The Online Trafficking of Synthetic Drugs and Synthetic Opioids in Latin America and the Caribbean
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The United Nations Office on Drugs and Crime (UNODC) is proud to present this introductory threat analysis of online trafficking of synthetic drugs and synthetic opioids in the Latin America and Caribbean region.

This report has been made possible due to the strength, depth and breadth of UNODC’s relationships with governments, the private sector and the public. It was produced thanks to the kind voluntary funding of the Government of the United States of America (State Department Bureau of International Narcotics and Law Enforcement (INL)).

The COVID19 pandemic increased, almost overnight, the number of people working, schooling and socializing online. Unsurprisingly, criminals with no previous cyber experience took tentative steps into online criminality. Those already operating online saw the opportunity to branch-out into novel commodities, whilst others saw the potential to grow their criminal business models at scale, and beyond their traditional geographic reach.

This report assesses online trafficking of synthetic drugs and synthetic opioids, the linkages with transnational organized crime groups (OCG) and discusses the abilities of OCGs to traffic synthetic opioids on the clearnet and the darknet. The anonymity provided by heavily-encrypted darknet marketplaces and forums undoubtedly makes investigation more challenging, yet, detection, attribution, enforcement and prosecution remain possible. Our work revealed salient data for assessment but there remains an overall paucity of online drug-trafficking crime data specific to Latin America and the Caribbean. There is little prioritisation of cyber-enabled nor cyber-dependent drug criminality in the region, neither in policy nor practice. This creates direct risk from the criminality itself, which is further compounded by the limited political, policy and law enforcement response.

There is an absolute need for a ministerial lead on cyber affairs, in each country, to ensure that law enforcers receive the necessary political support to undertake the most challenging operations. There are real opportunities for States to work together cohesively, at pace, to build international, regional and national cooperation.

UNODC’s capacity building is at the heart of such a response.

Many criminal activities conducted over the darknet and the clearnet are predictable and preventable. UNODC and its partners work hard to address these challenges by helping Member States to build capacity through training and mentoring and by supporting and encouraging research and policy development. Awareness is fundamental for addressing online drug trafficking. Those enforcing the law, and those taking evermore extreme risks by buying high-risk drugs online, need to be empowered to make better decisions. Given the challenges posed by online drug trafficking, stakeholders must increase their commitment and cooperation to developing policy, share intelligence and enhance international cooperation to counter the criminality nationally, regionally and internationally.

The data collection and desktop reviews for this report were carried out from late 2020 to mid-2021, consequently the online drugs market has evolved prior to publication. Sustained, predictable investment in UNODC will help us to robustly assess and analyse the threat, advise Member States and guide policy responses accordingly. We strongly encourage States to help us to achieve this most-necessary goal.

This UNODC analysis will inform policymakers, as well as supporting law enforcement and judicial cooperation, and providing opportunities for focused crime prevention.

NEIL J. WALSH
Chief, UNODC’s Cybercrime and Anti-Money Laundering Section

KRISTIAN HOELGE
Representative
UNODC Liaison and Partnership Office
Mexico
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Acknowledgements

UNODC would like to thank the countries of Latin America and the Caribbean. The preparation of this report would not have been possible without their assistance.

UNODC gratefully acknowledges the financial contribution of the United States Department of State, Bureau of International Narcotics and Law Enforcement Affairs, whose generous support enabled this research to be carried out.

This study was conducted by the UNODC Global Programme on Cybercrime in cooperation with the UNODC Laboratory and Scientific Service under the UNODC Opioid Strategy.

Supervision
Asma Fakhri, Coordinator of the UNODC Opioid Strategy
Bertha Nayelly Loya Marin, Head of the Global Programme on Cybercrime
Neil J. Walsh, Chief of the Cybercrime and Anti-Money Laundering Section

Core team
Gabriel Juarez (research, data collection/analysis and drafting)
Live Brenna (research, data collection/analysis and drafting)
Himal Ojha (data collection/analysis and review)
Bertha Nayelly Loya Marin (coordination and analysis)
Web-IQ (service provider)

The report was edited by Terri Lore.

This report also benefited from the valuable input of many UNODC staff members and external experts and organizations. Oleksiy Feshchenko reviewed and contributed to various sections of the report.
Abbreviations

The following abbreviations have been used in the present report:

<table>
<thead>
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<th>Abbreviation</th>
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<tr>
<td>apps</td>
<td>(computer) applications</td>
</tr>
<tr>
<td>CDS</td>
<td>Cártel de Sinaloa</td>
</tr>
<tr>
<td>CJNG</td>
<td>Cártel de Jalisco Nueva Generación</td>
</tr>
<tr>
<td>COVID-19</td>
<td>Coronavirus disease 2019</td>
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<tr>
<td>FATF</td>
<td>Financial Action Task Force</td>
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<td>ICT</td>
<td>Information and Communications Technology</td>
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<tr>
<td>IoT</td>
<td>Internet of Things</td>
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<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
</tr>
<tr>
<td>OCG</td>
<td>Organized Crime Group</td>
</tr>
<tr>
<td>Tor</td>
<td>The Onion Router</td>
</tr>
<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
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<tr>
<td>WCO</td>
<td>World Customs Organization</td>
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This report provides a picture of threat arising from the online trafficking of synthetic drugs and synthetic opioids in Latin American and the Caribbean. It is not intended to be comprehensive but rather provides a snapshot of key facts in the trafficking of synthetic drugs and highlights outcomes that warrant rapid attention. The raw data was collected during June and July 2021. Like all darknet-focused work, there are inherent gaps in access to, and knowledge of, some marketplaces and forums. As such, it is necessary to add some caveats to the inferences, hypotheses and judgments in this assessment.

Globally, there has been clear growth in the online drug trafficking market. Increasing reliance in online criminal business models has been influenced by the COVID-19 pandemic but existed prior to this. In Latin America and the Caribbean, the online trafficking of synthetic drugs and synthetic opioids has evolved rapidly. Traffickers have adjusted and adapted to new realities, including increased Internet connectivity in the region and changing regulations, controls and responses surrounding drug trafficking.

The borderless nature of cyberspace enables criminals and organized crime groups (OCGs) to operate online in a more flexible and covert manner. The pseudo-anonymity offered by online platforms that conceal the identity of vendors and customers, the simplicity of online communications and transactions, and the low costs associated with establishing and carrying out operations are attractive to drug traffickers.

There are indications that cross-continental cooperation in the production and trafficking of synthetic drugs and synthetic opioids has gained momentum. OCGs in parts of Latin America and the Caribbean receive shipments of precursors from Asia which are then used to produce synthetic drugs in clandestine labs in their respective areas. These OCGs are believed to be using both the darknet and clearnet to negotiate the acquisition and shipment of precursors through legitimate air and/or ocean transport services.

OCGs in Latin America and the Caribbean use social media platforms, open forums, dating apps and darknet markets to advertise and sell synthetic drugs and synthetic opioids. The availability of anonymous online communication translates into lower detection rates, whilst the need for fewer intermediaries and physical facilities lowers costs and increases operational efficiency. The online trafficking of synthetic drugs is lucrative for OCGs; the global reach of the Internet allows them to expand their operations, extending their reach to Asia and Oceania, with the final products shipped to consumers by air or sea.

Transnational actors trafficking synthetic drugs and synthetic opioids online tend to be either criminals operating darknet markets or traditional offline actors who utilize online platforms. Operating a darknet market requires a skill set that includes ICT and security expertise, human resource management and planning capabilities, and financial and business acumen. Single-source data collected for this report suggests that darknet synthetic drug activity in Latin America and the Caribbean is concentrated among approximately 30 vendors or organizations. Whilst we do not, however, have a high confidence level in this number, it is useful to present it so that readers can substantiate or challenge it. OCGs that play a dominant role in the traditional trafficking of synthetic drugs and synthetic opioids have also likely expanded their business to the online market.

The online trafficking of synthetic drugs and synthetic opioids is primarily motivated by profit, and the preferred method of payment (at final point of sale) is with cryptocurrency. Cryptocurrencies appeal to criminals because of the pseudo-anonymous and decentralized structure, which aligns with the nature of darknet markets. Bitcoin is currently the most widely used cryptocurrency on both the clearnet and the darknet, though various types of privacy coins—cryptocurrencies that offer greater anonymity—are becoming increasingly popular. This shift is expected to create significant challenges for law enforcement in terms of gathering intelligence and conducting investigations and policy makers seeking to regulate.
Countries face multiple challenges. There is an overall lack of reliable quantitative and qualitative data upon which analysis can be built and developed.

