USE OF THE DARK WEB AND SOCIAL MEDIA FOR DRUG SUPPLY
Online drug sales mirror the increase in Internet use

Use of the Internet and social media continues to spread across the globe, to the extent that two thirds of the global population now have access to the Internet (66 per cent)¹ and more than half use social media (59 per cent).²

Increased digital interconnectivity has brought about innovations in how supply chains operate, but the ongoing growth of online shopping is not limited to the purchase of licit goods. The increase in the use of the Internet among the general population is mirrored in the increase the use of the open Internet, also known as the clear web, as well as the deep web to procure drugs. Developments in digital communications platforms have added a new dimension to drug distribution. In principle, almost everyone can now order drugs online and have them delivered directly to their door, thereby cutting out intermediaries, reducing costs and shortening supply chains.

The marketing and sale of controlled drugs and NPS on the Internet can take place at different levels: on the clear web, sometimes using encrypted communications tools; on certain social media applications; and on darknet markets, which form part of the deep web. Measurements – such as the number of websites, terabytes stored on such websites or cryptocurrency

THE INTERNET: CLEAR WEB, DEEP WEB AND DARK WEB

- **Internet**
  Infrastructure consisting of a standardized set of data transfer protocols for digital information exchange.

- **Clear web (surface web)**
  Content indexed by standard web-search engines, accessible to anyone using the Internet.
  - social networks
  - public pages /profiles

- **Dark web (darknets)**
  Darknets, or overlay networks within the Internet that can only be accessed with specific software, configurations, or authorization, and often use a unique customized communication protocol. Two typical darknet types are social networks (usually used for file hosting with a peer-to-peer connection), and anonymity proxy networks such as Tor via an anonymized series of connections.

- **Deep web**
  Content not indexed by standard web-search engines; content can be located and accessed by a direct URL or IP address but may require a password or other security access to get past public-website pages; includes many very common uses such as web mail, online banking, private or otherwise restricted access content and profiles.
(2017–2022) involved transactions linked to illegal goods and services (0.24 per cent in 2022). The proportions of illegal transactions are different if only transactions involving darknet markets are considered, however. Transactions involving darknet markets (mostly drug-related markets) accounted for 0.02 per cent of all cryptocurrency transactions in 2022, the majority of which can be considered to have been illegal.

Following years of an upward trend, drug sales on the dark web seem to have declined in 2022

An Internet survey conducted simultaneously in 10 European Union countries in the period 2017–2018 among some 20,000 Internet-using drug consumers, using various recruitment strategies, found that 8 per cent of survey respondents had bought drugs on the dark web. This was a far smaller proportion than those who had bought drugs from a drug dealer (59 per cent), but a significantly larger proportion than those who had bought drugs from an online shop (3 per cent) or a specialized NPS shop (1 per cent). Another online survey, based on a convenience sample of more than 100,000 participants in 35 countries worldwide, suggested that the proportion of Internet-using drug consumers who had purchased drugs on the dark web in the previous 12 months had more than doubled between 2014 and 2022, from 4.7 to 10.8 per cent. Although plausible, these findings should

Most cryptocurrency transactions are not illegal. A blockchain analysis of cryptocurrencies suggests that only between 0.1 and 1.9 per cent of the volume of all cryptocurrency transactions in recent years
be interpreted with caution, because they are not based on representative global samples but on convenience samples that are characterized by an overrepresentation of Internet users in Europe, the Americas and Oceania.

Estimating the size of drug markets on the dark web is challenging. An analysis of major darknet markets using web-crawling techniques has shown that they are highly volatile and have a propensity to disappear at short notice as a result of both law enforcement successes in dismantling such markets and exit scams.20

Another approach has been to systematically investigate the existing blockchains of various cryptocurrencies for suspicious addresses involved in illegal transactions, and the resulting money flows between such addresses (cryptocurrency wallets). The analysis of various blockchains of cryptocurrencies suggests that darknet markets (mostly selling drugs) continued growing up until 2021, when their combined revenue reached a record high of an estimated $2.7 billion (equivalent to an estimated 1.5 per cent of retail drug sales in North America and Europe),21 before declining by half, to around $1.3 billion in 2022, mostly...
as a result of the dismantling of the darknet platform Hydra Market in April 2022. Nonetheless, darknet markets continue to show resilience and started to recover in the second half of 2022.

**Darknet drug sales may be shifting towards wholesale**

International experts, meeting in late 2022, highlighted a possible shift in darknet markets, away from primarily retailing drugs to end users towards selling them wholesale as well – a trend that seems to have been confirmed by blockchain analysis more recently. The recent decline in active darknet markets (mostly drug-related), their participants and transactions has occurred in a context where overall darknet sales nonetheless continued to rise until 2021, the consequence of a marked increase in average payments per transaction and an indication that some vendors may...
Use of social media for buying and selling drugs appears to be growing

End users seem to be buying their drugs on the dark web to a lesser extent than in previous years. Qualitative information provided by people who use social media suggests that the use of such media for drug purchasing purposes has been increasing, especially at the retail level. This is occurring in a context in which the use of social media, typically accessed via the clear web (although not exclusively) is increasing more rapidly than the use of the Internet in general.

