug trafficking have become weakened to their foundations, even bankrupt, and therefore naturally weaken the concert of interdependent

nations. The domino theory popularized during the Cold War is aptly applied to production areas, staging points and, ultimately, consumer markets, as Florian Manet has so eloquently revealed. Today's globalization has given rise to new forms of solidarity, breaking down both physical and intangible barriers. It has standardized lifestyles across the globe, spreading new models of civilization. It has opened up public spaces to new, often illicit actors who are taking advantage of the cracks in State and socio-economic structures. Combined with digitalization and its direct impact on supply chains, this global process has boosted the growth of organized crime to such an extent that it has established itself as a major economic and political actor. Worse still, it is increasingly seen as a geopolitical lever, a vector for indirect influence and destabilization within and between States. All the more so because at the same time States are using the levers of disinformation to target our brains via social networks, to destabilise our democratic institutions and render our social relations ever more panic-stricken. As a link in a destructive chain, organized crime is fully integrated into the current logic of deleterious fragmentation of the world. Even if they remains distant in terms of the purpose of their actions, it nevertheless comes to ally itself with terrorism as a supplier of human, financial and logistical resources. Combating organized crime is undoubtedly one aspect of a general policy designed to strengthen the rule of law and public peace both within States and between States themselves. In this singular context, where the very essence of the State is under attack, analyses drawn from geopolitics need to be further enriched by criminological considerations. This science of crime provides a new vantage point from which to view the complexity of events. Geopolitics, on the other hand, provides criminologists with a useful insights, providing an vision into the new dynamics shaping crime. Geopolitics makes it possible to account for the interdependence of scales and the multiplicity of actors, both legal and illegal. It is at this point that internal security will fully assume its institutional objective for the benefit of populations and the rule of law. In this respect, academic research would benefit from more contact with the experts in the fields responsible for our security, both internal and external. And vice versa. DIPLOWEB, the leading French-language geopolitics website, strives in its modest way to contribute to the dissemination of high-level content and to make up-to-date expert analyses available to as many people as possible.

As a provider of maritime information for the general public, Florian Manet describes precisely the mechanism of this phenomenon, referred to as 'maritimization', which acts in concert with globalization. Or to be more precise, the sea and its infinite potential make globalization possible. Covering 64% of the globe, the high seas have undeniably become the centre of gravity for economic and political rivalries in an interdependent world. Access to both material and immaterial wealth depends on the oceans.

However, this international balance is very fragile. In addition to the climatic effects which, from time to time, block the Suez Canal or drastically reduce the movements of the locks on the Panama Canal – the other choke-point of international trade – we should also mention the effects of maritime piracy or the current overflow of the Yemeni conflict to the Arabian Sea, which has led to a costly circumnavigation via the Cape of Good Hope. What's more, the risk is now multiplied by the flow of goods and data that pass through the oceans and seabed every day. The new conflicts in eastern Europe and in the Middle East, or the tensions surrounding fisheries or mineral resources on the seabed in the South China Sea or in South America, for example, all reflect in their own way the vital issues linked to the sovereignty of maritime areas. Against this backdrop, France has a central role to play in the concert of nations, thanks to its status as the second largest maritime power and a respected combat fleet. With a presence on all the world's oceans, it casts a watchful eye to ensure the safety of maritime traffic and areas. These overseas territories, whose importance is not fully appreciated in mainland France, are a manifestation of France's presence in regional geopolitics. They are coveted vectors of influence. They act as invaluable sensors of tensions and rivalries, warning signs of the emergence of both State and non-State actors, such as the emergence of friction between powers. However, with the hidden face of this key asset comes the responsibility to exercise sovereignty over these strategic areas. On the surface. In the water column. On the (deep) seabed. This requires political awareness. This requires national pride. This requires the resources to put this political will into practice. We are living through a cruel experience that should capture our attention. For the past two decades we have neglected the experts who warned of the risk posed by Russia and now we are being forced to remobilize, as a matter of urgency. When it comes to the challenges of the maritime world, will we listen to Florian Manet's well-documented warnings? There's no point in boasting in school textbooks that we have the world's second largest EEZ if we refuse to make the effort to learn about it and provide the means of sovereignty to match our standing.

