idpc
International Drug Policy Consortium

IDPC ANALYSIS OF THE UNODC WORLD DRUG REPORT 2017

January 2018

Executive summary

As has been the case in recent years, the *World Drug Report for 2017* – the flagship publication of the United Nations Office on Drugs and Crime (UNODC or Office) - represents an impressive overview of the latest developments and trends in the world's illicit drug markets, including in many instances linkages to the Sustainable Development Agenda (SDA) and specific Sustainable Development Goals (SDGs). A feat of data synthesis and analysis, the combination of a new five booklet format and interactive maps and data sets on the UNODC website arguably make the Report one of the agency's most thorough and accessible publications, or publication packages to date.

Data within the Report are contextualised in terms of the operationalisation of the UNGASS Outcome Document agreed in New York in April 2016, and preparations for the high-level ministerial segment (HLS) at the 2019 Commission on Narcotic Drugs (CND). The policy context – particularly in relation to the HLS and work on some form of document to guide international drug policy for the next decade or so – may be somewhat different to previous years, yet many of the key conclusions and overarching themes are familiar.

Global markets remain dynamic and 'thriving' and are becoming increasingly complex and diversified in terms of production, trafficking and use. The previously dominant narrative of market stability, however, is not so obvious. In terms of headline figures, the Report informs us that an estimated quarter of a billion people – around 5% of the global adult population – used drugs at least once in 2015 and that about 29.5 million of those suffer from what the UNODC refers to as 'drug use disorders'.

It is important to note, nonetheless, that while the Office's analysis is increasingly sophisticated, there is an ongoing level of uncertainty linked to the paucity of data upon which this analysis is based, especially in relation to Africa and Asia. Such uncertainty pertains to both the state of drug markets and the nexus between the 'drug problem' and organised crime, illicit financial flows, corruption and terrorism. This topic is the focus of Booklet 5 – what would, in previous years, have been labelled the Report's thematic chapter.

Key points

- Amidst discussion, among other things, of the harms caused by drug use, particularly premature deaths (most attributable to opioid use), the need for affordable access to 'effective scientific evidence based prevention treatment and care for drug users' and the threats posed by methamphetamine and new psychoactive substances (NPS), the Executive Director's preface highlights the importance of the SDA to drug policy. This discussion, however, does not stretch to how member states' drug policy performance can be measured against a broad range of related human rights obligations. The Executive Director also avoids any mention of the tensions within the international drug control system around the issue of regulated cannabis markets.
- The Report devotes considerable attention to the extent of drug use and health impacts, including the chronic shortage of good quality treatment provision. Analysis als o includes, for the first time in a *World Drug Report*, disability-adjusted life years (DALYs). This could be seen as a corrective to the inference in previous reports that a sizable

proportion of the world's adult population was using drugs without experiencing significant ill-effects.

- While data reveal that opioids remain the most harmful type of drug, the Report demonstrates a growing concern over the use of synthetic drugs, including the dynamic state of the markets for amphetamine-type stimulants (ATS) and NPS. Additionally, cocaine use is seen to be increasing, with the use of waste water analysis becoming more prominent in an attempt to better understand the scale of use. All that being said, cannabis remains the most widely used drug.
- Data reveal that people who inject drugs continue to face some of the most severe health consequences associated with drug use: almost 12 million people worldwide inject drugs, of whom 1 in 8 (1.6 million) are living with HIV and more than half (6.1 million) are living with hepatitis C. Indeed, the Office shows how hepatitis C is causing the greatest harm among people who inject drugs.
- Devoting more attention to the issue than in previous years, it is also shown how people who use drugs are particularly vulnerable to tuberculosis. However, the discussion sometimes misses the opportunity to explicitly highlight the benefits of a range of harm reduction interventions, including in relation to prison settings.
- The Report devotes some space to access to pain medication. Although welcome, and despite reference to the SDGs, it does not engage in debates about the role of the international system itself in restricting access.
- Analysis reveals increasing market complexity, including drug trafficking routes and polydrug use. The latter involves not only internationally controlled substances, but also prescription medicines (diverted from the licit market and counterfeit).
- An increasingly pressing challenge for law enforcement at various levels of governance, the Report once again gives some space to the issue of drug trafficking over the darknet and the additional complexity that this adds to drug markets. Little attention, however, is given to what has been called 'indigenous harm reduction' within crypto-drug markets.
- Market analysis of plant-based drugs illustrates the ongoing and widespread production of cannabis globally, the central role of Afghanistan in the production of opium and heightened coca production in Colombia.
- In terms of drug trafficking, global seizures are shown to be 'relatively stable', but in a constant state of flux, including in relation to heroin, ATS and cocaine.
- Aware of the scarcity of data within the region, the Report reveals an expansion of the methamphetamine market in East and South East Asia.
- In a slight deviation from the usual narrow and isolated discussion of markets, the Report provides a useful overview of the cannabis policy landscape within the United States and Uruguay. It also offers a welcome objective and balanced assessment of the impact of cannabis regulation on markets, including on use. Regarding the United States, of note is the conclusion that 'The evaluation of the impact of measures allowing the commercial production, sale and recreational use of cannabis on health, criminal justice and other outcomes requires regular monitoring over time, and it may take years to determine their long-term effects on cannabis use and associated harm among adults, as well as their influence on cannabis use among adolescents'.
- Within the detailed discussion of the nexus between the drug problem, organised crime, illicit financial flows, corruption and terrorism, and with an acknowledgment of gaps within data sets, the Office highlights the changing business models for drug trafficking and organised crime, the long-term damage caused by crime proceeds to economies, the role of corruption in facilitating illicit drugs markets (which in turn fuel corruption) and the benefits of the drug trade to some terrorist, insurgent and non-state armed groups.
- One of the key points to come out of a reading of this year's Report stems not from the publication itself, which is of very high quality, but rather the data upon which it is constructed and hence the aspects of the 'world drug problem' it examines. It is becoming increasingly difficult to reconcile the Report's assertion that it 'provides ample evidence to guide the international community on key aspects of drug policy' when the data upon which it is based does not incorporate any human rights indicators, or proxies thereof, as they pertain to the implementation of drug policy. It should be recalled that the issue of human rights is given prominence throughout the UNGASS Outcome Document and is central to the SDA.

