Excerpt from the EU drug markets report:

• Chapter 10: Conclusions and recommendations
Introduction

This report has drawn together, for the first time, an unparalleled amount of information about the structure and operation of European drug markets and placed this information within the broader context of an understanding of the drugs phenomenon. This area has become an increasingly dynamic one, with new realities emerging to challenge long-held certainties in a way which only a few years ago would have been hard to imagine. The analysis reported here suggests that Europe is now entering an important new phase in respect to developments in the availability and use of drugs. This perspective is, however, of little value if it does not serve to inform future policies and actions. To facilitate this, this chapter analyses the data discussed in the body of the report to provide an overview and identify key conclusions and learning points. The operational implications of these are then developed in accompanying action points. The analysis provided is intentionally pragmatic and practically orientated, making the best use of the information available while acknowledging its limitations. The focus is on the European level, but it is recognised that the conclusions will also have relevance for policy considerations in individual Member States.

A top-level strategic summary and recommendations were provided at the beginning of this report. The basis for this can be found in the analysis provided in this chapter, which is structured in three parts. First, a number of linked factors that can be seen as drivers of contemporary developments in the European drug market are explored. These are not necessarily substance specific and generate recommendations for actions that are generally applicable. Next, conclusions that specifically pertain to the trafficking and marketing of individual drugs are considered in isolation in the second section of this chapter.

Finally, the information available to guide policies and actions in this area is considered. This report provides a comprehensive overview of the current European drug market. Nonetheless, it is clear from this analysis that data sources are underdeveloped in many areas, and this inhibits both an understanding of the problem and, critically, the development and targeting of effective responses. Reflecting these key information needs are identified and discussed in the concluding section of this chapter.

Drivers of change for the modern European drug market

The changing faces of organised crime and drug trafficking

Historically, analysis of the drug market has tended to focus on specific drugs that are being trafficked along defined routes by OCGs which are, to some extent, specialised operators. This simplified geographical perspective is still valid and useful for targeting actions on high-priority areas. However, this picture now needs to be extended to take account of the more polymorphous, dynamic and fluid nature of the contemporary European drug market. OCGs are increasingly likely to take a multicommodity perspective and less likely to specialise in only one type of drug. At the same time, trafficking routes are also diversifying, in terms of both the types of drugs that are shipped along them and their geography, which is becoming increasingly heterogeneous and complex. Moreover, the growing exploitation of established commercial transport options means that, in many respects, thinking about discreet routes can be unhelpful simply because nowadays drugs may be moved through complex webs of interconnected channels.

Many examples of this diversity can be found in this report. For instance, heroin and cocaine may be trafficked through Africa and the Western Balkans and methamphetamine through Europe and possibly even South-West Asia. The implications of such developments for drug markets and existing supply reduction strategies can be profound, as is illustrated by the fact that significant cocaine seizures and imports are now reported in East European countries, or that methamphetamine now appears to be manufactured in Iran and Nigeria for export to East Asia via European airports.

There are a number of factors that are responsible for this growing market diversification. Globalisation is clearly important, with more countries now used as potential transit points, and the European drug market now having to be seen
within the larger context of the changing international demand for drugs. This has been accompanied by the impact of open borders within the EU and a trend in Europe for drug production to take place close to its intended marketplace, with the rationale of minimising the risks associated with transportation and increasing potential profits.

The modern European drug market is also increasingly innovative and dynamic, which reflects, and exploits, the broader changes that have occurred in modern forms of communication and commerce. Additionally, changes in patterns of drug use in Europe, and indeed globally, make OCGs more interested in the profit that can now be derived from synthetic and stimulant substances. Importantly, groups have to be adaptive if they are to continue to operate over the longer term. This requires the development of ‘countermeasures’ with new approaches introduced to respond to successful supply reduction responses, such as the targeting of precursor chemicals, or known high-value trafficking routes and methods. This gives the drug market its dynamic and constantly evolving nature.

The changing face of organised crime

Overview

- Moving to a multi-commodity perspective: The European drug market is more polymorphous, dynamic and fluid. OCGs are more likely to be linked and take a multi-commodity perspective and are less likely to restrict their activities to a single drug type.

- Diversification in trafficking: Trafficking routes are diversifying, in terms of both the types of drug that are shipped along them and of greater geographical heterogeneity and complexity.

- Exploiting legitimate transportation opportunities: The exploitation of established commercial logistics, such as containers, aircraft, couriers and postal services, means that drugs may be moved through multiple transit points and complex channels. This dynamic and fluid operational model is more challenging to tackle than the one used for more linear and fixed geographical trafficking routes.

Action points

- Strategic analysis: Strategic-level analysis with regular review is critically important to ensure that responses remain on target and meet the challenges posed by complex, faster moving and more interlinked drug markets.

- Focus efforts on high-value targets: Targeted, coordinated and intelligence-led law enforcement actions against major OCGs, such as that provided by JlTs supported by centralised analysis, must be regarded as a high priority.

- Work more effectively through coordinated actions: EU Member States have the capacity for the rapid and secure sharing of information, and resources to support coordination are available. This should be exploited and EU agencies should be utilised to increase the effectiveness of cross-border and multilateral operations.

- Follow the money: The investigation and prosecution of drug trafficking cases should be facilitated by multidisciplinary investigating teams that include specialist financial investigators and forensic accountants, with a focus on dismantling organised crime rings, developing prosecutable evidence, interrupting criminal money flows and money laundering and promoting international asset recovery, refining monitoring and detecting tools and drawing up typologies.

- Address the legitimate commercial market: The growing challenge of intercepting drugs trafficked at high speed through complex routes using commercial channels is a major threat and requires the development of specific action plans targeting each of the sectors concerned. Partnership with industry and European-level cooperation and coordination will be essential for success.
Taken together, the factors driving developments in the drug market represent a major challenge for existing European drug control strategies. The problem is now more complex, faster moving and interlinked, and this needs to be reflected in our responses. Supply reduction measures, if they are to be effective, need to be reactive to change and, ideally, anticipate future developments. A wide perspective is also clearly called for. At the global level drugs are an important illicit commodity and form a nexus with other important security concerns, such as the fight against terrorism and the need to support social development and fight corruption. At the other end of the scale, within the EU, local drug markets are inextricably linked with broader crime and policing issues, with drugs exacerbating many of the social and health problems found in Europe today.

The impact of global developments on the European drug market

A theme running through this report is that it is impossible to understand the contemporary European drug market without locating it within a global context. An often overlooked point is that the world is undergoing a period of rapid development that is resulting in profound demographic and social changes. Data on the extent of drug use at the global level are poor, which means that quantification is disproportionately focused on developed regions, such as the EU. Awareness of important changes occurring in drug use in other areas is therefore insufficient or simply lacking.