While it is difficult to predict how this will affect the traditional drug trafficking dynamic, there are clear indications that the online trafficking of synthetic drugs and synthetic opioids is trending upward and that serious and immediate attention is required at the highest levels.

Countries in Latin America and the Caribbean must be ready to address these increasingly complex challenges and the overall political and policy implications by committing to ongoing investment in strengthening their criminal justice capacity and capabilities to investigate online drug trafficking and to identify and prosecute those involved.

In areas as complex as darknet infiltration and analyses, what is strikingly clear is the need for long-term, sustained and routine evaluation of threat. This assessment builds a snapshot picture-of-threat from a relatively limited dataset over a short period of time. The pace at which organized criminals and technologies evolve warrants a strategic response. The basis of such a response must be long-term, reliable darknet threat analysis. This requires consistent, predictable funding, access and staffing. Achieving such will lead to more accurate hypotheses, inferences, premises, judgments and recommendations.

UNODC stands ready to assist.
Building a comprehensive analysis was challenging given the lack of robust, detailed sources of information on synthetic drug trafficking in Latin America and the Caribbean.

The dynamics of how organized crime groups traffic synthetic drugs and synthetic opioids have begun to shift, influenced in part by the COVID-19 pandemic. There has been sustained growth in online drug trafficking, with larger quantities being negotiated and sold on the darknet.

Online trafficking via darknet, clearnet and social media platforms minimizes geographic impediments and provides relatively easy access to a global client base.

Synthetic drugs and synthetic opioids are advertised and sold on dating sites and apps such as, but not limited to, Grindr and Tinder. The geolocation and filtering capabilities of these sites facilitate new dealer-user relationships. Once contact is established, communications tend to move to encrypted messaging apps such as Telegram.

Darknet marketplaces are likely to continue to transition from Bitcoin-based payments to privacy-coin-based cryptocurrency payments. This will further frustrate the legal investigation of cryptocurrency-facilitated transnational organized crime.

Law enforcement and criminal justice authorities in Latin America and the Caribbean often lack the capacities and capabilities to investigate the increasingly complex online drug trafficking marketplace.

A mid-2021 single-source estimate suggested that darknet synthetic drug markets in Latin America and the Caribbean are controlled by approximately 30 Organized Crime Groups. Information to support this conclusion is, however, limited, and UNODC would welcome information which confirms or negates this hypothesis.
• Countries must enhance cooperation between anti-drug agencies and specialized cybercrime units at the national, regional and international levels. Sharing operational, evidential and political experience will strengthen the response to this evolving form of transnational criminal activity.

• Using proportionate state-of-the-art operational tradecraft, law enforcement should develop, maintain and continuously update systems and approaches that securely enable the covert infiltration of darknet drug marketplaces. This will enable investigators to operate safely in high-risk criminal forums.

• Countries should continue to build their understanding of the comparisons and contrasts between traditional and online drug trafficking methodologies so that the emerging risks associated with the latter can be clearly identified and better understood. Regularly updated threat analysis will help States respond swiftly to their new challenges by engaging all relevant agencies as needed.

• All Countries in Latin America and the Caribbean should strengthen their specialized political, policy and operational knowledge of darknet networks, open-source intelligence, social media, cryptocurrencies, and online intelligence gathering. This will enhance national security, and the ability to engage in preventive cyber diplomacy through international cooperation and confidence-building.

• Countries should support the strengthening of local capabilities within the public, private and academic sectors to encourage research on darknet technologies, policies and investigation techniques. These techniques must be proportionate, legal, accountable and necessary for addressing online drug trafficking within a broader human rights and oversight framework. This will build response capabilities whilst also reassuring the public that the techniques used are not disproportionate to the seriousness of the crimes committed.

• Countries must adopt appropriate and effective cryptocurrency (virtual asset) policies and regulations. The regulation of cryptocurrency exchanges, particularly through the application of FATF “risk-based approach to virtual assets” guidelines, will contribute significantly to reducing the anonymous transfer of illicit funds.
This report analyses threats linked to the online trafficking of synthetic drugs and synthetic opioids in Latin America and the Caribbean.  

Cybercrime is an evolving form of transnational crime. The borderless nature of cyberspace enables criminals and organized crime groups (OCGs) to operate online in a more flexible and covert manner. Drug trafficking is a core cyber-enabled (as opposed to cyber-dependent) crime because it can be carried out both online and offline.

Globally, there is clear growth in the online drug trafficking market. Increasing reliance on online criminal business models has been influenced by the COVID-19 pandemic but was apparent prior to this. According to the United Nations Office on Drugs and Crime (UNODC) World Drug Report 2021, the sale of drugs on the dark web increased almost fourfold from 2011 to mid-2017 and more in later years (mid-2017 to 2020).  

There are several perceived benefits for drug traffickers operating online. One is that the pseudo-anonymous nature of online platforms protects the identity of traffickers and limits physical exposure, both in terms of detection and personal security risks. Another is that the low costs associated with establishing and carrying out operations increases profits and flexibility. These advantages are further enhanced by the broader geographical reach and the speed and simplicity characterizing online communications and transactions. Traffickers are no longer limited to local physical markets but now have fast, easy access to a much larger pool of potential customers worldwide.

The trafficking of drugs occurs on multiple online platforms on the darknet and clearnet. Both small-scale traffickers and larger transnational OCGs use darknet markets, social media platforms and encrypted messenger apps for drug trafficking. The preferred form of payment is cryptocurrencies, especially Bitcoin and Monero.

Online trafficking of synthetic drugs in Latin America and the Caribbean have gained significant momentum since 2013. As noted, this derives largely from the obvious advantages of online over traditional commerce for those engaged in criminal activity, including lower production costs, a more profitable business model, and the lack of geographic and other physical boundaries. These are among the key factors that have enabled drug traffickers to shift their focus from traditional narcotics to synthetic drugs. Evidence is emerging to suggest that in Latin America and the Caribbean, as in other regions, traditional in-person trafficking is rapidly losing ground to online trafficking.

### Aim and scope

The purpose of this analysis is to assess and evaluate the threat from the online trafficking of synthetic drugs in Latin America and the Caribbean. The findings of this assessment identify avenues for policy development, to inform strategic response changes among law enforcement authorities, and to guide tactical investigative recommendations.

In terms of regional scope, this report covers Latin America and the Caribbean, including all countries in the Americas except Canada and the United States of America.
To assess the threat from the online trafficking of synthetic drugs, data were systematically gathered from multiple sources across a range of online platforms, including clearnet web pages, social media platforms and messenger applications, and darknet markets and forums. In addition, extensive desktop research and reviews were conducted to build a clearer picture of the synthetic drug market and efforts to address this emerging threat in the region. Interviews with some law enforcement agencies in Latin America and the Caribbean provided important insights into evolving trends in both the online trafficking of synthetic drugs and actions being taken to combat the problem.

Darknet and social media research centered around a data set of more than 30 crawled and indexed darknet markets and forums (both past and present). A set of filters was created for substances, markets, languages and geography. Keyword, hashtag and emoji-based indicators were used to access and analyse darknet markets/forums and social media platforms. The work was further informed by a careful review of research reports, policy and regulation documents, court decisions, and media articles.

The report does not, however, claim to be comprehensive and essentially provides a snapshot of a complex threat arena. Darknet operations and analysis are inherently difficult. There are a multitude of ever-evolving “known unknowns” and, much more challengingly, “unknown unknowns”. These risks mean that analysis may be skewed and that Key Findings which were correct at the time of collection, may no longer remain extant with the passage of time.
The trafficking of synthetic drugs in Latin America and the Caribbean has evolved in recent years. Traffickers have adjusted and adapted to emerging realities, including increased Internet connectivity in the region and changing regulations, controls and responses surrounding drug trafficking.

The current regional context is shaped by a multitude of factors. OCGs have analysed and adapted to the demands of the market and are expanding their criminal enterprises in a cost-effective manner. Operating online has vastly expanded their market reach and facilitated faster and more efficient contact with end-users while also allowing them to lower their running costs, conceal themselves from authorities, and remain anonymous.

In terms of demand and consumption, research suggests that synthetic drugs are on the lower end of the demand list. It has been challenging to obtain sufficient data for analysis from all regions of Latin America and the Caribbean because relevant data either do not exist or are not comparable.