Let us ask the following question: what is France's thalassopolitical strategy? We are reminded of the words attributed to Cardinal de Richelieu who, towards the end of his life, is said to have exclaimed: *'Tears have a salty taste to remind fallen sovereigns of the sea they neglected'*. Let us hope that those who can shape the future will take heed of the challenges presented by the thalassopolitics of drug trafficking.

Bibliography

Yann ALIX, *Histoires courtes maritimes et portuaires. Tome II D'Afrique uniquement*, Éditions EMS, November 2023.

Yann ALIX, Michèle MONTANTIN and José M. PAGÉS SANCHEZ (dir.), *Dinamicas portuarias en el Caribe y Americana latina/ Ports in transition to face global challenges*, Éditions EMS, Tome 7 coll. 'Les Océanides', February 2021.

Yann ALIX, Pierre CARIOU and Jacques PAQUIN (dir.), *L'Intelligence portuaire, Opération, Innovation, Projection*, Éditions EMS, Tome 8 coll. 'Les Océanides', February 2024.

European Commission, *EU roadmap to combat drug trafficking and organised crime*, COM/ 2023/ 641 final, 18/10/2023.

EUROPOL, *EU Serious Organised Crime Threat Assessment (SOCTA)* 2021.

EUROPOL, *Criminal Networks in EU Ports, Risks and Challenges for Law Enforcement*, 30/03/2023.

Yan Giron, *Précis de puissance maritime*, RL éditions.

INCB, Report of the International Narcotics Control Board for 2021.

Florian MANET, *Le crime en bleu, essai de thalassopolitique*, Édition NUVIS, September 2018.

Florian MANET, 'La crypto-criminalité, défi de l'économie 2.0', *Revue du GRASCO*, 26, May 2019.

Florian MANET, *Crise libanaise. Le MV RHOSUS ou le retour en force de la thalassopolitique*, in DIPLOWEB, 10/08/20.

Florian MANET, *La marétique, un enjeu essentiel pour l'humanité*, Cybersécurité maritime In Cybercercle, collection 'regards croisés', December 2020.

Florian MANET, *La thalassocratie criminelle, perturbateur démasqué des approvisionnements stratégiques?*, contribution to a collective work edited by the Centre Européen de Recherche sur le Risque, le Droit des Accidents Collectifs et des Catastrophes (CERDACC), Éditions Mare et Martin, November 2021.

ONUDD, DEVIDA, *El Estudio sobre la dinámica de la cocaína en Perú*, 2023.

UNODC, *The illicit trade of cocaine from Latin America to Europe – from oligopolies to free-for-all?*, Cocaine Insights, Vienna, 2021.

UNODC, *World Drug Report*, 2023.

UNODC, *Global report on Cocaine 2023 – Local dynamics, global challenges*, 2023.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), *European Drugs Report 2022: Trends and Developments*, Publications Office of the European Union, Luxembourg, 2022.

EMCDDA, BKA, *Captagon trafficking and the role of Europe*, Technical Report, 2023.

EU Drugs Action Plan 2021-2025.

H I SUTTON, *Narco Submarines: Covert Shores Recognition Guide*, 26 March 2020.

Revue sécurité globale, *Les nouvelles criminalités en mer, la vision de la gendarmerie maritime*, issue 13 May 2018.

Report by the Ecuadorian Organized Crime Observatory, *Caracterización del crimen organizado*, 2023.