This is a growing problem as urbanisation in low- and middle-income countries with large and young populations means that patterns of global drug demand are likely to be changing significantly. For example, domestic demand for cocaine in South America and for heroin in Asia is now estimated to be greater than in the EU. These changes have a number of potential implications for the drug market: drug flows are becoming more fluid; production is diversifying; and the existence of domestic markets in transit countries complicates drug control efforts. Moreover, the extent to which other markets are now competing with demand from the EU, and the resulting changes in trafficking flows, remain poorly understood.

Of growing importance for the EU is the changing situation in Africa. Weak legal and regulatory systems have made the region an important transit and storage area. A number of information sources suggest that domestic demand for drugs is growing and diversifying, but the overall picture is difficult to discern. More recently, synthetic drug production has been noted in the region and drug flows through African countries have become more complicated and interrelated, with heroin, cocaine, cannabis and, now, synthetic drugs all playing a part.

The global dimension of the drug problem, together with the need to maintain a secure external border, makes it important for the EU to engage at all levels with non-EU countries and to take part in appropriate international and regional initiatives. There are many examples of the benefits that this kind of cooperation can bring. There are, however, some factors, such as a lack of respect for fundamental human rights and corrupt practices at senior levels that can inhibit fruitful or full collaboration between the EU and third countries. Furthermore, frustrations with domestic social and criminal problems associated with the drug market, together with broader political issues, can be noted in some Latin American countries. It remains unclear if this issue will have longer term implications for EU policy priorities to suppress production and trafficking from this region.

Any discussion of the more complex geographical nature of drug flows into and through Europe needs to bear in mind an important caveat, namely the importance of OCGs based in North-West European countries, which continue to play a key role in the intra-European distribution of almost all types of drugs. There are a number of reasons for this, including their proximity to major markets; the fact that this area is a hub for legitimate transportation; and the capacity that is provided by the existence of long-established drug redistribution networks.

It is also important to conclude any analysis of the global market by noting that the EU is also a drug-producing region for precursor chemicals of synthetic drugs and, increasingly, for cannabis. The importance of the EU in relative terms as an exporter of synthetic drugs seems to be declining as production in other parts of the world becomes more important. Nonetheless, continued efforts to disrupt the production of drugs intended for export, and measures to control the diversion of precursor chemicals, especially acetic anhydride, remains a priority. The EU is also a source of expertise and ‘know-how’ for the production of some synthetic drugs and intensive cannabis cultivation techniques. And increasingly it plays a leading role in the packaging, marketing and promotion of products containing new psychoactive substances, with some recent indications of export to non-EU countries.
Chapter 10 | Conclusions and recommendations

Addressing a global marketplace

Overview

• A changing global marketplace: Socioeconomic developments mean that the EU is likely to become relatively less important in global terms as patterns of drug demand change in the developing and transitional world. This has the potential to influence drug flows and availability and make interdiction efforts more challenging.

• The need for international cooperation: Cooperation between the EU and non-EU countries, and appropriate regional and international initiatives, are of growing importance. Fruitful cooperation in this area needs to be informed by other EU measures to fight corrupt practices, support development and promote respect for human rights.

• The growing importance of Africa: Africa has become an important transit and storage area for drugs, and domestic demand is also likely to be growing. Drug flows have become more complicated, with heroin, cocaine, cannabis and now synthetic drugs all playing a part.

• The EU as a drug producer: The EU remains an important drug-producing region for some synthetic drugs and cannabis, although its relative importance for the export of synthetic drugs is declining. The EU is also an important global source of the heroin precursor chemical acetic anhydride.

• North-West Europe remains important: Within the EU crime gangs based in North-West Europe continue to play a pivotal role in the inter-European trafficking and distribution of virtually all types of drugs.

Action points

• Improve analysis of global trends: Analysis of developments in drug demand and drug supply in non-EU countries is necessary to provide an early warning of potential new threats and allow the better targeting of responses.

• Engaging with producer and transit countries remains important: Changes in drug production and the more fluid nature of drug flows into Europe mean that it is now important to engage and cooperate with a larger number of source and transit countries.

• Reduce production in, and trafficking from, the EU: Greater efforts are required to address the growing threat posed by drug production within the EU, and continued efforts are needed to suppress the trafficking of drugs and precursor chemicals from the EU.

• Give special attention to Africa: Developments in Africa require special attention, informed by the fact that social, developmental, governance and crime issues are interlinked there. There is a critical lack of information on issues such as interactions between drug trafficking routes, local demand, money laundering and developments in drug production.

Technology as a driver for innovation

Technological advancements have changed virtually all aspects of modern life, so it is unsurprising that they are also important drivers for changes occurring in the illicit drug market. The analysis offered in this report has repeatedly identified technology as a significant ‘game-changer’ in drug trafficking, production and distribution.

The advent of the widespread use of mobile phones provides a simple, but often overlooked, example of how technology can have a profound impact on the drug market. Mobile phones are a means of rapid and easy communication that preserves anonymity and reduces risks, as buyers and sellers no longer have to meet in a predefined geographical place. Today, the Internet, and the growth of all forms of social networking, is opening up new possibilities at a remarkable pace and at a low cost. Controlling unwanted activities in this medium is extremely challenging, and issues of jurisdiction are complex. We live in an increasingly joined-up world, with new communication options, and easy and unrestricted access to vast information resources that were
previously unavailable. The communication opportunities provided by the Internet are now beginning to impact on the drug market. This is happening quite quickly and must be regarded as representing a considerable potential threat. Although other forms of cyber crime have until now attracted more attention, the anonymity afforded by the possibilities of an online drugs market is clearly attractive to those who want to sell illicit drugs.

The advantages of the Internet as a relatively secure communication medium for those involved in clandestine activities are obvious. More than this, however, the Internet has allowed information on drug use and production to spread rapidly, facilitating the diffusion of trends and ‘know-how’. A whole new market for ‘new drugs’, unregulated psychoactive substances, that is global in nature and highly innovative, has quickly become established. The Internet has enabled contact between chemical producers and entrepreneurs located in different parts of the world and the marketing and sale of attractively packaged products. It has also facilitated research and development of new products by giving access to the scientific literature, patent information, as well chemical and pharmaceutical archives.

A related issue here is the use of the Internet for the sale of controlled and counterfeit medicines. Knowledge about the Internet sale of pre-precursors, other essential chemicals and controlled drugs has grown. The scale of this problem in respect of controlled drugs is difficult to assess but probably remains small at present. Nonetheless, the development of secure payment technology and restricted web areas could mean that this situation could change quickly. Although the Internet represents a new and challenging area for law enforcement and drug control in general, a model of value here can be found in work carried out to crack down on the sale of falsified, counterfeit and unlicensed medicines and to fight other forms of cyber crime. The approach has been to target websites and to work in partnership with major credit card issuers and other online payment providers.