Introduction

Over the course of the past year, growing attention within Vienna, the home of the UN drug control apparatus, has been devoted to the operationalisation of the UNGASS outcome document[1] agreed in New York in April 2016 and preparation for what has now been agreed as a HLS at the 2019 CND. As such, it is difficult to read the latest version of the UNODC's flagship publication without consideration of the broader political and related policy environment. That said, while reference to the key themes pertaining to processes in New York and Vienna are at various points both explicit and implicit within the *World Drug Report 2017*, as in recent years the tone and content remain largely de-politicised. Indeed, under the continuing leadership of Mr. Yury Fedotov, the UNODC has once again produced an impressive overview of the latest developments and trends in the world's illicit drug markets, including, where fitting, linkages to the SDA. Discussion of the 'world drug problem' remains appropriately objective and scientific, as is befitting a UN agency of its status, position and analytical expertise.

Mindful of the fact that the publication is annual, many of the key conclusions and overarching themes are familiar. This is particularly so in relation to the negative health consequences of drug use, including drug-related deaths – particularly in relation to opioids – HIV and hepatitis C infections, as well as what might be called the treatment gap. At a broader level, and above the shifting character of markets for specific drug types – especially NPS and methamphetamine – it is also possible to identify constancy in terms of some stability, increasing market dynamism, growing market complexity and an ongoing lack of good quality and reliable data. This situation continues to lead to significant levels of uncertainty concerning some geographic and issue areas. It is positive to see 'Strengthening the knowledge base of the drug problem' given prominence within the Report's stand-alone 'Conclusions and Policy Implications' section (see Box 6). This is an issue that will be touched upon at points throughout this analysis, including in relation to the key source of UNODC data, the Annual Report Questionnaire (ARQ) (Box 8).

However, while the global picture contained within the *World Drug Report 2017* remains relatively consistent, the same cannot be said of its presentation. This year, in part to celebrate 20 years since its inception, the publication is presented in a new five-booklet format.[2] This, the UNODC Executive Director notes, is in 'response to readers' needs, to improve user friendliness, while maintaining the rigorous standards expected from the Office's flagship publication' (1, p. 3).[3] The inclusion of interactive maps and datasets on the UNODC website, the abundance of infographics and the online Methodology 'chapter' certainly provide some useful visuals and background detail on the data presented in this year's Report. The result is probably one of the agency's most thorough publications – if somewhat unwieldy and at times repetitive. Both the extended market analysis of synthetic drugs and the in-depth examination in booklet 5 of the nexus between the drug problem, organised crime, illicit financial flows, corruption and terrorism, what in previous years would have been the Report's thematic chapter two, certainly add to the publication's analytical rigor. The latter raises many pressing questions concerning the relationship between drug markets and various forms of criminality and non-state actor violence and adds an additional layer of intricacy to any assessment of what by its very nature is a classic cross-cutting issue.

It is within this context that we aim to provide an overview of the data and topics presented in, as well as the key themes emerging from, the *World Drug Report 2017*. In many instances, critical analysis of and comment on all three, including a summary of booklet 5, is offered. While this is the case, a narrative description of some aspects of the Report does not imply IDPC's comprehensive endorsement of the UNODC's position on all issues and its preferred emphasis within the text.

The Executive Director's Preface: Waltzing the Vienna side-step

Mr. Fedotov sets up his preface to this year's 'refreshed' publication very much as a celebration of 20 years of the *World Drug Report*, noting that for the past two decades the UNODC 'has been at the forefront of global research into complex areas of drug use and supply, supporting international cooperation and informing policy choices with the latest estimates, information on trends and analysis' (1, p. 3). This is a fair point, although perhaps understandably the Executive Director avoids explicit reference to the steadily improving quality of the Report in recent years since doing so would have undermined its historical credibility.

Mr. Fedotov is also correct in saying that the Report comes at an important time for the international community. Although again for political reasons – this time inter-state rather than intra-agency – he avoids the increasingly obvious divergence of views among member states working to address the so-called 'world drug problem'. It is noted that 'The 2017 report comes at a time when the international community has acted decisively to achieve consensus on a way forward for joint action'. Reference is made to the Outcome Document from the 2016 UNGASS and to Resolution 60/1 of the March 2017 session of the CND. The latter reinforces the 'commitment to implementing the outcome document and charting a course to the 2019 target date of the 2009 Political Declaration and Plan of Action on the world drug problem, as well as strengthening action towards the Plan of Action's agreed goals and targets'. What these statements side-step is the shrinking consensus beneath the high-level language produced at UN fora in both New York and Vienna - even though the case of cannabis regulation is addressed in considerable detail in the body of the Report itself. Indeed, while the Outcome Document represented what Mr. Fedotov himself defined as a 'broad' consensus,[4] discussions at the 2017 CND revealed increasing disagreement about its status as the preeminent soft law document in the lead up to the high-level meeting in 2019.[5]

Consequently, amidst references to the scale and dynamism of the illicit market, it is difficult to argue with the Executive Director's belief that, 'As the *World Drug Report 2017* clearly shows, there is much work to be done to confront the many harms inflicted by drugs, to health, development, peace and security, in all regions of the world'. Yet, as part of a reality that seems far removed from the key message within the Mr. Fedotov's preface, it must not be forgotten that significant challenges also lie ahead in relation to addressing the increasingly fragile patina of consensus that currently exists within the field of international drug control.

While not explicit, Mr. Fedotov's discussion of the issues covered in booklet 5, also alludes to a related and increasingly pressing contemporary challenge facing the UN drug control system: the development and adoption of appropriate policy indicators and a related much-needed revision of the ARQ. This is especially the case as 2019 looms large and some new form of soft law document will be developed to help guide international policy until 2029 or so.

Moreover, as in cross-cutting areas beyond the drug-crime 'nexus', the need for revised indicators is given more urgency in light of the welcome move to ensure synergies between drug control and the SDA. Indeed, acknowledging a paucity of data within a fluid and complex field, Mr. Fedotov stresses that 'Clearly, countries must be able to act and react to an ever-changing and formidable array of threats and problems'. To this end, he points out that 'UNODC is fully engaged in strengthening responses, working closely with our United Nations partners and in line with the international drug control conventions, human rights instruments and the 2030 Agenda for Sustainable Development, which are themselves complimentary and mutually reinforcing'.

Once again it is difficult to disagree with such a perspective, particularly in relation to the Executive Director's mention of UN standards and norms. That said, while Mr. Fedotov is right to show concern over data gaps relating to connections between drugs, terrorism and insurgency, he in many ways personifies the Vienna-based system response in avoiding discussion of how to measure states' drug policy performance against a broad range of human rights obligations. This is a core conceptual theme of all UN activities and one that is growing in significance in not only recent UN drug policy documents like that emanating from the UNGASS, but also in a prominent system-wide initiative like the SDA.