### Increased connectivity allows online trafficking to thrive

Approximately 52 per cent of households in Latin America and the Caribbean have access to the Internet, though figures vary widely from one country to another. Whilst overall Internet penetration remains somewhat low, the share of the population using the Internet has risen significantly over the past decade, increasing by 27 per cent between 2011 and 2018; by 2019, 59.54 per cent of individuals in Latin America and the Caribbean were using the Internet.

Information and communications technology (ICT) is becoming more accessible, cheaper and easier to use. For cybercriminals, this translates into a larger pool of potential customers - particularly young people, who make up a significant portion of the world’s digital natives. Connectivity speeds are faster, and the number of connected devices is higher than ever before. For many of these devices—in particular Internet of things (IoT) products—security standards are deficient or absent, increasing user vulnerability to illegal activity. Criminal organizations exploit this weakness and also benefit from the lack of technical expertise and capacity among criminal justice authorities investigating and prosecuting cybercrimes.
Regulations and precursor controls: Implications for the Online Market

Regulations established outside Latin America and the Caribbean still have an impact in the region. Some States have restricted and "scheduled"\textsuperscript{14} the use and commercial sale of precursors for synthetic drugs. This has led to some diversification within the synthetic drug market in terms of physical production and manufacturing—and to concomitant adaptation among online criminals. For example, regulations adopted in 2017 pertaining to precursors such as N-phenethyl-4-piperidone (NPP) and 4-anilino-N-phenethyl-piperidine (4-ANPP)\textsuperscript{15} encouraged criminal organizations to switch from the most widely used synthesis method—the "Siegfried" method—to the new "Janssen" method, where precursors that are not internationally controlled are used to manufacture or recover scheduled or regulated precursors. Such regulations also affect how precursors and synthesized drugs are being negotiated and sold online. Fentanyl and other synthesized opioids and their precursors have recently been added to the list of banned items in a limited number of darknet markets under the premise of banning a harmful substance. There are indications that the darknet markets are, at least on the surface, banning the substance to avoid drawing law enforcement attention. The implication is that substance bans can lead to less transparency surrounding the ingredients—including fentanyl (which may not always be advertised as such).\textsuperscript{16}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{internet_usage.png}
\caption{Percentage of individuals using the Internet in selected countries in the Americas region, 2019}
\label{fig:internet_usage}
\end{figure}

\textsuperscript{14} See the glossary for a more detailed explanation of scheduling.
\textsuperscript{16} Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021); information on Web-IQ available at \url{https://web-iq.com/}
Another tactic used by drug traffickers is to intentionally miscatalogue and misspell their products; using keywords such as “H.r0in” and “fen-tany’l”, for example, makes it possible for consumers to recognize their products but less likely for the market to match them from a list of banned words. This concealment of keywords is particularly important for law enforcement and criminal justice authorities since it challenges the efficacy of monitoring tools used to investigate and prosecute cases from darknet markets.

**Action and reaction:**
Organized crime group responses to law enforcement strategies

The evolution of law enforcement responses to drug trafficking has had an impact on OCG drug trafficking methodologies. This is particularly noticeable in countries where opium poppy cultivation and production occur and where the State response has focused on crop seizure and eradication. OCGs have responded by shifting and diversifying their drug trafficking operations into new markets and employing different logistical approaches using tools facilitated by the dark web.

A report discussing crop monitoring prepared by UNODC Mexico details the eradication of 23,625 hectares of poppies between 2017 and 2018. This significantly affected the cultivation and production of opium, which drove down the prices paid to poppy farmers and led to traffickers to turn to a cheaper and more accessible synthetic replacement: fentanyl.

Another State response that has prompted changes in synthetic opioid trafficking patterns is the class scheduling of chemical precursors. For instance, the class scheduling of fentanyl in China in 2019, coupled with a major

![FIGURE 2. Screenshot from a popular darknet marketplace taken on 7 August 2021, with image illustrating rules for vendors and identifying fentanyl and similar substances as unacceptable listings](https://www.example.com/fentanyl-screen.png)
takedown of clandestine laboratories and sales sites in the country, has led to an increase in the shipment of precursor chemicals to Mexico. Traffickers have proved to be adept at adapting to shifting regulatory realities. Manufacturing synthetic opioids offers an alternative that not only increases profits but also creates a more addictive product. With the increased need for chemical precursors from abroad, OCGs have turned to the dark web and cryptocurrencies to negotiate the acquisition and shipment of these substances, with the providers taking advantage of the anonymity these technologies can provide.

Although regulatory responses have had a significant impact on the cultivation of opium and the production of heroin, there has been no observed reduction in heroin flows to indicate that fentanyl is displacing heroin on a large scale.

The impact of COVID-19

Measures adopted to control the COVID-19 pandemic have influenced the evolution of the synthetic drug market. Lockdowns and physical distancing measures have made production and transportation harder, as these phases typically require large numbers of people working in close proximity. Border restrictions have inhibited transnational trafficking as air transportation has been seriously limited or prohibited during the pandemic.

COVID-driven restrictions such as lockdowns and international border closures in countries where chemical precursors are produced have led to a significant decrease in price due to the stockpiling of drugs by drug traffickers along the supply chain. The closure of public and private gathering spaces such as recreational environments, bars, and clubs has reduced the availability of drugs from street dealers, leading to increased online drug trafficking via social media and dark web forums. Another advantageous shift for criminal organizations has been the diversion of resources and capacity towards countering COVID-19 propagation, which has weakened some security controls, including scrutiny of the mail stream system for illicit substances, effectively facilitating drug transportation and delivery.

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21 United States, Department of Justice, Drug Enforcement Administration, 2019 National Drug Threat Assessment.
25 Ibid.
27 Ibid.
28 Because of the high volatility of darknet market sites, it is difficult to determine the impact of the COVID-19 pandemic on drug trafficking through the dark web.
The online trafficking of synthetic drugs in Latin America and the Caribbean

Production

The production of synthetic drugs is characterized by the absence of geographic limitations, as there is no need for large tracts of land or a specific climate for cultivation. Clandestine laboratories can be installed and set up anywhere, and logistical and workforce requirements are minimal.29 Within Latin America and the Caribbean, OCGs that operate in Mexico and to a lesser extent in Colombia and Guatemala, play a key role in terms of the large-scale production of synthetic drugs and the acquisition of chemical precursors from abroad.30

Cross-continental cooperation in the production of synthetic drugs has gained momentum. Though sources are limited and untested, there are early indications that producers ship precursors from laboratories in China to OCGs in Colombia and Mexico.31 The OCGs use the precursors to produce synthetic drugs in clandestine labs in their respective areas. The finished products are then shipped by air or sea to consumers.30,31,32

Data from seizures in Latin America and the Caribbean show shipments of precursors and methamphetamines from China to Colombia and Bolivia (Plurinational State of). Drug traffickers associated with Mexican OCGs have been arrested in India, producing fentanyl with the intention of shipping it back to Mexico on a commercial flight.34 In Mexico this business is dominated by two OCGs—Cártel de Jalisco Nueva Generación (CJNG) and Cártel de Sinaloa (CDS). These OCGs are believed to have used the dark web to negotiate the acquisition and shipment of precursors through legitimate air shipping services or via ocean containers, taking advantage of weaker controls in airports and seaports.37 Whilst there is a paucity of data regarding the methodology behind these negotiations, several investigations (such as Operation DisrupTor and the dismantling of multi-State drug trafficking networks carried out by the United States have revealed Mexican cartel involvement and associated money laundering through cryptocurrency markets.38,39

OCGs use social media platforms, open forums, and darknet markets for all phases of trafficking, from acquiring the precursors and methamphetamines from China to Colombia and Bolivia (Plurinational State of). Drug traffickers associated with Mexican OCGs have been arrested in India, producing fentanyl with the intention of shipping it back to Mexico on a commercial flight.34 In Mexico this business is dominated by two OCGs—Cártel de Jalisco Nueva Generación (CJNG) and Cártel de Sinaloa (CDS). These OCGs are believed to have used the dark web to negotiate the acquisition and shipment of precursors through legitimate air shipping services or via ocean containers, taking advantage of weaker controls in airports and seaports.37 Whilst there is a paucity of data regarding the methodology behind these negotiations, several investigations (such as Operation DisrupTor and the dismantling of multi-State drug trafficking networks carried out by the United States have revealed Mexican cartel involvement and associated money laundering through cryptocurrency markets.38,39