Internationally coordinated and parallel activities have

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<tr>
<td>• The growing importance of the Internet: The Internet is now beginning to impact on the drug market by providing communication opportunities, access to knowledge and logistics, and a platform for the faster diffusion of new trends.</td>
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<td>• The potential for an online drug marketplace: The Internet has facilitated the development of a new market for unregulated psychoactive substances. Some precursors and drugs are also traded online.</td>
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<td>• Monitor the online market: Improved and more proactive monitoring of the Internet is necessary to provide a better understanding of the nature and scale of the online market and of new developments at both consumer and supply level and to provide early identification of new trends and threats.</td>
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<td>• Create barriers to Internet sales: Websites involved in illegal activities associated with the drug market need to be identified and action taken with service providers to restrict access. Partnerships with major credit card issuers and other online payment providers are required to inhibit payments. Effective actions in this area are likely to require EU coordinated activities. Complementary measures to raise awareness and increase vigilance among postal and courier services are also needed.</td>
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<td>• Innovate to anticipate and detect new threats: There is a need to develop and share information from sources sensitive to important changes in the drug market. Forensic data and profiling, including data on precursors and adulterants, wastewater analysis, and the analysis of data from production facilities are all currently underutilised but potentially valuable approaches.</td>
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proven to be particularly fruitful. As purchases are likely to be sent to buyers via postal and courier services, this reinforces the recommendations made above to develop greater interdiction capacities in this area. The speed of developments in this area means that Internet-monitoring and intelligence-gathering activities are likely to be fundamental to understanding of both the nature of the problem and the design and targeting of interventions. A more general point is that the central role of the Internet in the lives of many young people makes this medium of growing importance for research as well as communicating prevention, education and harm reduction messages.

Innovation in the drug market is not restricted to communication and the Internet. Innovation in drug production has been considerable, and, as noted already, the EU is a source of know-how and expertise. The use of specialist and increasingly sophisticated technology can be seen in cannabis cultivation and synthetic drug production in Europe, with an important development in the latter being a ‘chemical down-streaming’ of the manufacturing processes. Responding to controls on precursor chemicals, producers have moved down the production chain and have innovated manufacturing processes using uncontrolled pre-precursors. At present, a ‘cat and mouse’ game appears to going on, with targeting by law enforcement of one group of chemicals leading drug producers to search for more easily available alternatives. Innovation in cocaine trafficking has seen not only the use of specialised vessels and concealment methods but also more sophisticated chemical approaches requiring secondary extraction within the EU.

An often overlooked additional negative consequence of synthetic drug production within the EU is the environmental damage and risk to community safety that comes from the dumping of chemical waste or from the poor storage of dangerous chemicals.

Innovation and adaptation to the threats posed by control can also be seen in the human organisation of trafficking and drug market activities. OCGs have always adopted organisational structures in which lower-value or expendable individuals are disproportionately put at risk. New approaches to this can be seen in cannabis cultivation and synthetic drug production. In both cases there is evidence of the increased use of a decentralised model for drug production and storage, thus decreasing the overall vulnerability of the organisation to law enforcement efforts.

**Drugs in perspective**

An important contextual starting point is that indicators of the use of the ‘established’ drugs—heroin, cocaine and cannabis—at the European level, and in most Member States, are stable or even showing a downwards trend. Despite this, levels of use remain high by historical standards and, although inter-country variations are considerable, drug use remains a major policy concern for all of Europe. Synthetic substances are also becoming more important, and this trend appears likely to continue. Moreover, drug markets appear to be increasingly fluid, dynamic and, importantly, responsive to countermeasures.

**Heroin**

Heroin remains at the heart of the EU drugs problem: even when prevalence of use is low, this drug is responsible for severe health and social problems. This is illustrated by the fact that the drug is associated with the majority of the 7 000 drug-related overdoses currently reported every year in Europe. If indirect mortality associated with heroin use is also included, then this figure can probably be at least doubled. Heroin use also remains the most common reason for seeking drug treatment in the EU, and those with heroin problems typically require treatment over a protracted period of time, with relapse a common problem. This, together with the risk of infection associated with the use of this drug by injection, means that heroin is still responsible for a disproportionate amount of the health and social costs arising from drug use in the EU.

The heroin problem we see today in Europe to a large extent has it roots in the ‘drug epidemics’ seen in the 1990s. Recent data suggest that heroin use in Europe is now in a slow long-term decline. At market level, this is reflected in the latest data on purity, retail prices, seizures and heroin offences, all of which show a decrease. In some countries the drug has been replaced by other substances, including synthetic opioids such as diverted medicines and illicitly produced fentanyl. The heroin market collapsed almost a decade ago in parts of northern Europe, and has never fully recovered. More recently, short-term market shocks, probably resulting from successful interdiction efforts, have also been reported, with some countries experiencing a significant drought in 2010, from which the market has subsequently recovered only partially. Demand factors are also contributing to a market contraction. New recruitment is at a low level, and a large increase in the availability of substitution treatment has removed a significant proportion of the demand from the marketplace. In the global context, heroin use in the EU is now characterised by a relatively small and ageing population with high levels of service contact. Overall, it seems reasonable to conclude that the European heroin market is becoming less important in global terms. Nonetheless, threats in this area remain. They include the possibility of new ‘heroin epidemics’, especially during a
time of economic austerity, and the production or increased marketing of synthetic alternatives. To date, a number of drugs have been reported (depending on country) as substitutes for heroin, including synthetic opioids, synthetic cathinones, benzodiazepines and methamphetamine. There is some evidence that heroin trafficking organisations are showing interest in other drugs, including methamphetamine and cocaine.

A possible bounce-back driven by changes in opium production in Afghanistan or even South-East Asia also cannot be ruled out. Production outside Afghanistan in South-West Asia could also become more significant than is currently assumed to be the case. Historically, heroin production and trafficking has been strongly associated with areas in conflict, and the present situation in several countries of South-West Asia and the Middle East could prove to be fertile ground for the further expansion of production or trafficking networks.