The extent of drug use and health impacts

Highlighting the critical point that the 'harm caused by drug use remains considerable', the Report informs us that an estimated quarter of billion people, around 5% of the global adult population (aged 15-64) used drugs at least once in 2015. This figure is given more precision elsewhere, with detail explaining that it is taken from a range of 158 million to 351 million (2, p. 13). Even more 'worrisome', we are told, is the fact that about 29.5 million of people who use drugs (around 0.6% of the global adult population), suffer from 'drug use disorders' – that is to say, drug use that is 'harmful to the point that they may experience drug dependence and require treatment' (1, p. 9; 2, p. 9). Again, elsewhere in the report the range for 'drug use disorders' is given at 15.3 million to 43.1 million (2, p. 13)

In an approach introduced for the first time to the *World Drug Report*, this year's publication adds

another layer of analysis regarding the concept of harm by applying DALYs[6] to drug use. As such, it is noted that 'The magnitude of the harm caused by drug use is underlined by the estimated 28 million years of "healthy" life (disability-adjusted life years (DALYs)) lost worldwide in 2015 as a result of premature death and disability caused by drug use'. It then goes on to note that of those years lost, 17 million were 'attributable solely to drug use disorders across all drug types' and that 'DALYs attributable to morbidity and mortality resulting from all causes of drug use have increased overall in the past decade (1, p. 9).

The calculation, including in relation to transparency, of DALYs has been open to some criticism over the years.[7] In a 2017 article in *Addiction*, Wayne Hall observed that 'estimated DALYs attributable to drug use come with caveats'. 'There is', Hall notes in reference to well-known limitations in knowledge of drug markets, 'a lack of data on the extent of drug use and dependence in many low- and middle-income countries where rates of illicit drug use are highest'. He goes on to point out that there is also 'considerable uncertainty about the long-term effects of using many' controlled 'drugs, and these estimates quantify harms experienced by drug users: they do not include adverse effects – health, social, and economic – that drug users may have on non-drug-users'. Finally, and 'most importantly', Hall adds, 'the estimates reflect patterns of drug use under drug prohibition in most countries'.[8] The point here being that there is no consideration of health consequences under different legal structures. Nonetheless, with close links to the Global Burden of Disease Study[9] 2015, this is clearly a useful approach to better understand the consequences of drug use at a global level. It is interesting, however, to note the differentiation in the application of DALYs to drug use and drug dependence. This may in some way be seen as a corrective to the inference in previous reports that a sizable proportion of the world's adult population was using drugs without experiencing significant ill-effects.[10]

While this may be the case, a constant theme running across recent Reports is the chronic shortage of treatment provision, a point once again highlighted by the Executive Director in the preface. This year's publication highlights that less than 1 in 6 people dependent on drugs are provided with treatment each year and that the 'availability of and access to science-based services for the treatment of drug use disorders and related conditions remain limited' (1, p. 9). In terms of the proportion of people in treatment for different drugs (global averages), cannabis is shown to come out on top at 39%, although the Report stresses that it is important to 'understand, however, that there is greater variability in the definition and practice of what constitutes treatment of cannabis use disorders'. This, we are told, can include behavioural or psychosocial interventions that may vary from a one-time online contact or a brief intervention in an outpatient setting, to a more comprehensive treatment plan involving other co-morbidities in an outpatient or inpatient setting' (2, pp. 16-17). More welcome nuance on this topic can also be found in relation to levels of problematic drug use, as reflected in demand for drug treatment. Often utilised as a proxy indicator, the Report reminds us that 'this is only a latent indicator of trends in the use of drugs, owing to the time lag between the period when people start using drugs, when they develop drug use disorders and when they seek treatment for drug use' (2, p. 15). Interestingly, considering the attention devoted to synthetics within the Report, there is no open acknowledgment of the lack of a stimulant analogue to opioid substitution therapy.[11]

Opioids remain the most harmful type of drug

Although cannabis remains dominant in terms of people undergoing drug dependence treatment, opioids (including heroin) remain the most harmful type of drug in terms of negative health consequences. As is discussed at length, the use of opioids is associated with risk of fatal and non-fatal overdose, risks of acquiring infectious diseases, for example HIV and hepatitis C through 'unsafe injecting practices', and risk of other medical and psychiatric co-morbidities. (1, p. 10; 2, p. 9). The report highlights that large numbers of avoidable premature deaths can be attributed to opioid use, with disorders associated with the drug group representing the heaviest burden of disease attributable to 'drug use disorders'. Strikingly, data reveals that in 2015, almost 12 million DALYs, equating to 70% of the global burden of disease, attributable to 'drug use disorders', were caused by opioid use (1, p. 10; 2, p. 9). Unsurprisingly, attention in this regard is given to the current situation within the United States, where the illicit use of pharmaceutical opioids coupled with an increase in heroin and fentanyl use has resulted in a 'combined and interrelated epidemic', as well as increase in morbidity and mortality relating to opioids (1, p. 10) (see Box 3). Data within the report shows that the United States accounts for

approximately one quarter of the estimated number of drug-related deaths worldwide, including by overdose, which continue to rise (see Box 1). Mainly driven by opioids, overdose deaths in the United States have more than tripled during period 1999-2015. With a past year increase of 11.4%, drug related deaths within the country have reached the 'highest level ever recorded' (1, p. 10).

As is discussed at various places across the booklets comprising this year's Report, the emergence of new derivatives of prescription medicines classified as NPS, especially fentanyl analogues, has been linked with rising numbers of overdose cases, including fatalities among people using opioids. Recent years have also seen a number of 'emergent synthetic opioids' associated with serious harms and deaths. Representing a threat to public health, the problems these substances pose is, we are told, compounded by variation on both quantity and potency of 'active components' (1, p. 10; 4, p. 48).

Growing concerns over synthetics

The 2017 Report also highlights the fact that methamphetamine accounts for considerable harm, with disorders relating to use of amphetamine representing a considerable share of the global burden of disease attributable to 'drug use disorders'. This is at a level that puts disorders relating to the drug type second only to those connected with opioids. More specifically, 'available' data show that among amphetamines, methamphetamine represents the greatest global health threat, with use apparently spreading and more methamphetamine users seeking treatment. Providing further evidence of the dynamic state of the ATS market, the Report reveals that, in addition to established and expanding markets for the drug in East and South-East Asia and Oceania, there are 'growing concerns' about methamphetamine in North America, South West Asia and parts of Europe (1, pp. 10-11; 4, p. 9).