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29 UNODC, “COVID-19 and the drug supply chain: from production and trafficking to use”.
34 Wilson Center Mexico Institute and InSight Crime, “Mexico’s role in the deadly rise of fentanyl” (2019), available at https://www.wilsoncenter.org/publication/mexicos-role-the-deadly-rise-fentanyl
36 Audrey Travère and Jules Giraudat, “Revealed: how Mexico’s Sinaloa cartel has created a global network to rule the fentanyl trade”, The Guardian, 8 December 2020, available at https://www.theguardian.com/world/2020/dec/08/mexico-cartel-project-synthetic-opioid-fentanyl-drugs
37 United States, Department of Justice, Drug Enforcement Administration, 2019 National Drug Threat Assessment.
38 United States, Department of Justice, United States Attorney’s Office, Western District of Washington, “Multi-state International drug trafficking organization targeted in 18-month investigation”.
39 United States, Department of Justice, Office of Public Affairs, “International law enforcement operation targeting opioid traffickers on the darknet results in over 170 arrests worldwide and the seizure of weapons, drugs and over $6.5 million”.

needed to manufacture synthetic drugs to selling the final products.\textsuperscript{40, 41} Single-source reporting has revealed the use of the social media platform Pinterest to publish fentanyl advertisements in Chinese. Providers also indicate that they are able to offer secure shipping by claiming to have their own air shipment services and, in some cases, control over corrupt customs and border officials.\textsuperscript{42}

There are indications that organized crime groups in Latin America and the Caribbean have expanded their operations, extending their reach to Japan, Australia and New Zealand.\textsuperscript{43}

\textbf{FIGURE 3.} Screenshot from Pinterest illustrating the sale of synthetic drugs (taken 7 August 2021)

\textbf{Trafficking routes}

At the production level, determining where opium plants are being cultivated, where laboratories are being set up, and how precursors are being acquired and shipped will reveal the initial path synthetic drugs take along the trafficking route. At the sales level, information supplied at the payment stage may help identify the origin of advertisements found on the darknet and clearnet, as well as shipping destinations, providing the final link in the trafficking chain.
Production links to online trafficking routes

In terms of production, OCGs in Mexico and Guatemala and to a lesser extent in Colombia are key managers of poppy plant cultivation and clandestine laboratories.\textsuperscript{44} Several local media reports indicate that Mexican OCGs are using the darknet to communicate, negotiate and conduct logistics operations with their counterparts in China and India to acquire essential chemical precursors.\textsuperscript{45,46,47} As noted previously, social media platforms facilitate the acquisition of precursors for OCGs in Mexico. All of this suggests established links between OCGs in Mexico, China and India at the production stage of the trafficking business model.

For the Central American and Caribbean regions, there is a paucity of data regarding the procurement of synthetic drugs from overseas. While these regions are not source or production zones, they include transit countries for synthetic drugs, overlapping with the transportation framework of the more traditional cocaine supply chain in South America.

The South American landscape is potentially different, as domestic OCGs in the region operate fake or illegal pharmacy sites, mainly to target users located in the United States and Canada. According to local reports of specific cases\textsuperscript{48} and interviews conducted with local authorities, evidence suggests that precursors and final products are being procured and shipped from Europe and Southern Asia. During 2020 and 2021, large quantities of chemical precursors were seized from shipping containers in Colombia and Bolivia (Plurinational State of).\textsuperscript{49}

Online sales links to trafficking routes

The sales process in trafficking reveals important pieces of information that can be linked to production-related information to help plot the complete distribution circuit for synthetic drugs in the region. Several methodologies are used to arrive at these determinations, but the primary approach is to analyse and connect information—much of which is obscured or inferred—on sources, shipping origins and destinations in advertisements and in posts uploaded to forums and markets on social media platforms and the dark web.\textsuperscript{50}

While indicating the source of production is uncommon in darknet advertisements, there are some references to synthetic drugs being produced in Mexico. Shipments also originate in Europe, other countries in Latin America, and some Caribbean countries. Colombia is listed as one of the sources and shipping origins for synthetic drugs; however, the analysis suggests that Colombian postal packages draw greater attention from customs officers. Discussions on one darknet market forum in 2018 appeared to indicate that criminals preferred to list or use Puerto Rico and the Dominican Republic as transit countries to conceal the original shipping source.\textsuperscript{51} OCGs in the Dominican Republic and Puerto Rico mainly act as intermediaries between Mexican and Colombian OCGs in the shipment of synthetic drugs and sometimes in their distribution (including through street-level sales) in certain regions of the United States. They make use of an already established network along the east coast of the United States to facilitate shipment and distribution using a variety of transport methods. For instance, they might use the “body carrier” method to transport synthetic drugs into the United States, or they might serve as a trans-shipment point for synthetic drugs from Mexican or Colombian OCGs, with

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\textsuperscript{44} According to the World Drug Report 2021, the clandestine synthetic opioid laboratories manufacturing fentanyl that are reported to have been dismantled over the period 2015-2019 were located primarily in North America (20 laboratories) and to a lesser extent in Europe and Oceania.

\textsuperscript{45} United States, Department of Justice, United States Attorney’s Office, Western District of Washington, “Multi-state international drug trafficking organization targeted in 18-month investigation”.

\textsuperscript{46} United States, Department of Justice, Office of Public Affairs, “International law enforcement operation targeting opioid traffickers on the darknet results in over 170 arrests worldwide and the seizure of weapons, drugs and over $6.5 million”.

\textsuperscript{47} Diego Oré, “Crimen y bitcoins: una combinación peligrosa se abre paso en Latinoamérica”.


\textsuperscript{49} Statistics provided by the UNODC-WCO Global Container Control Programme.

\textsuperscript{50} Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).

\textsuperscript{51} Ibid.
the products shipped in concealed packages to Puerto Rico utilizing small maritime vessels or United States Postal Service commercial shipping services.52

Colombia is the shipping source most frequently mentioned, but several posts on the dark web assert that the country’s role is declining and that Mexico is playing an increasing role. It is difficult to attach any real validity to such a judgment unless a consistent flow of salient information is available.53

There are some internal routes that have been determined from the analysis of advertisements on darknet marketplaces within countries in Latin America and the Caribbean, particularly in Brazil, Barbados and Chile; however, the number of vendors and markets advertising these routes and countries is low.

It is likely that OCGs involved in trafficking a broader range of drugs use the same or similar transport routes for synthetic and non-synthetic drugs. Utilizing established routes is cost-effective, as it allows traffickers to take advantage of the transport, logistics and market infrastructure already in place.

FIGURE 4. Image of an advertisement for synthetic drugs on the Zion darknet market  

FIGURE 5. Image of an advertisement on Dream Market on the darknet, with vendor shipping from Mexico to the United States and worldwide

52 United States, Department of Justice, Drug Enforcement Administration, 2019 National Drug Threat Assessment.
53 Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).
FIGURE 6. Image of an advertisement on the Agartha darknet market, with vendor shipping to and from Barbados.

FIGURE 7. Communication found on the DNM Avengers forum on 27 August 2020 regarding heroin production moving to Mexico.

Because #4 heroin production has shifted to Mexico, from Colombia, where for years BTH was almost all of what was made & exported to the US. BTH is easier to refine, requires less precursor chemicals, cheaper for bulk buyers and thus easier to prepare and sell. It only takes a few KG of Opium to make a KG of BTH whereas #4 requires at least 8-10KG. #4 is more laborious and difficult to refine, more expensive per KG and not something Mexico has much experience with, even now in 2020. Colombia was sending very high quality #4 to the east coast since the early 90s until around 2013-2014 when production shifted to Mexico. It's a shame for us #4 users because there is a noticeable dip in quality since Mexico took charge of our supply. I don't know what makes the average quality of drugs from SA/Colombia seem much higher than Mexican but it certainly feels that way for me. It makes sense why
The last two stages in the trafficking of synthetic drugs are product sales and delivery. As noted, online platforms on both the clearnet and the darknet are being increasingly used by drug traffickers and consumers. The availability of anonymous online communication and sales channels and the need for fewer intermediaries and physical facilities have lowered costs and made overall operations more efficient than was previously possible.