Turkey continues to have a central role in the Balkan route as a transit country, and Turkish OCGs continue to play a significant part in the importation of heroin to the EU. However, other countries and groups appear to be becoming

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<td>• The heroin problem: Heroin use continues to be responsible for severe health and social problems although the market appears to be in long-term decline as a result of both supply and demand factors.</td>
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<td>• The global market: Non-EU heroin markets are larger and easier to penetrate and are thus probably becoming more important globally, and this may have a knock-on effect on availability within the EU.</td>
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<td>• Interactions with other drugs: OCGs appear to be increasingly active in the markets for other drugs, and interactions can be seen between the heroin market and the market for cocaine (through Africa and the Western Balkans). An important specific risk is the diversification of heroin networks into methamphetamine production and trafficking.</td>
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<td>• Diversification of routes: Recent diversification of heroin trafficking routes has been noted as organised crime responds to interdiction successes.</td>
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<td>• Precursor control: Europe remains an important source of precursors, but data are limited and control measures difficult to implement effectively.</td>
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<td>• Future threats: The production situation remains fluid and this, and the possible existence of stockpiles, could result in future increases in availability.</td>
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<td>• Invest in proven approaches: Strategically planned and intelligence-led operations, based on cooperation among countries along the classical heroin trafficking routes, have proven successful and should be continued and reinforced where possible.</td>
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<td>• Work beyond the EU: Diversification to new routes and groups is a major challenge and will require the development of corresponding information sources and strategic partnerships. Currently, African countries appear to be particularly important here.</td>
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<td>• Respond to a more joined-up threat: The particular threat posed by interaction between the heroin market and the market for synthetic drugs and cocaine implies the need for joined-up law enforcement strategies and more efforts in information sharing and analysis.</td>
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<td>• Remain vigilant: Trends in heroin production and demand developments require careful monitoring both in established areas and in areas where diversification or diffusion is possible.</td>
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<td>• Restrict access to precursors: An effective precursor monitoring and control framework, not just in the EU but globally, should remain a key objective. Increased synergy between monitoring activities and interdiction mechanisms is likely to increase the effectiveness of responses in this area.</td>
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<td>• Give equal priority to reducing demand: The importance of a balanced approach, especially with respect to increased availability of effective drug treatment, is essential if the heroin problem is to continue to diminish in the EU.</td>
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more important, resulting in a diversification of trafficking routes and organisations. This is suggested by evidence of the increased importance of the Western Balkans and of heroin transit through African countries and the Middle East. Innovations that include the increased use of air transportation may also represent a threat to current interdiction strategies. A related and important issue is the role of European OCGs in sourcing and exporting the principal precursor chemical for heroin production, acetic anhydride. Despite a strong EU prevention mechanism and some notable interdiction successes, the principal trafficking routes for acetic anhydride remain difficult to identify and counter-measures have to be understood within the context of a chemical that has a large legitimate market and is therefore difficult to control.

Cannabis

The sheer magnitude of the cannabis market and the income it generates makes it a major policy challenge. The market has undergone important changes, the most important of these being an increase in production within the EU and developments in cannabis cultivation technologies, resulting in a potential increase in yield and potency. Domestic production of cannabis has implications for public health and certainly presents a greater challenge for drug enforcement efforts. Production sites range from small-scale cultivation of a few plants for personal use to major plantations. Sites are usually located close to consumers and difficult to detect. This is reflected in a relatively low volume of herbal seizures in comparison with seizures of cannabis resin (originating outside Europe). Cannabis production may now be seen as an attractive and easy to enter cash business for new and established crime groups, resulting in the increased involvement of organised crime. Some groups active in this area have a transnational presence, and the involvement of ethnically defined OCGs can be particularly challenging for enforcement efforts because of their closed nature.

The understanding of the negative impact these developments in these cannabis markets have had on local communities is growing, prompted by crimes of violence and other crimes linked to production and distribution. Despite this, the public is largely unaware of the extent of violent crime now associated with cannabis as much of this occurs between criminal groups. This does, however, put an increasing strain on often already stretched local police resources in the areas where production sites are located.

Domestic production is also now changing the drug flows between some EU Member States as it displaces imports from non-EU countries. Interdiction efforts targeting domestic production are becoming more sophisticated and are being scaled up in many countries. This appears to be resulting in increased use of a more decentralised production model in which vulnerable individuals are recruited or coerced into becoming small-scale cultivators. A closely related problem is human trafficking by South-East Asian transnational OCGs involved in cannabis production, with victims exploited as an expendable source of labour.

A relatively well-developed commercial grow shop industry supports illicit production and sometimes may be linked to distribution. The plurality of production sites and producers appears to be creating a new role for brokering activities in which vulnerable individuals are recruited or coerced into becoming small-scale cultivators. A closely related problem is human trafficking by South-East Asian transnational OCGs involved in cannabis production, with victims exploited as an expendable source of labour.

Differences in enforcement practices between countries can result in cross-border issues, sometimes resulting in displacement of the market. Despite the increasing importance of domestic production, it is also important not to ‘take the eye off the ball’ in respect of established and potential new external sources of production. The trafficking of cannabis into the EU remains a major criminal activity area. The Iberian Peninsula remains of paramount importance here, but the threat appears to be growing from production sites located in South-Eastern Europe and beyond, including Afghanistan.
Cannabis

Overview

- A large and diverse market: The sheer scale of demand for cannabis and accompanying diversity and sophistication of the market, in terms of potential sources, players and products, makes it relatively resilient to interdiction efforts.
- Current consumption: Annual cannabis consumption in the EU is currently estimated at around 2 500 tonnes. Extrapolating from the limited data on prices currently available, this would mean that the value of the EU cannabis market at street level is probably somewhere between EUR 18 and 30 billion.
- A changing situation: There is now an overall shift to production within the EU, and this has been accompanied by developments in cultivation technologies that may result in increased yield and potency.
- Production in the EU: Domestically produced cannabis can be more difficult to detect and increases local criminality, thereby posing a new challenge for law enforcement.
- An ubiquitous problem: The cannabis market is lucrative and relatively easy to enter, and therefore attractive to both new and established crime groups.
- North Africa remains important: Trafficking of cannabis resin, principally from Morocco, remains important and is sometimes linked to the importation of other illegal cargos.
- The European dimension: Some groups active in this area have a transnational presence and are relatively flexible in terms of relocating activities between countries. Crime networks based on specific ethnic groups can be more difficult to penetrate.
- Diffusion and displacement: Different legal frameworks, and judicial and policing practices, between European countries can impact on the location of cannabis production and sale.