Beyond ATS, and as suggested above, the Report also highlights the growing significance of synthetics in the form of NPS. Data show that, despite the large number of substances in existence, the overall scale of the market is still relatively small. Nonetheless, as the Office flags up, NPS are potentially more lethal than other drugs (4, p. 10). It is noted how 'one of the most troubling aspects of NPS is that users are unaware of the content and dosage of the psychoactive substances continued within some NPS'. This, we are informed, 'potentially exposes users of NPS to additional serious health risks'. Moreover, due to their relatively recent appearance within many countries, the Report stresses that 'Little or no scientific information is available to determine the effects that these products may have and how best to counteract them' (1, p. 11; 4, p. 10). An additional area of concern once again given some attention is the number of fatalities where NSP are implicated. This is particularly the case in relation to the injection of NSP with stimulant effects among 'high-risk groups of people who use drugs'; behaviour that further aggravates health risks (1, p. 11). This issue is discussed in booklet 4, where the authors highlight how, due to the short duration of action, the high frequency of injections of NPS increase risks of HIV and hepatitis C infections (4, p. 39). As elsewhere within the Report, however, the discussion of drug injecting practices here is surprisingly not accompanied by explicit acknowledgement of the role of health-oriented interventions, particularly needle and syringe programmes, in reducing the harm associated with drug injection.

On the issue of NPS and health risks, attention is given to the use of synthetic cannabinoid products, including in relation to toxicity and fatalities (4, p. 41). These, as is explained, are not simply synthetic versions of the substances occurring in herbal cannabis and as street names may suggest (1. p. 15; 3, p.10). Rather, they are a 'diverse group of potent psychoactive compounds that are designed to mimic the desired effects of cannabis'. There is, we are told,

Box 1 Drug-related deaths

One of the notable figures to come from this year's Report, and one highlighted in the Executive Director's preface, is that there were at least 190,000 mostly preventable drug-related deaths in 2015. Noting that drug-related deaths are the most extreme consequence of drug use, it is pointed out how there are definition variations between countries.

That being the case, it generally includes all or some of the following conditions: overdose; deaths from HIV/AIDS and hepatitis C acquired through injecting drug use; behavioural disorders caused by the use of psychoactive substances; intention self-harm and self-poising (suicide) by expose to psychotropic substances; and unintentional deaths and trauma resulting from drug use (motor vehicle accidents and other forms of accidental deaths (2, pp. 27-28).

a 'Growing recognition of the harm associated with intoxication resulting from the use of synthetic cannabinoids' (4, p. 10). Indeed, the UNODC points out that, products containing synthetic cannabinoids are 'often highly variable both in the quantity of active ingredients and number of different synthetic cannabinoids present, and thus pose a public health risk' (4, p. 41). 'While, in general, these health harms are not dissimilar to the intoxication caused by natural cannabis, the use of products containing certain synthetic cannabinoids has been associated with severe health events including hospitalizations and fatalities' (1, p. 15). That being said, it is stressed how it 'cannot be concluded…that the untoward or undesirable effects of synthetic cannabinoids will limit their uptake or use' (1, p. 15, 4, p. 10).

In addition to some discussion of use in prison settings and association with violent behaviour, particularly in the UK, (4, p. 44) the Report also notes that the use of hallucinogenic NPS is increasing in South America, a phenomenon that has health implications, including fatalities (4, pp. 45-46).

Cocaine use disorders are increasing

Reinforcing the fact that negative health consequences associated with plant-based drugs remain significant, the report demonstrates that cocaine use disorders are increasing. More specifically, data reveal that while numbers of cocaine users are decreasing or stabilising in Europe, wastewater analysis (see Box 2) suggests that cocaine consumption in that region may be increasing. Moreover, following several decades of decline in North America, there are also signs that use there is on the increase. Indeed, data show that overdose cases increased 'markedly' in the United States between 2012 and 2015. Importantly, however, and reflecting the increasingly complex and often very specific nature of drug markets in different parts of the world, much of the increase was linked to cocaine use in combination with opioids (1, p. 11). Significantly, at the global level DALYs attributed to cocaine use disorders increased from 729,000 in 2015 to 999,000 in 2015 (1, p. 11).

Drug use and the burden of disease

It will come as no surprise to learn that people who inject drugs continue to 'face some of the most severe health consequences associated with drug use'. As the Report states, 'Almost 12 million people worldwide inject drugs, of whom 1 in 8 (1.6 million) are living with HIV and more than half (6.1 million) are living with hepatitis C (1, p. 11; 2, p. 9). Having acknowledged the marginalised status of individuals within this group, it is also noted how the 'situation is often made worse with lack of access to relevant evidence-based prevention and treatment services

Box 2 Waste water analysis

As some readers may note, analysis within the World Drug Report 2017 reveals the UNODC's increased reliance on the use of waste water analysis for measuring trends in drug consumption, specifically cocaine use in Europe – using data from the European Monitoring Centre for Drugs and Drug Addiction.

The limitations of household survey data are widely acknowledged, as is the fact that seizures may reflect not only 'changes in the availability of cocaine' but also 'changes in law enforcement activity and priorities'.[12] In this context, the online methodological section of the Report[13] notes the usefulness of looking for alternative methods of measuring trends in drug consumption. 'One of such methods', the Report notes, 'is the analysis of drug consumption based on the analysis of wastewater'. Indeed, 'analysis of benzoylecgonine (a cocaine metabolite) in waste water' underpins much of the Report's 'information about trends on cocaine consumption' within Europe, and to a lesser extent elsewhere (3, pp. 30-32).

While only noted briefly in the text, it is important to highlight discussion of some of the technical challenges accompanying the approach explored in detail in the Report's Methodology section. Beyond the broad ranges of results across European cities and associated problems relating to averaging methodologies, these include 'pharmacokinetics'. That is to say, the way different individuals excrete cocaine from the body. Waste water analysis is clearly a useful analytical tool, with an increasing scientific literature examining its utility across a range of drug types.[14] Nevertheless, as with other methodologies, the limitations of this method also need to be kept in mind.

for drug dependence and infectious diseases' (2, p. 19). Indeed, according to information from the joint UNODC/WHO/UNAIDS/World Bank estimate, the number of people who injected drugs in 2015 is 11.8 million (with a range of range 8.6 million to 17.4 million). This figure corresponds to 0.25% (range 0.18 to 0.36%) of the population aged 15-64 years and is based on the reporting of injecting drug use from 107 countries, covering 89% of the global population aged 15-64 years (2, p. 19). Accompanied by the admission that data are 'scarce', the UNODC reports that HIV infection among people who inject drugs is on the increase. Here the joint UNODC/WHO/UNAIDS/World Bank estimate gives the figure for HIV prevalence among people who inject drugs in 2015 as 13.1% (1 in 8 people), which equates to 1.55 million people who inject drugs living with HIV worldwide. This is based on reporting of HIV prevalence in 118 countries, covering 95% of estimated people who inject drugs (2, p. 19).[15]