In a study conducted in the United States (2018) and Spain (2019), in which about one tenth of all Internet-using drug consumers aged 15–25 bought drugs online, large proportions (69 per cent in the United States and 86 per cent in Spain) of online purchases were made via social media, and the remainder on darknet markets. Another study, conducted in Ireland in 2021, suggested that around 64 per cent of online drug purchases among the general population were made using social media, 28 per cent occurred on darknet markets and 8 per cent were made via online shops. That pattern applied to most drug types. A previous comparison of social media and darknet markets in Denmark, carried out in 2017, had also suggested that

have started selling their drugs to drug distributors while others may have widened their portfolio to increasingly sell other products and services in addition to drugs.
most online drug purchases were made via social media (71 per cent).³³

Drugs are sold on a number of social media platforms, including mainstream platforms such as Facebook, Instagram, Snapchat and WhatsApp.³⁴ Platforms that enable social networking between strangers, such as Tinder, Grindr, Instagram, Facebook and Discord, allow sellers to openly “advertise” their products to unknown buyers by constructing a public profile. Conversely, messaging platforms, both encrypted and unencrypted, facilitate more private drug transactions between people who already know one another, via direct message or within the confines of a group chat.³⁵

The two main social media platforms identified for drug purchases in the above-mentioned study conducted in the United States and Spain in 2018/2019 were Facebook and Instagram.³⁶ Findings from a study in Nordic countries in the period September–December 2017 show that Facebook and Instagram were also the social media platforms most commonly used for drug dealing in Denmark, Iceland and Sweden. There were no indications of drug dealing on open social media platforms such as Facebook in Norway, however. The same was

Source: Deirdre Mongan, Nicki Killeen, David Evans, Seán R. Millar, Eamon Keenan and Brian Galvin, European Web Survey on Drugs 2021: Irish Results.

Note: There can be more than one source reported.
Drug users who purchase drugs online are predominantly men

Most drug users in the samples illustrated in the graph below who purchased drugs online were men: more than three quarters of respondents did so on darknet markets, and slightly fewer (two thirds) used social media.

Proportion of men among survey respondents who were Internet-using drug users purchasing drugs online: darknet markets (cryptomarkets) versus social media, 2017–2021

![Graph showing proportions of men among survey respondents who purchased drugs online through different means.]


true in Finland, where the majority of online drug purchases were made on darknet markets. One-on-one social media forums such as Reddit seem to be preferred in Norway. However, different social media platforms may also be used for different drugs, as seen in Latin America and the Caribbean.

User-friendliness of social media raises new challenges

Sales on the dark web (on darknet markets) are, in general, fully anonymous transactions between sellers and buyers that are dispatched by mail. Drug sales via social media, although initiated anonymously, tend to require hand-to-hand transactions, so end up in face-to-face meet-ups arranged via one-on-one social media apps such as Snapchat, Wickr or Facebook Messenger.

The need for face-to-face transactions means that the use of social media for buying and selling drugs is more of a localized phenomenon, in which different social media platforms dominate the scene in different countries and buyers and sellers often live in the same country. In contrast, the use of darknet markets for those purposes is more of a regional and, partly, global phenomenon.

The growing popularity of social media platforms for purchasing drugs reflects a certain reluctance among people to access the dark web, possibly because it is
often perceived as requiring sophisticated IT skills to use and as being increasingly targeted by law enforcement authorities. Social media and encrypted messaging apps are thus seen as faster, more convenient and more user-friendly local alternatives for purchasing drugs than the complex and volatile darknet drug markets. Moreover, social media users lean more towards the use of pictures, icons or emojis that resemble the products that consumers are looking for, thereby offering an alternative method of communicating and identifying illicit products – one that does not require the use of conventional text and which may be more difficult for law enforcement authorities to identify quickly.

The proliferation and ubiquity of social media, coupled with its increasing use for buying and selling drugs, suggest that the availability and accessibility of drugs are also on the increase for people with less access to traditional drug markets. Sections of the population can now be reached who otherwise may not have had easy access to drug markets. In the United States – and probably in other countries as well – the growth of social media and access to smartphones have led to the emergence of new threats, as criminal drug networks have started using social media to create new illicit markets and target a new clientele. Perhaps even more problematic is that, in addition to drugs becoming more accessible, as reported in some studies, drug supply is now more varied in terms of the compounds and doses on offer.

This may be a particular issue for young people, as the use of social media correlates strongly with age; the youngest age groups (those aged 16 to 24) seem to show the strongest inclination towards using social media to purchase drugs, while the use of the dark web for drug purchases seems to be more popular among young adults aged 25 to 34.

Even though the available data are still not sufficiently robust to arrive at final conclusions, published studies suggest that drug sales via social media have grown markedly and may already be more significant than drug sales via darknet markets on the dark web, notably at the retail level.
For the purposes of these European Web surveys on drugs coordinated by EMCDDA, national partners were encouraged to develop a variety of recruitment strategies to reach a range of different user groups. Sampling strategies were devised by each national partner based on their own networks and experience. Recruitment strategies varied substantially and included advertising in drop-in and outreach centre premises, advertising on the darknet, offering participants the incentive of entry in a lottery, and paid ads on social media sites. Source: João Matias, Monitoring Drug Use in the Digital Age: Studies in Web Surveys – European Web Survey on Drugs: an overview of the project, EMCDDA Insight (December 2022).

UNODC calculations based on Global Drug Survey 2022 data (and previous years): detailed findings on drug cryptomarkets.
74 Demant et al., “Drug Dealing on Facebook, Snapchat and Instagram.”