Action points

- Adopt a holistic approach: Interdiction efforts against any single source of production may result in replacement from alternative sources, emphasising the importance of a holistic and comprehensive approach.
- Share expertise: Continued innovation and the sharing of know-how and technologies among Member States are important if Europe's capacity to combat domestic cannabis production is to be improved.
- Monitor production and trafficking: There is an urgent need to improve the monitoring of production and trafficking flows of cannabis into and between the EU countries and to better monitor domestic production yields and potency.
- Act in key areas: Interdiction efforts targeting cannabis entering through the Iberian Peninsula remain important as does the need to actively engage with Morocco. In addition, responses are required to the threat that appears to be growing from production sites located in South-Eastern Europe and from areas that have not previously been important from an EU perspective.
- Work with the community: Environmental drug prevention approaches, education and community awareness-raising and strategies to intervene with groups who may be vulnerable to involvement in the cannabis market are all necessary to support supply reduction measures.

Cocaine

All cocaine indicators (both supply and demand) peaked in 2008 and have declined since. The prevalence of cocaine use is high in a relatively small number of West European countries, although some ongoing spread is still evident. Demand in these countries remains high by historical standards. Survey data suggest some modest contraction in the market, but not on the same scale as the fall in seizure volumes since 2006. The bulk of EU seizures occur in the Iberian Peninsula, which remains the main point of entry into Europe of this drug, which is subsequently transported along broadly the same routes used for cannabis. There is concern about the security of countries on the supply routes for...
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cocaine into Europe, particularly in West Africa. As noted above, interaction between cocaine and heroin trafficking organisations may be an important development. Recently, major seizures in the Black Sea ports of the Balkans area and in ports in the Eastern Baltic Sea area have been noted. Although Latin American OCGs continue to dominate the supply of cocaine to the European market, intelligence now points to some diversification, with European-based OCGs becoming more prominent. It also appears that traditional heroin trafficking networks and infrastructures are now being used for cocaine trafficking purposes. An ongoing challenge is that legal businesses, particularly those involved in the importation of products in which cocaine could be concealed, are commonly infiltrated or set up to facilitate trade or launder profits.

Cocaine is produced in Latin America, and recently both UN and US sources have reported a moderate decrease in coca bush cultivation. The availability of cocaine in Europe is potentially influenced by levels of production, interdiction efforts in source and transit routes countries and competition from other markets. Historically, the main consumer market

### Cocaine

#### Overview

- **A large but heterogeneous market:** Europe now accounts for only about 9% of global seizures. The European cocaine market is heterogeneous at country level, but overall the drug remains the second most commonly used illicit substance in Europe—representing probably the third largest market in the world.

- **Trends in indicators of demand and supply:** Demand for the drug remains high, but indicators of cocaine use at the EU level peaked around 2008 and have fallen slightly since then. Since 2006 there has been a large fall in seizure volumes that is not easily explained by contractions in demand.

- **Developments in trafficking:** Spain and Portugal remain the main points of entry for cocaine into Europe, with trafficking through West Africa a particular concern. Evidence of new routes is also emerging. In all areas, cocaine concealed in container shipments is becoming more important, and recent major seizures have been made in the Black Sea and in the Eastern Baltic Sea areas.

- **Increasing links between organised crime groups:** Interaction between cocaine and cannabis resin trafficking networks is well established. A more recent concern is interaction between cocaine and heroin trafficking groups.

- **Innovation:** In addition to developing new routes and concealment methods to avoid detection, cocaine trafficking organisations have developed more sophisticated chemical techniques including incorporating the drug in legitimate products and the production of ‘odourless’ products.

- **Precursor availability:** The main cocaine precursor (potassium permanganate) now seems to be manufactured illicitly in the cocaine-producing countries of South America rather than being diverted from legitimate sources.

#### Action points

- **Monitor growth in use in the EU:** Although the use of cocaine appears to have peaked in high-prevalence countries, there is still considerable potential for further spread elsewhere. Monitoring of trends, especially along new trafficking routes, is therefore important.

- **Assess new threats:** There is a need for better intelligence on cocaine importation in Europe, especially in the Black Sea and Balkan areas and via Africa. A parallel need is to improve the understanding on the use of secondary extraction laboratories, especially outside the Iberian Peninsula.

- **Put container trafficking in the spotlight:** Of particular importance is developing awareness and multiagency working partnerships with customs, port authorities and commercial transport organisations as weaknesses in this area are increasingly being exploited.

- **Cooperate with Latin American countries:** Support for precursor control activities in producer countries remains important.
for cocaine was the United States, but parts of Latin America appear to be becoming increasingly important. The Brazilian market, for example, is now estimated to be considerable. Cocaine trafficking groups have shown considerable innovation, responding to interdiction challenges by developing new routes and new concealment methods. Reflecting this, the problem of cocaine entering Europe concealed in commercial containers is attracting more attention. Chemical innovation has also been seen, with cocaine being chemically incorporated in legitimate products for secondary extraction within the EU. New methods of procuring precursor chemicals are also becoming apparent. Indeed, it seems that more of the main cocaine precursor (potassium permanganate) is now manufactured illicitly in the cocaine-producing countries of South America than is diverted from legitimate foreign sources. This development is similar to the use of ‘pre-precursors’ to manufacture synthetic drugs (see below), and illustrates how successful interdiction measures may result in new challenges as drug manufacturers seek new ways to circumvent controls.

European responses in this area have taken a number of different forms—at both political and technical level; these range from bilateral projects to inter-regional cooperation initiatives and include intelligence sharing and joint operations. There has been some notable interdiction success, for example in the mid-Atlantic, resulting from cooperation. The European cocaine market is believed to be the third largest in the world, although Europe now seizes only about 9% of the cocaine captured globally. Moreover, the large drop in quantities of cocaine seized noted after 2006 is difficult to explain in terms of the data available on levels of use. This suggests the need to consider other plausible explanations, one being a mixture of new trafficking routes and methods, combined with changes in the availability of law enforcement resources.

### Synthetic drugs

The synthetic drug market is dominated by stimulant products, and in this context amphetamine, methamphetamine and ecstasy can all be seen as drugs competing in a similar consumer marketplace. They also share some aspects of synthesis, production and trafficking. Stimulants are often used for functional purposes and the other main ‘market player’ here is cocaine, the prototype stimulant drug. In any overall analysis it is important to consider the demand for stimulants as a group as well as independently since the substances are frequently interchangeable, and this can have an impact on the effectiveness of intervention measures.

Amphetamine, methamphetamine and ecstasy are in aggregate very widely used both in Europe and globally. The use of amphetamine and ecstasy, historically the most important synthetic drugs in Europe, appears to be largely stable or in slight decline. Overall, any decline in use is best understood as a reflection of diversification rather than any contraction in demand, with methamphetamine now becoming more important and other new substances also appearing.

In parts of Europe, the small-scale production of synthetic drugs for personal use is still found. The best example of this is methamphetamine production in the Czech Republic, where small user-producer cooperatives have a long history going back to the Communist period. More generally, however, the production of synthetic drugs involves OCGs reflecting economies of scale obtained by large production runs and the need to source equipment and precursor chemicals. Overall current trends in the organisation of synthetic drug production are clearly suggestive of a trajectory towards much greater organisation, scaling up in production runs, and greater integration.