The sale of synthetic drugs on darknet markets

To be able to search and detect advertisements of synthetic drug shipments from Latin America and the Caribbean on darknet markets, a keyword-based methodology was developed and implemented. Lists of words which could be used by vendors were compiled. These included slang for prescription drugs (such as oxy for oxycodone). The keyword-based search process proved challenging, as many platforms have started to ban some of the substances or products that were targeted for assessment for the present report. It is likely that marketplace administrators have concluded that listings for fentanyl, for instance, will draw increased attention from law enforcement.

This task was undertaken to access data for this report and to provide tactical advice to law enforcement however building comprehensive lists of keywords with all the different variants engineered by vendors proved difficult. To further strengthen the analysis, geolocation, metadata and language data-points were gathered.

The research suggested that when it comes to advertisements for synthetic drug shipments from Latin America and the Caribbean, Mexico is the most common shipping origin (45.51 per cent), followed by Colombia (14.74 per cent) and Brazil (13.46 per cent). In terms of shipping destinations for synthetic drugs originating in Latin America and the Caribbean, the broadest share (46.01 per cent) could not be clearly defined, followed by the United States and South America (16.56 and 7.36 per cent, respectively). It should be noted that this is a snapshot of a dynamic market that changes rapidly. It is also noteworthy that the fundamental premise of anonymous criminal marketplaces is one of mistrust. Simply because a vendor lists the origin as Country A and destination as Country B, does not mean that the locations are accurate. Further metadata is required to build independent corroboration.

Findings showed that only four of the fourteen active online darknet markets have synthetic drug advertisements referring to shipment from Latin America and/or the Caribbean. Applying the same analysis to offline markets, thirty-four twelve had advertisements indicating shipping from the region.

FIGURE 8. The movement of synthetic drugs out of Latin America and the Caribbean to worldwide destinations on darknet markets, distributed by country (June/July 2021)
The sale of synthetic drugs on clearnet platforms

Although the digital gap remains significant, Internet connectivity in countries in Latin America and the Caribbean is growing. Drug traffickers communicate and offer their illicit services on the clearnet, most commonly through social media platforms. The use of such platforms likely reflects the reluctance of most people to access and browse the dark web. Another factor that likely influences the use of social media platforms is the low detection rate, linked to the limited capability of law enforcement to investigate and prosecute online cases. Though operating on darknet markets comes with a lower detection rate, it demands more technical capabilities than running the same operations on the clearnet.\(^5^5\) The use of social media platforms, online dating applications, open forums, and instant messaging applications becomes even more appealing for traffickers in environments where the legal framework is weak/absent and where political prioritization and tactical capabilities are lower.

Synthetic drugs are sold on a number of social media platforms. Just as in darknet markets, using salient keywords in clearnet searches are vital. However, on social media platforms it is also important to identify hashtags and emojis to find the right product or service. Several keywords, hashtags and emojis are posted as images to prevent them from being indexed and to circumvent the consequent risk of the advertisement being banned by the platforms. Forums such as Reddit and Dread are used to discuss darknet market access and information, with most conversations centering around prices, new vendors, concealment methods, security tips, and the quality of products.

Telegram appears to be the most widely used messaging app for synthetic drug trafficking. Although most illicit-drug-focused information on Telegram and Wickr channels is cocaine-related, messages relating to opioids are also seen. Telegram channels\(^5^6\) are usually set up to serve the region where the consumer and vendor are both located, which differs significantly from the international scope of darknet markets.

FIGURE 9. Number of advertisements indicating shipping origins in Latin America and/or the Caribbean (June/July 2021)

Source: Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021)

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\(^5^6\) Channels are one-way tools used to broadcast messages to large groups of subscribers. Importantly, messages are signed with the channel’s (rather than the user’s) name.
Online dating apps such as Tinder and Grindr are used to sell synthetic drugs on a smaller scale.\textsuperscript{57,58} Taking advantage of the geosocial capabilities, Global Positioning System (GPS) location functionality, and advanced filtering features of such apps, consumers are able to find nearby vendors using keywords, hashtags and emojis. The use of pictures, icons or emojis that resemble the product consumers are looking for offers an alternative method of communicating and identifying illicit products—one that does not require the use of conventional text. After the product is bought and sold, communication moves to other platforms (such as Telegram) that offer greater anonymity. A nearby drop zone is agreed upon between the vendor and the consumer, resulting in physical delivery and concluding the final stage in the online synthetic opioid trafficking process.\textsuperscript{59,60}

Products are commonly delivered through private or public postal services.\textsuperscript{61} Direct mail is preferred and is considered less risky. Vendors employ complex techniques to avoid detection, using vacuum seals to reduce air in their shipments and dipping or concealing the products in acetone, gasoline or other chemicals. Most advertisements posted on the darknet mention airmail and fast-parcel courier services as the most common methods of shipment.

**FIGURE 10.** Advertisement for the sale of illicit synthetic drugs on Instagram (1 June 2021)

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**Delivery methods**

**FIGURE 12.** Example of illicit drug shipping information found in a darknet advertisement

- **Shipping information**: All orders are shipped within 24 hours from ordering from Monday till. Ordered before 15:00 for same day shipping. Please always state your shipping information in the following way described below:
  - Name: Address (street name + number):
  - Postal/Zip code and City: Country: -Estimated Delivery Time 3-5 days -TRACKING Tracking is provided the same day as shipping! Please make sure you have your PGP Public key set on your profile or you add it to your order notes so we can send your tracking number encrypted. -If you don’t send us a public key we will send your tracking using privnote private 1-time read note service. **★Refund Policy – Reship Policy★** In case of Non-arrival or delay please send us a message instead of leaving a negative feedback without communicated with us. Order’s are sent Priority with Track-Trace, Non-arrival Only 100% Reship With Legit Proof Of Seized Or 100% Refund!

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\textsuperscript{57}R. López Lio, “Narcocomercedo y aplicaciones de citas venta de drogas a través de redes sociales” (unpublished paper).

\textsuperscript{58}Anastasia Austin, “4 ways microtraffickers are getting around Coronavirus restrictions”, 12 June 2020 (Buenos Aires, InSight Crime), available at https://insightcrime.org/news/analysis/microtrafficking-coronavirus-restrictions/


\textsuperscript{60}Eduardo Ortega, “El nuevo narco: de la esquina al Grindr”, La Tercera, 26 January 2019, available at https://www.latertcra.com/reportajes/noticia/el-nuevo-narco-de-la-esquina-al-grindr/501859/

For online trafficking to be profitable, the vendor needs to assure the buyer that the risk of detection is low. To build this trust, vendors advertise their concealment methodology and even offer no-cost reshipment if the package is intercepted.

Darknet forum participants regularly discuss tradecraft, with significant attention given to avoiding detection by postal services and law enforcement. While concealment techniques, often referred to as “stealth” or “decoy” tactics, are discussed on Internet forums, shipping routes are not. Arrests and darknet market takedowns are analysed and discussed so that traffickers can seek to minimize detection in the future.

FIGURE 13. Discussion on concealment techniques: Mylar versus a vacuum seal (29 June 2021)
Transnational OCGs trafficking synthetic drugs online are generally divided into two categories: those involved in the management of darknet forums, markets and advertising; and those who have traditionally been involved in offline trafficking but now also make use of online tools and platforms to conduct their criminal activities.

Criminals operating on dark web platforms

The dark web and the darknet marketplaces that operate within it offer the majority of vendors and buyers anonymity through the use of strong encryption. Establishing a darknet market requires a skillset that includes ICT and security expertise, human resource management, planning capabilities, and financial and business acumen. One or more individuals—often referred to as administrators—need to be involved in configuring, launching and maintaining the site through the usage of Tor (short for The Onion Router) or peer-to-peer (P2P) networks, and in the day-to-day management of the site.

The Tor network is, at the time of writing, the darknet protocol most often used to conceal real Internet protocol (IP) addresses and locations for websites, email and file-sharing through what is referred to as multi-layered “onion” routing services. The use of encryption together with the random bouncing of communications through global volunteer relay networks and the nesting of the layers of the communication protocol stack are the reminiscent of the layers of an onion. The technology end, anonymity and being able to avoid detection and censorship are key to the sustainability and success of darknet operations. Once a darknet market is established, vendors can advertise their products and complete transactions with buyers.

On the business side, administrators typically identify product sources and secure products. They also handle financial matters, including setting prices, conducting financial transactions, and attracting more vendors through the provision of sales incentives and rewards. The use of a pseudo-anonymous monetary system (such as cryptocurrency), an escrow payment system, and reputation/feedback metrics are also essential for ensuring that the marketplace operates efficiently and anonymously.