Hepatitis C is causing the greatest harm among people who inject drugs

Importantly in terms of drug use-related harm, the Report also highlights that hepatitis C is causing the greatest harm among people who use drugs. In this instance data shows that, globally, the negative health consequences related to the disease among people who use drugs are 'substantial'. Indeed, the number of deaths attributed to hepatitis C among people who use drugs is 'greater than from other causes of death related to drug use'. In fact, we are informed that, overall, 'more DALYs are lost as a result of hepatitis C than of HIV infection among people who use drugs' with most of these DALYs relating to premature death, while the remainder are the result of 'years lived with a disability' (1, p. 11). The Report notes how recent advances in treatment, using direct-acting antivirals, provide an opportunity to reduce the heavy burden of disease among people who use drugs. Yet, returning to a strong theme throughout the UNODC's description and analysis of the health consequences of drug use, it is stressed how 'accessibility remains poor for many of those in need', in this case since 'such treatment options remain very expensive in most countries' (1, p. 11; 2, pp. 19-21).

People who use drugs are particularly vulnerable to tuberculosis

Acknowledging that it has only been touched upon lightly in previous editions of the *World Drug Report*, this year's publication devotes considerable attention to the fact that people who use drugs are particularly vulnerable to tuberculosis, including in prisons (e.g. 2, pp. 21-26). As we are informed, tuberculosis is more prevalent among people who use drugs than in the general population. Based on the limited available data from studies in Europe, Asia and the Americas, it is shown that prevalence among people who inject drugs is estimated at approximately 8%. This compares with a figure of less than 0.2% in the general population (1, p. 12). Moreover, it is noted that people who use drugs may have a particular need for interventions that prevent and treat tuberculosis, since 'They may be disproportionately affected by the risk factors for the disease', such as poverty, malnutrition, infection with HIV and time spent in prison. UNODC also report that treatment of the disease is 'particularly complex' for people who use drugs since they may be living with 'multiple, co-existing infectious diseases (such as HIV and hepatitis C)' as well as 'psychiatric and medical co-morbidities (such as depression and anxiety) in addition to drug dependency.' As is often the case, such a situation is compounded by the fact that it is harder for people who use drugs to 'surmount' barriers to prevention and treatment than others in the general population (1, p. 12; 2, p. 9).

Prison is a high-risk environment for the spread of infectious diseases

Picking up on the theme of drugs and prison, it is also highlighted how prison is a high-risk environment for the spread of infectious diseases. Providing an essential but alarming sense of perspective, in terms of context we are informed that 'On any given day, approximately 10 million people are held in prison (including pretrial detention) throughout the world', with the number of people who pass through each year 'considerably' higher (1, p. 12; 2, pp. 9-10). With this in mind, the Report stresses that drug use, including heroin and injecting drug use, is 'commonplace in many prisons'. Indeed, one in three inmates has used an illicit substance at some time while incarcerated, with 16% reporting cannabis use in past month. Within prisons cannabis use is most common, followed by heroin with approximately 10% of prisoners reporting using the drug at some point while incarcerated. In terms of people who inject drugs, prison is a 'high risk environment for the spread of infectious diseases' with unsafe injecting practices contributing to the spread of HIV among this group and 'ultimately the wider community'.

Box 3 Access to pain medication

At various points across this year's Report, the UNODC highlights the increasingly pressing issue of the use of, and access to, controlled medicines, particularly opioids. This topic has quite appropriately become more significant in discussions in UN fora and, among other places, is given prominence within the 2016 Outcome Document. Such discussion takes place within the context of data showing, as discussed above, increasing illicit use of prescription opioids, especially in the United States but also Australia (2, pp. 31-35) and the illicit use of tramadol in Africa and Asia (2, pp. 38-39).[16]

For example, according to the Report, how evidence shows that 'making pharmaceutical opioids available to the population who need them most often does not lead to their misuse and addiction'. However, it continues, 'Despite the fact that pharmaceutical opioids for pain management and treatment of opioid use disorders are included in the list of essential medicines by WHO, there remain significant gaps and barriers in the access to and availability of pain medication in most parts of the world'. Moreover, the UNODC points out, there are disparities in the availability of and access to 'pain medication for improving the quality of life of people suffering' from a range of conditions (2, p. 29).

Referring to what is sometimes called 'opiophobia',[17] it is also observed how 'Fear of addiction to pharmaceutical opioids contributes to the complex dynamics influencing access to availability of controlled medicines'. While this is the case, we are told that 'a structured review of the literature found that 'only ' 3 per cent of chronic non-cancer pain patients regularly taking opioids developed opioid use disorders' (2, pp. 10, 31).

Mentioning work conducted by the International Narcotics Control Board (INCB or Board), the Report also highlights the Board's conclusions concerning the causes of limited access noting that, in addition to a misplaced fear of 'addiction', other 'impediments' include a lack of training or awareness among medical professionals, limited resources as well as 'Many other interlinked factors, such as fear of diversion, fear of prosecution, onerous regulatory frameworks or sanctions and control measures, and cultural attitudes' (2, p. 30). Although these are all valid concerns worthy of attention, the Report, like the INCB, gives disappointingly little attention to the role that the international drug control system itself plays in hindering access to controlled medicines.18 This is an area of concern that, as with the barriers to access acknowledged within the Report, will take on increasing significance as states move to not only operationalise commitments agreed within the UNGASS Outcome Document and work towards achieving the SDGs, but also seek to develop new indicators to accompany new soft law documents. This includes whatever comes out of the HLS of the 62nd session of the CND in March 2019.

It is also shown how people who use drugs while in prison also face a greater risk of contracting tuberculosis (1, p. 13). Once again, the analysis here would have benefited from a discussion, or at least an acknowledgement, of health-oriented interventions designed to reduce risks and harms – in this case, the operation of harm reduction programmes within prison settings.

Higher burden of disease from problematic drug use among women

Continuing a welcome focus on gender disparities, the Report highlights the higher rate of increase in the burden of disease from 'drug use disorders' among women than among men. In this regard, we are told that 'At least twice as many men than women suffer drug use disorders'. However, as the authors stress, 'once women have initiated substance use, in particular, use of cannabis, opioids and cocaine, they tend to increase their rate of consumption more rapidly than men'. As is explained, the result is that women may progress quicker to problematic use or dependence, a situation that is compounded by more limited access to treatment (1, p. 13). It is also shown how, in the past decade, the negative health impact of drug use among women has increased more rapidly among women than men, with 'The rate of increase in the number of DALYs attributed to drug use disorders in 2015, particularly opioid and cocaine use disorders… greater among women (25% and 40%, respectively) than among men (17% and 26% respectively) (1, p. 13; 2, p. 10). Mindful

of the situation within the country, data shows that women are adversely affected by heroin and prescription opioid use in the United States (2, p. 34).