In contrast to other parts of the world, in Europe amphetamine is far more commonly used than methamphetamine, although this situation may be beginning to change. Data on methamphetamine are difficult to interpret, but overall they suggest that the drug is becoming more commonly available. Production has been reported in more countries, which now include Bulgaria, Lithuania, the Netherlands, Poland and the United Kingdom. Recently, Germany has also expressed concern about increases in methamphetamine production and importation. Recent intelligence reports, for example, have identified methamphetamine produced in the Netherlands and Lithuania destined for export to Scandinavian consumer markets.

Some sources also suggest a possible growing interest in methamphetamine trafficking from OCGs that produce cannabis. And, as noted already, some data exist to suggest that opiate production and trading networks might be becoming more interested in methamphetamine production. In this context, Turkey is now reporting methamphetamine seizures and Iran appears to have become a producer country with production intended for Asian countries but potentially linking to countries along the Balkan heroin route.

The European ecstasy market has recently gone through a period in which the availability of tablets sold as ecstasy containing MDMA became quite rare. Tablets sold on the illicit market during this period often contained other drugs, including legally sourced piperazines, such as mCPP. The scarcity of MDMA in ecstasy tablets appears to have been
related to shortages of the precursor PMK, possibly reflecting the success of interdiction efforts targeting this chemical. However, more recent data suggest that MDMA availability is again increasing.

MDMA production methods now appear to be based on either safrole or, increasingly, imported non-controlled chemicals, such as PMK glycidate, that are structurally similar, although not identical, to the controlled precursors hitherto used. A parallel exists here with developments in the ‘legal highs’ area, where non-controlled products replace controlled ones. This illustrates the increasing sophistication of drug production capacity within the EU and the ability to innovate to circumvent control measures. Border control strategies are therefore rendered less effective by producers moving ‘downstream’ in the chemical production chain.

A related phenomenon has been observed in the amphetamine market, where precursors have been chemically ‘masked’ to avoid existing border and sales

### Synthetic drugs

#### Overview

- **A rapidly developing area:** Recent developments in the synthetic drug market include a bounce-back in ecstasy quality; increased availability of methamphetamine; greater technical sophistication; evidence of scaling up of production processes; and increasing interaction with the market for new psychoactive substances.

- **Innovation to avoid control:** Producers have introduced new measures, in particular the sourcing of pre-precursor chemicals and decentralised production processes to adapt to previously successful supply reduction efforts.

- **Increased replacement:** There is increasing evidence of synthetic substances being used as replacements for both heroin and cocaine. Increasing interplay is also seen with the market for non-controlled new psychoactive substances.

- **Ecstasy on the rebound:** Ecstasy use over the medium term has stabilised or even declined, due in large part to successful enforcement, albeit that demand for this drug may have been satisfied by other stimulants. The improved quality of ecstasy tablets, and now powders, available in Europe may, however, see a resurgence in interest in this drug.

- **EU production:** Demand for synthetic drugs in Europe is met largely by laboratories located intraregionally, particularly in the Netherlands and, to a lesser extent, Belgium, Lithuania and Poland. However, trafficking in precursors—and pre-precursors—is on a global basis, and producers are proving versatile in finding new production methods. The EU remains an important exporter of amphetamine and ecstasy.

- **EU responses:** There have been important initiatives at European level to improve coordination in tackling ATS, including action against trafficking and the trafficking of precursors; coordinated chemical profiling of seized drugs; and the funding of JITs and EMPACT.

#### Action points

- **Act against major production sites:** Targeting inter-regional production of synthetic drugs, which can be mobile, relocate quickly and result in large volumes, needs to remain a priority for law enforcement efforts, with greater emphasis given to coordinated and parallel actions.

- **Restrict access to necessary chemicals:** Targeting the trade in precursor chemicals necessary for production requires both intra- and inter-regional activities. The identification of new methods and chemicals and measures to restrict their availability is becoming of critical importance.

- **Strengthen the international framework:** Restricting the availability of new (pre)precursors will require international agreement. This is likely to be challenging in the case of those chemicals which have extensive legitimate uses.

- **Identify and target key producers:** The growing diversity of synthetic drug use is accompanied by, and may trigger, an increasing integration of OCGs involved in production. This threat requires that priority be given to intelligence gathering to identify and target key organisations and individuals.
control mechanisms, or where precursors (especially BMK) are manufactured illegally within Europe from non-controlled chemicals—so-called ‘pre-precursors’ such as alpha-phenylacetocetonitrile (APAAN). As producers become more technically sophisticated and seek out new ways to circumvent interdiction efforts and regulations, the possibility to modify and (re)convert substances represents another challenge to current drug control approaches.

Another precursor-related issue is the emergence of modified versions of controlled substances that may have additional harmful effects. In 2012, the EU early warning mechanism investigated 4-methylamphetamines after a number of deaths and emergencies were reported to be related to the use of this substance. The available information suggests that the precursor used for the manufacture of 4-methylamphetamines is 4-methyl-benzyl methyl ketone (4-methyl-BMK), which is not under international control. There are indications from intelligence reports that producers believe that they are attempting to produce amphetamines using the precursor BMK, when they are in fact using 4-methyl-BMK and consequently producing 4-methylamphetamines. Alternatively, it has also been suggested that a mixture of BMK and 4-methyl-BMK is being used by illicit laboratories that have imported the precursors from China or Russia for amphetamine synthesis.

An overall conclusion is that, more than other illicit drug types, the control of synthetic drugs is clearly a dynamic process of adaptation and reaction. Control measures are met with rapid countermeasures and technological innovation. Ensuring effective action will require Member States and EU bodies to monitor developments closely, to coordinate interdiction efforts and to foster coordination with non-EU authorities. It can be confidently predicted that producer and trafficker groups will remain quick to adapt to new controls. It is also likely in the coming decade that the logic of the illicit drug market will be towards an increasing importance of synthetic products, especially those that can be produced close to consumer markets.

New psychoactive substances

Over the past few years Europe has seen an unprecedented growth in the number, type and availability of new psychoactive substances (new drugs). In 2012, for the fourth consecutive year, a record number of 73 substances were detected for the first time in Europe, up from 49 substances in 2011, 41 in 2010 and 24 in 2009. Overall, the EU early warning system currently monitors more than 250 new psychoactive substances.