As would be the case in any other type of marketplace, vendors operating in a darknet market seek to build trust and a reliable reputation and gain market dominance. Vendors may have accounts across different markets, and it is possible to partially identify them by their consistent Pretty Good Privacy (PGP) key usage and to construct an overview of recently active vendor groups. Although vendors often use the same username in different markets, this is not always the case; PGP public keys provide a more robust way of semi-identifying vendors as re-used keys can be matched. For instance, if a buyer wants to send a message or shipping address, the message will be encrypted using the vendor’s public key, and only the holder of the corresponding private key will be able to decrypt the message. If two vendor accounts publish the same public key, it is possible to partially identify them by their consistent Pretty Good Privacy (PGP) key usage and to construct an overview of recently active vendor groups.

Vendors operating online

Traffickers operating online

65 UNODC, Darknet Cybercrime Threats to Southeast Asia 2020.
66 This technique does not necessarily reveal the true identity of the criminal, but it does link associated metadata.

FIGURE 14. Illustration of the Tor approach to enabling anonymous Internet communication
key, they are likely to be the same person or part of the same criminal organization. For darknet advertisements and vendor-buyer communications and transactions, the technologies, approaches and platforms most often used include the exchange of encrypted messages within the darknet marketplace itself and the use of Wickr, Kik, Telegram and WhatsApp.

In the context of synthetic drug advertisements from Latin American and the Caribbean, 29 distinct keys can be extracted from the 48 vendor accounts detected across all analysed markets. This suggests that Latin American darknet synthetic drug activity is concentrated within a group of approximately 30 vendors or organizations.

**FIGURE 15.** Screenshot of contact details found on Darkbay for the shipment of “OxyCodone pure pharmacy grade AAAA 99.5% pills”

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Refund Policy</th>
<th>Feedback</th>
<th>Shipping Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mg 40mg 80mg OxyCodone pure pharmacy grade AAAA 99.5% pills available for delivery within USA and worldwide. We do supply our pills both in small and bulk orders. CONTACT US BEFORE PLACING YOUR ORDER. You can contact us here. We are committed to selling only the highest quality medications for your moderate and severe pain (Read Pharmacy Grades). The drugs we sell are not expired. Relieving the pains of our customers is our greatest priority. Contact us today. Buy more pay less (discount). Get your monthly supplies.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 16.** Schematic overview of PGP public keys and related vendor accounts, with accounts related to the same key likely to be the same vendor or group
Organized crime groups play a dominant role in the trafficking of synthetic drugs, likely making use of their existing production, payment and distribution logistics infrastructure. Having dominated the drug trafficking business for decades, they have a competitive advantage over smaller or newer organized groups of criminals seeking to enter the market.

Darknet market advertisements occasionally mention or reference Mexican OCGs such as CJNG and CDS. The clearest references are in usernames linked to the names of known drug traffickers. Similarly, direct or oblique references to known OCGs are used to infer desirable origins or superior quality; advertisements might include phrases such as “cartel sourced” or “straight from the Sinaloa mountains”. Similar advertisements are seen on Telegram, where channels can be found bearing cartel logos with references to drug trafficking. It is possible that such darknet markets or channels have no association with the referenced OCGs and that this is simply an advertising ploy to attract business or create legitimacy.

FIGURE 17. Screenshot from the subdread d/DNMSA contains references to CJNG

Source: Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021)
Organized crime is motivated by profit, so it follows that to assess the scale of online synthetic drug trafficking, it is essential to understand the associated illicit financial flows.

In general, the preferred form of payment in cyber-enabled and cyber-dependent criminal transactions is cryptocurrency. Cryptocurrencies are a type of virtual asset based on a decentralized network that is distributed across a large number of computers. This decentralized structure allows cryptocurrencies to exist outside the control of countries and central authorities. Encryption is applied to regulate the creation of cryptocurrency and to verify the transfer of value.

Cryptocurrencies appeal to criminals, including drug traffickers, because of their pseudo-anonymous nature and decentralized structure. In 2020, the illicit use of cryptocurrency represented 0.34 per cent of the total share of cryptocurrency transfer activity, or roughly $10 billion in transaction volume. This represents a significant drop from 2019, during which illicit activity accounted for an estimated $21.4 billion in transfers, representing 2.1 per cent of all cryptocurrency transaction volume. The reason for this relative decline relates in part to the tripling of overall economic activity between 2019 and 2020.

According to one report, almost all drugs sold on the darknet are purchased with cryptocurrencies. The pseudo-anonymous nature of cryptocurrency aligns with the nature of darknet markets, where OCGs can conceal communications and sales.

**FIGURE 18. How cryptocurrencies are used to facilitate payments in darknet markets**

![Diagram of how darknet markets work](https://www.unodc.org/documents/southeastasiaandpacific/Publications/2021/Darknet_Cybercrime_Threats_to_Southeast_Asia_report.pdf)

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67 Fiat currencies are used in both online and traditional drug trafficking, but cryptocurrencies are most commonly utilized in online trafficking. 68 UNODC, Darknet Cybercrime Threats to Southeast Asia 2020.


71 Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).
According to the UNODC report *Darknet Cybercrime Threats to Southeast Asia 2020*, Bitcoin remains the most widely used cryptocurrency in both clearnet and darknet markets. Bitcoin was the first cryptocurrency to enter the market in 2009 and belongs to a group of cryptocurrencies that are considered pseudo-anonymous. Bitcoin transactions leave a trail in the Bitcoin public blockchain, which shows all transactions between Bitcoin wallets, so it is possible to trace transactions using the right tools.

The share of Bitcoin transfers likely linked to illicit activity dropped from more than 1 per cent in 2019 to 0.11 per cent in 2020. This aligns with the sharp increase in the use of privacy coins such as Monero, which comes with its own cryptocurrency mixer/tumbler service. Privacy coins are a class of cryptocurrencies that provide greater anonymity through private and anonymous blockchain transactions. Transaction origins and destinations are concealed. While most of the darknet markets still support both cryptocurrencies, some (such as the White House Market, a prominent darknet marketplace) are banning Bitcoin altogether and adopting Monero, and other markets are announcing their intention to follow suit. The shift is likely due to the anonymity features privacy coins offer in addition to the fact that Monero, in particular, has a lower transaction fee. The transition from Bitcoin to privacy coin transactions will create significant challenges for law enforcement in terms of gathering intelligence and conducting investigations. This further highlights the need for globally implemented regulations, informed policy debate, and comprehensive investigation capabilities.

Estimating the value and volume of cryptocurrency flows linked to synthetic drug sales in darknet markets is challenging because traditional financial tracking methods are ineffective in this context, where financial activities can be obscured with relative ease. While some transactions are publicly visible in the blockchain, others are untraceable and offer complete anonymity.

### FIGURE 19. List of darknet markets analysed during the preparation of this report and the cryptocurrencies accepted in each, including Bitcoin (BTC), Monero (XMR), Ethereum (ETH), Zcash (ZEC), Litecoin (LTC), Bitcoin Cash (BCH) and Bitcoin Dash (DASH)

<table>
<thead>
<tr>
<th>Market ID</th>
<th>Start Date</th>
<th>Country</th>
<th>Name</th>
<th>URL</th>
<th>Description</th>
<th>Supported cryptocurrencies</th>
<th>Monero (XMR)</th>
<th>Ethereum (ETH)</th>
<th>Zcash (ZEC)</th>
<th>Litecoin (LTC)</th>
<th>Bitcoin Cash (BCH)</th>
<th>Bitcoin Dash (DASH)</th>
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<tbody>
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<td>USA</td>
<td>Hollywood</td>
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Source: Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).
Although it is difficult to furnish precise figures, broad estimates can provide a sense of the scale and size of cryptocurrency activity in Latin America and the Caribbean. The region has one of the smallest crypto-economies in the world based on the overall volume of transactions and is positioned just ahead of Africa and the Middle East. In terms of the volume of cryptocurrency sent to darknet markets from drug customers, the region is ranked below Europe, North America and Asia.

Between July 2019 and June 2020, countries in Latin America and the Caribbean received approximately $24 billion and sent around $25 billion in cryptocurrency; these transactions represented 5 to 9 per cent of all cryptocurrency activity globally during any given month. During this period, Latin America and the Caribbean had the second lowest crypto-economy growth rate in the world. Out of the $24 billion the region received, 16 per cent ($3.84 billion) was associated with illicit activities such as scams, darknet commerce and stolen funds. Of the $3.84 billion received, 26 per cent ($998.4 million) originated from darknet market transactions.