Table of figures

Figure 1. Modelling of the criminal ecosystem of international drug trafficking.....	22
Figure 2. Global criminal system generated by drug trafficking.....	24
Figure 3. Trends in global cocaine seizures between 2010 and 2020 (in tonnes)	27
Figure 4. Estimated number of illegal drug users in the EU in 2022 and trends in drug seizures (2010-2020 period).....	30
Figure 5. Composition of the EU drugs market based on 2019	31
Figure 6. Cocaine seizure in Central America	38
Figure 7. Maritime operation to export cocaine from Ecuador to North American markets	41
Figure 8. Global mapping of cocaine shipments from production areas to consumer markets	62
Figure 9. Chronology of events linked to illegal cocaine trafficking	63
Figure 10. Global location of cocaine seizures, year 2020	66
Figure 11. Atlantic interdiction operations coordinated by MAOC-N targeting cocaine, 2008 to 2023.....	69
Figure 12. Atlantic interdiction operations coordinated by MAOC-N targeting cannabis, period from 2008 to 2023	70
Figure 13. Destination of cocaine flows from producer countries and Brazil, period 2010-2021.....	72
Figure 14. Area under coca cultivation in hectares, by producer country, 2014-2021.....	72
Figure 15. Breakdown of coca leaf cultivation by producer country, 2020 ...	73
Figure 16. Results of the repression of illicit cocaine trafficking by the Colombian security forces, period 2021-2022.....	76

Figure 17. Seizure of cocaine at the seaport of Antwerp (Belgium), period from 2010 to 2023	91
Figure 18. Ranking of Brazilian ports compared with American ports on the basis of freight transport (in metric tonnes).....	98
Figure 19. Brazilian row and cocaine export routes to the European Union and West Africa	99
Figure 20. Maritime performance of West African States in 2020	105
Figure 21. Mapping cocaine export routes via the Paraguay-Paraná hydraulic network	118
Figure 22. Cocaine exports to Europe via the Paraguay-Paraná waterway system (Hidrovia Paraguay-Paraná or HPP) and staging points in West Africa	119
Figure 23. Volume of cocaine seized on the Paraná – Paraguay – Río del Plata river-sea route over the period 2010–2021 (in tonnes).....	122
Figure 24. Modelling of the criminal ecosystem of international drug trafficking	135
Figure 25. Price of a gram of cocaine by country, period 2018-2020 (in US dollars)	144
Figure 26. The nature of port-land relations from the point of view of crime (local/international)	155
Figure 27. Volume of containers handled in the main ports of the European Union in 2021 (in million TEUs)	163

THE THALASSOPOLITICS OF INTERNATIONAL DRUG TRAFFICKING

THE HIDDEN FACE OF GLOBALIZATION?

What if drug traffickers had already taken control of Europe's major seaports?

This alarming prospect is not just the stuff of crime fiction. The 116 tonnes of cocaine seized in 2023 at the Belgian port of Antwerp serve as a stark reminder of the growing scale of the illicit drug trade. The expansion of cultivation areas, improvements in yields and processing techniques for coca leaves and poppy bulbs, and the rise in global demand illustrate the increasing scale of drug organizations. Chartered fleets of sailboats and commercial vessels, narco-submarines, container contamination, cyberattacks on port infrastructure, drop-offs from cargo giants... the determination of this criminal thalassocracy knows no bounds.

In this well-documented and accessible analysis, international maritime risk expert Florian Manet examines the increasing maritimization of drug trafficking, a trade that, at some point in its journey to consumer markets, always passes through the sea. Drawing on numerous concrete examples, he updates our understanding of the maritime and port logistics architecture that underpins globalized economies, which depend on the sea now more than ever. Drawing on his extensive operational experience, he also explores the challenges facing world trade in an era of growing geopolitical instability. This essay seeks to answer a central question: how can the need for security in global trade be reconciled with the fundamental principle of free movement for people, goods and data?

Florian Manet invites us to engage in a forward-looking, "thalassocentric" reflection on the challenges of an interconnected world, linked by maritime spaces. He develops an original approach that combines geopolitics, criminology, law, and maritime and port logistics.

Florian MANET, a senior officer in the French Gendarmerie, has extensive experience in the criminal investigations sector. An international expert on maritime risk, he previously led the National Investigations Service of the Maritime Gendarmerie, France's national judicial police service for the sea. An associate researcher at the Chaire Mers, Maritimités et Maritimisation du Monde at Sciences Po Rennes, he is the author of the seminal work *Le crime en bleu, essai de thalassopolitique (NUVIS)* as well as numerous studies on maritime security, intelligence, organized crime and cybercrime.

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