The ongoing process of globalisation, tightly coupled with technological innovations, has been essential to the development of this market. The factors underlying such globalisation include a growing capacity for complex, cheap chemical synthesis in emerging economies; the rise of the Internet as a means of communication, a forum for knowledge exchange and a marketplace; and air freight and postal systems that allow drugs or their precursors to be rapidly shipped to Europe. At the same time, the methods used to market and advertise many of these new drugs have also become increasingly innovative and sophisticated, with some countries seeing a rapid increase in retail outlets. As a result, new drugs can reach larger numbers of potential consumers, including some who would not typically use controlled substances.

The market has shown a considerable capacity to rapidly adapt to regulatory measures, with new product lines in development to anticipate controls. There is also a growing interplay between this new market and the established market for controlled drugs. Overall, these developments have posed serious challenges to existing approaches to drug control.

Although the source of the chemicals required to synthesise new drugs is unclear, there are indications that some are bought from manufacturers in Asia, with China and India often cited as countries of origin. Some new substances, such as mCPP, have also been legally sourced from within Europe, and some of the new substances are produced within Europe from precursors in illicit laboratories. These are usually intended to be sold directly on the illicit market as substitutes for controlled drugs. As a result, drug consumers may be unaware of the substances they are actually taking. The identification of substances in this area is a challenge not only for consumers. New psychoactive substances from numerous diverse and increasingly obscure chemical groups emerge rapidly and are incorporated in products whose component substances may change over time. This poses substantial problems for forensic and toxicological identification. It also means that consumers are exposed to substances of unknown toxicity. The initial identification of substances can be technologically demanding and costly, creating a strong argument for coordinated activities and the efficient sharing of data. Many of these substances will also go undetected if standard approaches are used. Thus, customs and border control forces can be poorly prepared to face the growing challenge of identifying a large number of different new substances.

As noted, there is an increasing interaction between the market in new drugs and those for controlled drugs. Some substances appear to have the potential to cross over to the illicit market once controls are put in place. Conversely, non-controlled psychoactive substances have been added
to, or sold in the place of, established illicit drugs such as ecstasy. Examples of the interchangeable nature of licit and illicit drugs markets are the presence of licit mephedrone in tablets sold as ecstasy tablets and, conversely, the inclusion of controlled drugs, such as PMMA, in ‘legal high’ products. Both these findings, along with seizure information, suggest a growing interest in this market by OCGs, although to date activity levels appear to have been relatively low. However, an equal threat appears to be that this area is attractive to new groups who see an opportunity

### New psychoactive substances

#### Overview

- **The challenge of identification:** New substances, from diverse chemical groups, emerge rapidly and are sold in products that may contain mixtures of substances that change over time. This poses a substantial challenge for forensic and toxicological identification and means that consumers are exposed to substances whose toxicity is unknown.

- **Dramatic rise in introduction of new psychoactive substances:** There has been a growth in the number, type and availability of new substances in Europe. In 2012, a record 73 substances were detected for the first time. Overall, the EU early warning system currently monitors more than 250 substances.

- **A multifaceted problem:** The new drugs market can be seen as two broad and overlapping groups of non-controlled substances and products: those sold directly on the illicit market and the so-called ‘legal highs’.

- **A potential for growth in use:** New drugs can diffuse rapidly and may also be attractive to consumers who do not typically use controlled drugs.

- **Crossover to drug market:** Non-controlled psychoactive substances have also been added to, or sold in the place of, established illicit drugs such as ecstasy (MDMA). Some ‘legal highs’ appear to have crossed over into the illicit drug market once controls have been put in place.

- **Globalisation and the Internet play a key role in the emergence of ‘legal highs’:** Synthesis usually takes place outside the EU, and similar products have appeared in many parts of the world. However, EU-based entrepreneurs play an important role in importing, packaging and marketing. The Internet is both a source of supply and a provider of information to consumers, traders and producers.

- **Competing with the illicit market:** Interaction between the illicit drug market and the market for ‘legal highs’ exists, but is currently limited. However, given the large profits, and low risk, of operating in this area a considerable potential exists for both established and new criminal organisations to become more active.

#### Action points

- **Respond to a growing problem:** The EU mechanism for identifying, monitoring and responding to new drugs needs to be strengthened to keep pace with the challenges posed by this rapidly developing phenomenon.

- **Rise to the forensic challenge:** The need to identify and assess increasingly diverse sets of chemicals, and the costs of doing so, requires forensic science capacity to be strengthened and the sharing of chemical data, reference samples and expertise. There is a parallel need to improve capacity to enable the detection of new substances at borders and within the postal and transport services.

- **Take a proactive approach:** Responses can be strengthened by a proactive approach to monitoring of the Internet, including test purchasing and by developing partnerships with industry to restrict illegal activities.

- **Respond to the illicit market:** There is a need to analyse and respond robustly to the growing interplay between the new drugs market and the established market in controlled drugs.

- **Take rapid action to protect public health:** Some new substances pose an immediate and pronounced threat to public health. This requires a fast-track EU-wide alert mechanism that will allow Member States to take immediate precautionary measures.
to move into an area characterised by low risks, high growth potential and easy profits.

Numerous factors drive the availability of new drugs. For many, the simple fact that there are few restrictions on the manufacture, transport, importation, sale and possession is crucial. Not only can this reduce costs, as well as risks to manufacturers and distributors, but it can also make new drugs more attractive and socially acceptable to consumers, especially when they are attractively packaged. The appeal of the strong visual images used in the packaging of these products is attested by the fact that similar packaging is now being adopted by some legitimate products targeting the youth market.

Online social networks are playing a growing role in how consumers learn about new drugs, buy them and, subsequently, share their experiences. This makes them a potent vehicle for further diffusion. Despite the importance of the Internet in this respect, it is not currently the principal route by which most consumers obtain these products. Studies have found that many users source ‘legal highs’ from friends, specialised shops or even illicit dealers rather than directly from the Internet. That said, it is clear from Internet monitoring that there is a growing number of online shops offering ‘legal highs’ and medicines for sale to consumers both in the EU and in other countries. Moreover, the Internet may be the initial source of supply for products that are subsequently sold on through commercial or social networks.

Understanding the consumer market for new drugs is difficult given the limited research currently available. Some insight is provided by a recent EU-wide study which estimated that, among those aged 15–24, the prevalence lifetime use of ‘legal highs’ was 5 %. There was large variation between countries, but rates of use were relatively high in some countries, with the United Kingdom, Latvia, Poland and Ireland reporting estimates of 8 %, 9 %, 9 % and 16 % respectively. This illustrates the potential of the products to spread rapidly, although the sampling approach used in this exercise, and the fact that the situation appears to be changing rapidly, means that further studies of drug prevalence in this area are urgently needed. To address the complexity of the new drugs phenomenon and to strengthen the EU response in this area, the European Commission is currently working on a new legislative proposal. This draws on a thorough analysis of the current situation and on an assessment of the existing legislative framework (Council Decision 2005/387/JHA).