FIGURE 20. Illicit activity in Latin American and Caribbean countries (July 2019 - June 2020)


It is common for darknet vendors and administrators to launder funds through cryptocurrency services such as mixers/tumblers, unregulated exchanges, or over-the-counter brokers in Asia or Eastern Europe. These transactions can be observed in the blockchain data activity between darknet markets and individual countries.

Most countries in Latin America and the Caribbean have not yet revised anti-money-laundering and counter-financing-of-terrorism (AML/CFT) regulations to include cryptocurrencies. It is worth noting, however, that Mexico has a 2018 financial technology (fintech) law which regulates financial technology institutions.


FIGURE 21. Share of drug-focused darknet market vendor activity by region, 2020


FIGURE 22. Value of cryptocurrencies received in Latin America and the Caribbean, by country and currency (July 2019 - June 2020)

Decentralized markets: the future of online trafficking of synthetic drugs?

For OCGs, the new decentralized model embodied by platforms such as OpenBazaar and Televend may be an attractive alternative option to the more traditional darknet marketplaces. A decentralized market is a P2P marketplace that does not need centralized storage or ownership and in some cases does not need Tor browsers for access.

**OpenBazaar**

OpenBazaar is a decentralized online marketplace, which means it does not rely on a central server. It is a P2P client that enables buyers and sellers to connect directly without the need for a third party to host data or provide escrow services. OpenBazaar, unlike dark web marketplaces, is not controlled by a single operator or group of operators and thus presents challenges for law enforcement authorities. If the operators of a dark web marketplace are identified, they can be tracked down and prosecuted, effectively shutting down the marketplace. In decentralized marketplaces, however, there is no operator to target because each user is individually engaged and could become a target instead, making it difficult to shut down operations.80

This platform is gaining popularity among vendors since traditional darknet marketplaces keep being taken down (or are exit scams). At the beginning of 2021, the development team behind OpenBazaar announced that it would terminate its technical support for the platform.

**FIGURE 23.** Screenshot from OpenBazaar (4 January 2021)

The disabling of the original search engine hampered efforts to obtain information on the sale of synthetic drugs; however, it was possible to gather some limited information utilizing alternative search engines.81

**Televend**

Televend is a Telegram-based platform that allows customers to pay vendors directly with Bitcoin or Monero and avoid potentially risky escrow services and possible exit scams. It is used by darknet vendors to sell drugs and other illicit products through automated chatbots utilizing encrypted communications. Buyers access a group in Televend relevant to their region and the products they are looking for, and through an automated chatbot they receive an automatically generated Bitcoin address to which they send payment. Once the payment is confirmed, the vendor is informed, customer addresses are decrypted, and the drugs are packaged and placed in the mail. As with OpenBazaar, there are relatively few vendors from Latin America and the Caribbean using this platform, but there has been a recent surge in interest, and Televend’s popularity is growing fast—not least because its decentralized structure makes it more resilient to attacks from both law enforcement and rival markets.82

Drug purchases through Televend are very quick, often taking only one to two minutes. Services are available 24 hours a day, 7 days a week, and automated alerts are sent to customers and vendors. Accessibility is easy, and the process for both buyers and sellers is very simple and streamlined. This service presents a number of challenges for law enforcement because users access it via a subscriber identification module (SIM) hosting service rather than a phone number when joining Telegram. Similarly, users can select a country other than their country of residence, making it difficult or impossible for law enforcement to pinpoint their location.83,84,85

81 Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).
82 Web-IQ, dark web intelligence data extraction and analysis carried out on behalf of UNODC (2021).
83 Charlie Clemoes, “Darknet markets are bringing more kinds of drugs to many more places than ever before”, FA Quicknotes (Failed Architecture, February 2021), available at https://failedarchitecture.com/2021/02/darknet-markets-have-brought-more-kinds-of-drugs-to-more-places-than-ever-before/
FIGURE 24. Examples of Televend channels in Latin America and the Caribbean related to drugs (found June/July 2021)

FIGURE 25. Example from a Televend channel where synthetic drugs labelled from Mexico are being sold (found August 2021)
Conclusion

This report suggests that there are strong indications of a growing online presence in the trafficking of synthetic drugs in Latin America and the Caribbean. Whilst this trend is unlikely to lead to digital trafficking overtaking more established methods, it is significant enough to warrant attention and decisive action. Transnational Organized Crime Groups have adapted to the digital age and are taking steps to ensure that their business models are evolving in ways that allow them to meet emerging challenges, remain competitive, maximize profits, and strengthen concealment strategies to avoid prosecution. COVID-19 and the consequent strengthening of online communication and commerce have further accelerated this process.

Synthetic drugs are advertised and sold via darknet markets and social media platforms and through messenger and dating apps. Online trafficking is seemingly being utilized to minimize detection risks and geographic impediments and to create and reach out to a larger customer base. Online platforms play an integral role in the entire trafficking process, from production and sales to payment and delivery. Encrypted messaging, whether app-based or within darknet forums, has become the communication method of choice for drug traffickers.

Cryptocurrencies are the preferred form of payment in online trafficking. The anonymity associated with cryptocurrency use and the strong encryption seen in messaging apps and the darknet complicate investigations. This will increasingly frustrate the efforts of law enforcement to analyse and address online drug trafficking. Vulnerable communities will be at even greater risk of harm, illicit financial transactions will soar, and in many cases investigative capacity will prove insufficient as criminals involved in the online drug trade become ever more sophisticated in avoiding detection.

While it is difficult to predict how this will affect the traditional drug trafficking dynamic, there are clear indications that online drug trafficking is trending upward and that concerted and immediate attention is required at the highest levels. It is vital that countries acknowledge the threat and be prepared to invest the resources needed to respond in a proportionate, legal, accountable and necessary manner. It is essential that Latin American and Caribbean countries address the overall political and policy implications and strengthen their criminal justice capacity and capabilities to investigate online drug trafficking and to identify and prosecute those involved.

This report provides a snapshot of the threat. It is not intended to be comprehensive but is rather meant to provide key facts surrounding important developments in the trafficking of synthetic drugs and to highlight some alarming trends that warrant urgent attention. It represents a call to action, reflecting debates in the Commission on Narcotic Drugs HONLEA forums and the Commission on Crime Prevention and Criminal Justice.

The challenges are myriad and will continue to evolve rapidly. Both drug traffickers and those who seek to shut down their operations are compelled to continuously come up with new ways to secure an advantage. Countries must be ready to address these ever-changing and increasingly complex challenges by committing to ongoing investment in continuous adaptation and improvement, particularly in the areas of intelligence gathering, regulatory and policy development, and criminal investigation and prosecution.

The criminal business model used by OCGs and other drug traffickers has evolved but remains wedded to the need to move a commodity along the supply chain from source to consumer and to get paid. Although technological advances have facilitated automation and anonymization, humans remain at the heart of the criminal activity. And where humans are involved, mistakes will be made. These missteps will provide law enforcement authorities with opportunities to investigate, gather evidence, detect criminal activity, arrest perpetrators, and try cases. Robust, transparent criminal justice systems will ensure that those found guilty are convicted and that those who are not guilty, go free.