Increasing market complexity

Under the heading 'drug market diversification', this year's Report goes to some length to explicitly emphasize a key, and perhaps more implicit theme of recent reports: increasing market complexity and fluidity. As is noted, the 'spectrum' of substances available on the drug market have 'widened considerably', with the 'persistence of traditional drugs and the emergence of NPS every year'. Furthermore, as alluded to above in relation to cocaine use in the United States, 'A characteristic of drug use patterns for many years, polydrug use is not a new phenomenon; however, it now poses an even greater risk because of the sheer number of substances on the market and the potential combinations that can be used' (1, p. 13).

Moreover, emphasizing the dynamism of the market, one of the key themes highlighted in the 2017 *World Drug Report* is that, in terms of trafficking, drug flows are in a 'constant state of flux'. According to the UNODC, changes brought about by globalisation and the spread of new communication technologies, including the darknet (see Box 4), means that 'drug flows are characterized more than ever by rapid changes in trafficking routes, modi operandi and concealment methods' (p. 18) (see Box 5).

Illustrating the fluidity of the global situation, the UNODC also highlights how the well-established opioid market remains in a 'constant state of change'. Indeed, as can be seen in the United States, the diversification of the market involves a combination of internationally controlled substances, especially heroin, prescription medicines (either diverted or produced as counterfeit medicines which contain fentanyl and fentanyl analogues), as well as non-opioid substances such as derivatives of benzodiazepine and methylphenidate (1, p.13; 2, p. 10; 4, p. 10). Beyond North America, we are informed that in many sub-regions an increasingly complex relationship between the use of heroin and synthetic opioids is being seen. More specifically, the illicit manufacture of opioids and the 'availability of numerous "research opioids"', which were first synthesized in the 1970s and have structures distinct from those used in medical practice 'are posing serious public health concerns'. In particular, the authors note, the use of a combination of different opioids and other psychoactive substances is causing many opioid-related deaths (1, pp. 13-14).

While this is the case, market complexity is heightened by the evolution, diversification and increasing numbers of NPS. As the Report stresses, 'the NPS market continues to be very dynamic and is characterized by the emergence of large numbers of new substances belonging to diverse chemical groups'. More precisely, between 2009 and 2016, 106 countries and territories reported to the UNODC the emergence of 739 different NPS (1, p. 14). Indeed, we are informed that NPS are proliferating at an unprecedented rate and pose a significant risk to public health and a challenge to drug policy' (4, p. 27). The admittedly somewhat limited evidence reveals that different NPS emerge quickly and then disappear, although some continue to be used regularly as the drug of choice for small groups. Several countries report that NPS are being sold under the name of controlled drugs (e.g. LSD, 'Ecstasy') and are often used for similar reasons to those for what might be called traditional drugs. Yet, as the Report notes, 'their easy availability and low prices have made certain NPS highly attractive to some groups of drug users'. Indeed, rather than merely complementing more traditional markets, a 'market for some NPS in their own right now appears to have been established' (1, pp. 14-15; 4, pp. 10, 34, 35).

This view is bolstered by the fact that a core group of over 80 NPS were reported during period 2009-2015 and 'appear to have become established on the global market'. In terms of increasingly dynamic markets it is interesting to note that while a number of NPS have been placed under international control, about 60 'seem to have disappeared from the market since 2013'. Although not mentioned in the Report, this suggests that factors other than policy interventions may have considerable influence on the NPS market. However, it is also important to note the UNODC's admission that 'problems in identifying, these substances 'in the laboratory may be a factor…in the low level of reporting of these lesser known, NPS substances' (1, p. 15). Indeed, at a more general level, it is acknowledged that there is a need for more data on this drug type (4, p. 27).

Meanwhile, alongside such developments, research reveals that the ecstasy market is becoming 'increasingly multifaceted'. Although smaller than the

Box 4 Drug trafficking over the darknet

Continuing a welcome trend begun in 2014, this year's Report devotes considerable attention to the development of darknet crypto-drug markets, a technologically-driven transformation to existing market structures and a phenomenon that is seen to be 'increasing at a fast pace'. As the authors state, although the darknet accounts for only a small percentage of drug sales, the market has been growing by around 50% per year in recent years (2, p. 10; 5, p.9). Consequently, it is noted, that the 'rapid growth' of darknet drug markets 'may represent a significant threat' (2, p. 43,). Citing data from the Global Drug Survey (GDS),19 the Report goes on to note that 'Among survey participants who had used drugs in the past year, the proportion who obtained drugs over the darknet in the previous 12 months rose by 70 per cent during the period 2014-17.' Data from the GDS also indicate that ecstasy, cannabis and NPS were the drugs most commonly obtained over the darknet (2, p. 44).

The publication also discusses the situation in key states, such as the United States and UK, as well as various 'market disruptions' and vendor 'scams'. Interestingly, and demonstrating the v ariation of behaviour across regions, the Report shows that vendors in 'countries in Asia seemed to be more involved in the wholesale business, while retail sales were dominated by vendors in North America and Europe' (2, p. 44).

Also of note are the UNODC's ideas on how the growth of darknet markets may impact drug trafficking patterns. The authors note that, while still 'relatively small in scale and concentrated in developed countries, it is fast growing and has the potential to significantly reduce the need for large, staff intensive distribution networks that have been operating for decades in cities across the globe'. 'If this were to happen', they continue, 'the results would be difficult to predict'. For instance, it is argued, 'the current cultivation areas of plant-based drugs would be unlikely to change'. But 'at the distribution level, street dealers could end up in violent completion for their dwindling client base, or they may look for alternative ways of making money'. It is concluded, therefore, that while 'violence in the core drug business (the supplier customer relationship) might be reduced with the spread of anonymous drug purchases, it is less clear whether this will ultimately result in more or less crime' (5, pp. 17-18).