**Information needs**

From an operational perspective, the investment of time and resources needed to develop robust data sets may seem sometimes like a distraction from more valuable activities. However, good intentions do not always deliver good results, and a sound analysis of the situation is necessary if activities are to be effectively targeted and their impact over time assessed. This is probably even more important now as a strong message coming from the analysis found in this report is the increasing speed and dynamic nature of the modern drug market.

The purpose of the analysis provided in this report is to provide a strategic overview of the situation with a focus on how value can be accrued from coordination and cooperation at the European level. The issues of the standardisation and comparability of those data available at EU level are of critical importance here. Currently, in contrast to demand-side indicators, the ability to compare even relatively simple quantitative measures between countries is quite poor. Similarly, both the timeliness of data availability and the coverage of data sets of the EU as a whole is frequently inadequate. This means that an EU-level analysis must be made with caution, and quantification of the scale of the market with any degree of rigour is often impossible in most areas. The weakness of statistical data is widely recognised, and the EMCDDA, Europol and the European Commission are currently working to improve the situation. The current focus of this work is to establish basic standardised key indicators for supply and supply reduction to provide the building blocks to permit a more robust time series analysis to be developed. Standardised statistical information sets, whilst important for strategic-level analysis, clearly do not serve all the information needs in this area. Research and intelligence sharing are plainly also important and can provide complementary data. This report has benefited considerably from the ongoing work to coordinate intelligence by Europol. This information is primarily intended for operational purposes, but when appropriately treated it can inform a more general analysis without compromising either sources or ongoing activities. It is therefore sufficient here to simply note the need for, and the value of, sharing operational data at the European level for both operational and analytical purposes.

The forensic science domain is one area where information sharing is clearly of both operational and analytical importance. The increasing presence of synthetic drugs, new drugs and mixtures thereof in the European drug market suggests that the importance of this area is growing. It has been noted in many parts of this report how understanding of this area is hampered by a lack of capacity. It is also an area in which added value can clearly be derived by sharing information and coordinated activities. Examples here are easy to find but can be summarised as improving forensic data quality as well as data on the availability on
the chemical make-up of seized substances including recording of purity and adulterants. Chemical and other forms of profiling can also allow a better understanding of market changes. Better information on the number and characteristics of dismantled drug production sites would also be helpful and allow a better understanding of issues such as the extent to which the processing and extraction of cocaine is occurring within the EU.

More standardised and detailed information on drug seizures must also be regarded as a priority. A good illustrative example of the issues here is cannabis. Current monitoring in this market does not allow products to be distinguished or the relative potency of available cannabis products to be determined. Data on herbal cannabis and cannabis plants, in particular, are currently poorly standardised and difficult to interpret.

There are a number of challenges that need to be overcome when attempting to scale up European data on supply issues. The speed at which changes are occurring and the parallel need to respond rapidly to new developments is a challenge to conventional statistical reporting models. The sustainability of any information collection system is often contingent on the data providers getting sufficient reward from their efforts. This would imply that rapid feedback and analysis relevant to local needs will be important. A good model here may be the current EU early warning system on new drugs. The benefits of rapidly sharing information using this system are reflected in the high degree of commitment.

### Information needs

#### Overview

- **The need for an integrated information model:** Understanding a complex phenomenon such as the drug market requires a critical analysis informed by both supply- and demand-side data.

- **Statistical data on supply remains a weak link:** Improving the measurement of drug markets and effectiveness of supply reduction responses requires that data are based on common definitions and standards.

- **Forensic science at EU level is underutilised:** Forensic information has both operational and strategic importance, yet capacity at EU level is currently insufficient. Sharing of information and improving the coordination of actions at EU level can also add value to national efforts.

- **Maximising the strategic value of intelligence:** Operational intelligence, used with appropriate safeguards, can enrich strategic analysis and complement information obtained from statistical and other sources.

- **Quantifying the drug market:** An estimate of the size of the market is essential for improved threat analysis, and to better target, and measure the impact of, supply and demand interventions.

- **The importance of research:** Dedicated research studies are necessary to complement statistical data, and, within a European context, key research priorities require identification.

#### Action points

- **Estimate size and value of markets:** Estimates of both the scale and value of drug markets are informed by demand and supply indicators. Functional longitudinal models that will allow the monitoring of changes on an ongoing basis need to be developed to allow better quantification of important aspects of the drug market.

- **Identify research priorities:** There is a need to identify emerging research needs in this area and encourage cross-national and multidisciplinary studies.

- **Establish high-quality indicators of drug supply:** Standardised key indicators to provide the building blocks to permit a more robust time series analysis need to be established.

- **Develop and share forensic science information:** There is a need to scale up and develop expertise, networks and analytical forensic capacity at the EU level. Maximum value will be accrued by sharing of information through integrated databases using common standards.
shown by data providers. It is likely that technology can also be helpful here, and, as noted already, online systems have the capacity to provide benefit by proving rapid and secure communication and allow information to be collected and accessed in more creative ways. Methodological technical developments may also prove helpful; for example, current developments in wastewater analysis offer the potential for a rapid reporting tool on trends in drug consumption at the population level.

Despite the challenges that exist, even moderate improvements in data quality could deliver some important returns. All data sources in this area are by their very nature partial, and the best insight comes from the multi-indicator analysis of time series data. To understand a complex phenomenon such as drug use and the drug market, both supply and demand data are essential. It is, for example, impossible to understand the current European heroin market without considering the impact that widespread substitution has had in removing a significant component of consumer demand. Looking at data availability overall, it can be concluded that a window of opportunity now exists that may allow, in the not too distant future, the ability to address with a greater degree of confidence important analytical questions such as the size of European drug markets and obtain better estimates of both scale and value of production and consumption.

In conclusion, it is clear that monitoring and evaluation are in some respects secondary tasks to the primary business of the operational work necessary to pursue supply and demand reduction objectives. Nonetheless, actions that are not based on an understanding of the nature of the problem risk being poorly conceived and poorly targeted. This can result in an overall approach that is likely to be at best ineffective and at worst counterproductive. Without impact evaluation, resources may be wasted as ineffective strategies continue to be pursued. And, similarly, without information systems that are proactive and sensitive to change, important new threats may be overlooked and opportunities for early intervention missed. This is recognised in the European strategic response to drugs, which can be characterised as placing a central emphasis on the need for actions to be evidence based. It is also the rationale for this report and it is why recommendations to improve the information base are important inclusions here.