UNODC remains committed to supporting the countries of Latin America and the Caribbean in their vitally important efforts to protect communities from the harms caused by synthetic drug trafficking.
## Glossary*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Anonymous web surfing</td>
<td>Anonymous web surfing allows a user to visit websites without information being gathered on which sites the user has visited. Services that provide anonymity disable pop-up windows and cookies and conceal the visitor’s Internet Protocol (IP) address. These services typically use a proxy server to process each HyperText Transfer Protocol (HTTP) request. When the user requests a web page by clicking a hyperlink or typing a Uniform Resource Locator (URL) into the browser, the service retrieves and displays the information using its own server. The remote server (where the requested web page resides) receives information about the anonymous web surfing service in place of the user’s information. Source: Law Web, “Unique legal database”, available at <a href="https://www.lawweb.in/2012/10/use-of-anonymizer-for-better-privacy.html">https://www.lawweb.in/2012/10/use-of-anonymizer-for-better-privacy.html</a></td>
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<tr>
<td>Bandwidth</td>
<td>Bandwidth is the maximum volume of data that can be transmitted over an Internet connection in a specific amount of time; it is often measured in megabits per second (Mbps). International bandwidth reflects the maximum rate of data transmission from one country to the rest of the world; it is the combined capacity of all international data lines from a country extending outside that country. Source: International Telecommunication Union, “International bandwidth”, definition from slide presentation (Diapositive 1), available at <a href="https://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Maputo-09/pdf/session2-Abosse-Internat_Bandwidth-en.pdf">https://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Maputo-09/pdf/session2-Abosse-Internat_Bandwidth-en.pdf</a></td>
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<tr>
<td>Clearnet</td>
<td>The clearnet is the “regular” publicly accessible Internet—the traditional World Wide Web—where information sources can be found using link-crawling and domain name system (DNS) query techniques. The clearnet comprises mainstream websites indexed by well-known search engines such as Google, Bing and Yahoo. It is the unencrypted, non-dark, non-Tor Internet. Source: European Monitoring Centre for Drugs and Drug Addiction and Europol, Drugs and the Darknet: Perspectives for Enforcement, Research and Policy (Luxembourg, 2017), available at <a href="https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf">https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf</a></td>
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<tr>
<td>Cryptocurrencies</td>
<td>Cryptocurrencies are electronic tokens generated by networks of computers to replace traditional currencies. The electronic tokens in digital currency have value based on the exchange of conventional currencies and commodities for the tokens through special Internet exchanges such as BitPay. These exchanges function somewhat like PayPal but are not associated with that company. Sources: Kaspersky, “What is Bitcoin?”, available at <a href="https://www.kaspersky.com/resource-center/definitions/what-is-bitcoin">https://www.kaspersky.com/resource-center/definitions/what-is-bitcoin</a> and European Monitoring Centre for Drugs and Drug Addiction and Europol, Drugs and the Darknet: Perspectives for Enforcement, Research and Policy (Luxembourg, 2017), available at <a href="https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf">https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf</a></td>
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<td>Cryptocurrency mixer/tumbler</td>
<td>A cryptocurrency tumbler or mixer is a service offered to mix potentially identifiable or “tainted” cryptocurrency funds with others to obscure the trail back to the funds' original source and make them more difficult or impossible to trace.</td>
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<tr>
<td>Dark web and darknet</td>
<td>The dark web is a relatively covert part of the World Wide Web that is not indexed by standard search engines and can only be accessed using specialized software such as the ToR browser. The darknet is a network built on top of the Internet that has been designed specifically for anonymity and is purposefully hidden. Unlike the deep web, the darknet is accessible only through the use of special tools and software—browsers and other protocols beyond direct links and credentials.</td>
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<tr>
<td>Deep web</td>
<td>The deep web comprises parts of the Internet that are not indexed or fully accessible through standard search engines such as Yahoo and Google. It includes both licit and illicit content. The deep web encompasses intranet content, banking information and membership sites, and Countries databases and libraries contain huge amounts of deep web data. However, it also includes dark web sites. The only way to access the deep web is by conducting a search within a particular website.</td>
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<tr>
<td>E-commerce websites</td>
<td>Electronic commerce (e-commerce) websites are Internet sites through which goods and services are bought and sold.</td>
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<tr>
<td>Encryption and anonymizing</td>
<td>Data can be converted to an unrecognizable or “encrypted” form, often to protect sensitive information, including files, storage devices and data transfers, so that only authorized parties can view it.</td>
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<tr>
<td>IP address</td>
<td>An IP address is the electronic address of a connected device in an IP network or transmission control protocol/Internet protocol (TCP/IP) network; this is the worldwide standard both in-house and on the Internet. Every desktop and laptop computer, server, scanner, printer, modem, router, smartphone, tablet and smart TV is assigned an IP address, and every IP packet traversing an IP network contains a source IP address and a destination IP address.</td>
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<td>License keys</td>
<td>A license key is a data string that verifies authorized software product access. This type of software security helps prevent software piracy and gives organizations the ability to protect their software from unauthorized copying or sharing by unlicensed users.</td>
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<tr>
<td>Opiates</td>
<td>Opiates constitute a subset of opioids and comprise various natural products derived from the opium poppy plant, including opium, morphine and heroin.</td>
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<tr>
<td>Opioids</td>
<td>Opioids is a generic term that refers to both opiates and their fully or semi-synthetic analogues (mainly prescription or pharmaceutical opioids) and compounds that bind to opioid receptors in the body.</td>
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<td>Privacy coins</td>
<td>Privacy coins are unique cryptocurrencies that allow a user to maintain total anonymity when making blockchain transactions. The identity of users and the origins of their transactions are completely protected. These coins empower senders and receivers to remain anonymous with different levels of privacy, including hidden wallet addresses and transaction balances. With privacy coins, payments actually remain private.</td>
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<td>Scheduling</td>
<td>The schedules in the international drug control treaties were established to classify internationally applicable control measures that would ensure the availability of certain substances for medical and scientific purposes while preventing their diversion into illicit channels. The schedules are built on the Single Convention on Narcotic Drugs of 1961, as amended by the 1972 Protocol, and the Convention on Psychotropic Substances of 1971. Source: UNODC, Terminology and Information on Drugs, 3rd ed. (United Nations publication, Sales No. E.16.XI.8), available at <a href="https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf">https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf</a></td>
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<tr>
<td>Synthetic drugs</td>
<td>Synthetic drugs are intoxicating substances that are manufactured to be chemically similar to organic drugs. There are various types and categories of synthetic drugs, but the two main classes of these drugs are cannabinoids, which are chemically similar to marijuana, and cathinones, which are chemically similar to amphetamines. Source: UNODC, Terminology and Information on Drugs, 3rd ed. (United Nations publication, Sales No. E.16.XI.8), available at <a href="https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf">https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf</a></td>
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<tr>
<td>Synthetic opioids</td>
<td>Synthetic opioids are all opioids that are not derived from the opium poppy or other plants but are synthesized in a laboratory and act on the same targets in the brain as natural opioids to produce pain-relief effects. Source: UNODC, Terminology and Information on Drugs, 3rd ed. (United Nations publication, Sales No. E.16.XI.8), available at <a href="https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf">https://www.unodc.org/documents/scientific/Terminology_and_Information_on_Drugs-E_3rd_edition.pdf</a></td>
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<td>Tor</td>
<td>The Onion Router (Tor) is an open-source project offering users software that allows them to access Internet resources anonymously by relaying traffic through the computers of other Tor users. This free web browser is designed for anonymous web browsing and hosting and is the tool most commonly used for accessing and surfing the darknet. Sources: Microsoft, Microsoft Intelligence Security Report, vol. 18 (Redmond, Washington, 2015), available at <a href="https://www.microsoft.com/en-us/download/details.aspx?id=46928">https://www.microsoft.com/en-us/download/details.aspx?id=46928</a> and European Monitoring Centre for Drugs and Drug Addiction and Europol, Drugs and the Darknet: Perspectives for Enforcement, Research and Policy (Luxembourg, 2017), available at <a href="https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf">https://www.emcdda.europa.eu/system/files/publications/6585/TD0417834ENN.pdf</a></td>
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<td><strong>Web crawling</strong></td>
<td>A web crawler, spider, spiderbot, or search engine bot downloads and indexes content from websites all across the Internet. The goal of such a bot is to learn what (almost) every web page is about so that the information can be retrieved when it is needed. The bots are called &quot;web crawlers&quot; because crawling is the technical term for automatically accessing a website and obtaining data via a software program.</td>
</tr>
<tr>
<td><strong>Web scraping</strong></td>
<td>Web scraping is the process of harvesting large sets of data from websites and storing the content in a database on a local computer or server.</td>
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*Definitions are extracted or paraphrased from the sources listed.*
UNODC Capacity Building Resources

Training

Cybercrime investigation, Dark web Investigations, Open Source Intelligence Intelligence, Digital Forensics, Cryptocurrencies, Cybercrime Investigations, Cybercrime Legal Aspects and Due Diligence, Online Child Sexual Abuse and Exploitation, Ransomware, etc.

Mentoring

Digital Forensics and Cybercrime Investigations.

Studies and Reports

*Darknet, Cybercrime Threats to Southeast Asia*

*Cyber Crime Case Digest*

*CYBERCRIME AND COVID19: Risks and Responses*

Other Resources

*UN Toolkit on Synthetic Drugs*

*University Modules on Cybercrime*

E-learning Course on Cryptocurrencies (available upon request)