This sort of analysis is certainly welcome. That said, it fails to recognise the possible health benefits of user interaction with darknet markets via what Angus Bancroft and Peter Scott Reid have called 'indigenous harm reduction'.20 Further, there remains a need to explore the impacts of different types of law enforcement intervention on darknet markets, especially how they may stimulate technological innovation and through forcing fragmentation might make the darknet environment even harder to police.[21] Mindful of the various references given to the 'internet' in the UNGASS Outcome Document, these issues will certainly require more attention in the next few years, including in relation to how member states, and ultimately the UN, measure the success of what might be called digital counter-narcotics policies and operations.

market for methamphetamine, the Report shows how the ecstasy market has 'grown in complexity' with an increase in the variety of ecstasy products available (1, p. 15). According to the UNODC, the three main types of the drug are: (a) tablets containing little or no MDMA (3,4 methylenedioxymethamphetamine), (b) tablets with 'extremely' high content of MDMA, (c) 'Ecstasy' sold in powder or crystal form, under different street names. In a detailed discussion in booklet 4, we learn that high MDMA content tablets are of 'particular concern in Europe', where law enforcement entities have also discovered industrial-scale MDMA manufacturing facilities (4, p. 9).

Finally, in terms of ongoing market diversification and in light of the discussion above in relation to health consequences, it is also worth noting the Report's emphasis on the crossover between plant-based and synthetic cannabinoids. Of particular interest here is the finding that, within the context of a growing recognition of the harm associated with intoxication resulting from the use of synthetic cannabinoids, users of cannabis have reported that they prefer 'natural cannabis' since they 'perceive the use of synthetic cannabinoids to be associated with more overall negative affects' (1, p. 15; 3, p. 10).[22]

A still flourishing global drug market

In addition to increasing in complexity diversity and fluidity, the illicit global drug market appears to be flourishing. While there is some variation across markets for different drug types, cultivation, production and trafficking remains in rude health. The authors note that 'Overall, drug trafficking seems to have increased slightly in 2015 and some drug markets, particularly the cocaine and synthetics drugs markets, appear to be thriving' (1, p. 15).

To be sure, the Report shows an expansion of the cocaine market with data on 'drug production, trafficking and use' pointing to an overall expansion worldwide (1, p. 15; 2, p. 10; 3, p. 9). In terms of cultivation, we are told that 'Following a long-term decline, coca bush cultivation increased by 30 percent during the period 2013-15' (1, p. 15). Reaching 156,500 ha in 2015, the global area under the coca bush was 'more or less' the same as 2010 and at a level that the UNODC is keen to point out is still l29% less than peak in 2000. (2, p. 40; 3, p. 25). The expansion of the market is seen mainly as a result of increased cultivation in Colombia, which offset decreases in Bolivia and Peru (1, p. 15; 2, p. 40)[23] As the Report demonstrates, and other research confirms,[24] the drivers for such an increase in Colombia are complex. As such, it is noted how the situation in the country 'may have been the consequence of different dynamics: a decrease in the perception among farmers of the risk of being affected by eradication (aerial spraying fell by 33 per cent from the previous year to 37,200 ha in 2015 and in October 2015 aerial eradication was completely abandoned by the Colombian Government); local phenomena affecting the licit economy (for example, drought in Antioqui and southern Bolivar in 2015); and higher coca leaf price' (3, p. 25). While not mentioned explicitly, such analysis must also be accompanied by an acknowledgment that the end of aerial eradication and a reduction in ground-based forced eradication were not accompanied by development assistance and government presence in coca growing regions. Moreover, it is important not to ignore the role played by a decrease in the price of gold and a resultant return by some to coca cultivation from illegal mining in some areas.[25] The Report also suggests, not unreasonably, that the peace process has played a role with expectations among farmers that they would be in a stronger position to benefit from alternative development if they grew coca.

Mindful of the growth in cultivation, it is no great surprise to learn that cocaine manufacture is also on the increase, with the figure of 1,125 tons in 2015 representing an overall increase of 25% over 2013 and a return to 2008 levels (1, p. 15; 2, p. 40).

The trafficking of cocaine is, due to growing production in Colombia, also shown to be increasing in South America. The Report also notes that 'trafficking via Central America 'appears to have remained relatively stable', but is increasing in the Caribbean (3, p. 32). As is usual regarding the region, data on cocaine trafficking via Africa remain limited, although West Africa is still recognised as a transit area. Interestingly, and again reflecting the dynamism of different drug markets, the UNODC also reports signs of increased trafficking to Asia, an apparent result of increasing use among higher socio-economic groups in the region (3, p. 33) (see Box 5). In terms of seizure data, worldwide the quantities of cocaine seized are reported to have increased by 30% to reach 864 tons (of varying purities) in 2015, 'the highest ever reported'. At a regional level, seizures increased in North America by 40% to reach 141 tons and Europe they increased by 35 per cent to reach 84 tons (1, p. 16). The record seizures in 2015 reflected primarily flows from South to North America and from South America to Western and Central Europe (3, p. 27). Indeed, in its analysis of the traffic, the Report shows that after cannabis, cocaine accounts for the largest quantities of drugs seized (2, p. 40-42).

Regarding use, cocaine appears to be increasing in the two largest markets – North America and Europe. We are told that 'The prevalence of use of cocaine among the general population and testing on the workforce suggest increasing use in the US'. Meanwhile in Europe, there are early signs of growing consumption. This conclusion is based on 'wastewater analysis in selected cities' (see Box 2), with an increase of 30% or more during the period 2011-2016 (1, p. 16; 3, pp. 29-30). It is also noted how the cocaine market in Oceania is 'potentially' growing once more, a finding again drawing on wastewater analysis (3, p. 35)

Alongside an end to the downward trend in coca bush cultivation is the continuingly high levels of opium poppy cultivation (2, p. 39). More specifically in comparable terms, the Report shows that, at 305,000 ha, the total global area under opium poppy cultivation was 'roughly twice the size of the total area under coca bush cultivation'. As the data reveals, in 2016 the global area under opium

Box 5 Global seizures 'relatively' stable, but constant flux in drug flows

It is interesting to note that where in previous years the Report tended to lead with information concerning market stability (if not with data then at least with narratives), noteworthy prominence is given this year to the market's dynamic character. As such, in booklet 2, we are told that global seizures remain 'relatively' stable with the following details adding texture to this statement; the largest quantities of drugs seized were of cannabis, followed by coca/cocaine related substances and opioids. The sharpest increase in quantities seized over the period 2010-2015 were reported for synthetic NPS, where they increased fourfold, and of ATS, which doubled (2, p. 10). However, within the broader context of structural changes at a global level and improvements in communication technology (see Box 4), booklet 1 gives prominence 1 to several key developments concerning significant shifts in patterns of drug trafficking.

Growing importance of the Caucus branch of the Balkan route – Information within the Report shows that while the so-called Balkan route 'appears to remain the world's principle trafficking route' an 'alternate branch of the route, through the Caucasus countries, appears to have been gaining in importance in recent years'. This route circumvents Turkey, where reflecting the reactivity of trafficking organisations, increasing flows of refugees heading towards countries in the European Union may have pushed traffickers to seek other options (1, p. 18; 3, pp. 9,19).

Geographical shift in the methamphetamine market – A major shift appears to have taken place in last five years. As noted below, East and South-East Asia has become the leading sub-region for seizures, with methamphetamine described by the UNODC as a 'dynamic global market' (1, p. 19; 4, pp. 9,13,15).

Amphetamine trafficking expanding in Asia and Central America – In contrast to methamphetamine, amphetamine has been confined to fewer sub-regions, such as the Near and Middle East and Western and Central Europe. Nonetheless, the Report demonstrates how quantities of the drug seized in 2015 'point to a possible recent expansion of the amphetamine market in South-Eastern Europe' – although there is an admission that this may be simply related to the large amphetamine market in the neighbouring Near and Middle East. It is also noteworthy that the quantity of amphetamine seized sharply increased in Central America and South West Asia (4, p. 19).

Cocaine trafficking expanding eastwards – 'Although comparatively small overall', the UNODC point out that there are 'indications that cocaine markets in several countries in Asia continue to rise'. Possible proof of this trend includes large seizures in Sri Lanka (2016) and Djibouti (2017), which were 'probably' intercepted en route to Asia. Significantly, the Djibouti seizure was the largest single cocaine seizure in East Africa for 13 years (1, p. 19). Moreover, 'overall', in 2015 quantities of cocaine intercepted in Asia were up by more than 40% compared with previous year, with increases reported over all sub-regions (1, p. 19; 3, p. 9).

poppy cultivation increased in size by 8% (3, p. 13). Moreover, representing a 60% increase over period 2010-2016, this figure is mainly due to cultivation in Afghanistan with the country seeing its second largest total area recorded in recent years. With 201,000 ha under opium poppy cultivation, we are told that Afghanistan accounted for 'roughly two-thirds of estimated global area under illicit opium poppy cultivation in 2016' (3, p. 13). That said, as the UNODC notes, the fact that surveys were not conducted in Myanmar or in the Lao People's Democratic Republic in 2016 means that 'global estimates must be interpreted with caution' (2, p. 39; 3, p. 13).[26] The report also shows that accompanying the enlarged scale of cultivation in 2016 was an increase in opium production (2, pp. 10,40; 3, p. 9), which was up by one third on 2015. This, however, was 'primarily the result of an improvement in opium poppy yields in Afghanistan compared with the previous year'. As with some data on coca, the UNODC is keen to point out that at 6,380 tons, 'the global opium production was still lower than at its peak in 2014 and was close to the average reported in the past five years' (1, p. 16).

In terms of trafficking, the Report shows that seizures of both opium and heroin have remained quite stable at the global level in recent years (see Box 5), 'suggesting a smooth supply' of heroin 'irrespective of annual changes in opium production'. At a regional level, the quantities of heroin seized in North America 'increased sharply in 2015' working in 'parallel with reports of increasing heroin use and heroin-related deaths in the subregion' (1, p. 16; 3, pp. 14-16). This contrasts with Europe, where seizures of heroin and morphine decreased in 2015. Significantly, it is noted how seizures of pharmaceutical opioids have reached the second highest level 'ever reported', a phenomenon linked to seizures of codeine and comparatively smaller seizures of tramadol. With seizures of pharmaceutical opioids taking place mainly in South Asia, followed by countries in the Middle and Near East, it is suggested that there are 'significant levels of diversion and misuse of such substances in those regions' (3, p. 16).

In a similar fashion to plant-based drugs, including cannabis (see section below), the Report reveals an expansion of the market for synthetic drugs. As is now well understood, an analysis of synthetic production is problematic relative to plant-based drugs since there are no geographical constraints with the process not requiring the 'extraction of active constituents from plants that have to be cultivated in certain conditions for them to grow'. An additional layer of complexity is added because, as the UNODC points out, 'information on synthetic drug manufacture is limited, which prevents the estimation of the volume of such drugs being manufactured worldwide'. While this is the case, we are informed that 'data on seizures and use suggest that the supply of synthetics drugs is expanding' (1, p. 16; 4, p. 9).

In this regard, the expansion of the methamphetamine market in East and South East Asia is noteworthy. While admittedly 'scarce', information suggests increases in the use and treatment within the sub-region. As is often the case in areas that lack quantitative data, assessments here are forced to draw on 'expert' perceptions. These revealed that in 2015 several countries in the sub-region reported a perceived increase in the use of both crystalline methamphetamine and methamphetamine tablets. The experts also considered methamphetamine to be the most commonly used drug in some countries and territories within East and South East Asia. This appears to be part of a geographic shift in the methamphetamine market with the quantity of the drug seized in East and South East Asia exceeding that in North America for the first time. While, as the UNODC openly admits, this may be the result of an increase in law enforcement activity, the reasonable conclusion is drawn that 'trafficking routes appear to be increasingly connecting previously unconnected markets in various subregions' (4, p. 9). Also of note is reporting on the increase of both quantities of methamphetamine seized and prevalence of use in Oceania (1, p. 7). Furthermore, adding further complexity to the ATS market, the Report shows how amphetamine trafficking is expanding in both Asia and Central America with the ecstasy market becoming increasingly 'multifaceted' (4, p. 9). More generally, ecstasy products are increasingly diversified and have undergone 'major changes', with the market growing in 'complexity' (4, pp. 21-22).

In addition to the detailed discussion of NSP in relation to health consequences in booklet 2, the UNODC's extended discussion of synthetic drugs in booklet 4 includes an examination of *Gamma*-hydroxybutyrate (GHB) (4, pp. 49-50) and ketamine. On the latter, it is noted that supply is increasing in South East Asia with the main source now being clandestine laboratories within the region, notably China, rather than from diversion from licit channels as had been the case in previous years. The Report shows that most production in China is 'believed' to be consumed locally, although there is 'trafficking to Macao, China; Hong Kong, China and other countries' (4, p. 52).

Cannabis market developments

Based on member state reports, there are 'strong indications' that cannabis remains the most widely illicitly produced drug worldwide (2, p. 39). More specifically, the Report shows how, over the period 2010-2015, cultivation of the drug was reported to UNODC in all regions, equating to 92% of total global population (2, p. 39). Indeed, the cannabis market remains what the UNODC calls a 'global phenomenon'. In this regard it is noted that cannabis plant cultivation, 'either through direct indicators (cultivation or eradication of cannabis plants) or indirect indicators (seizures of plants, domestic cannabis production being indicated as the source of seizures etc)' was reported in the territory of 135 countries. While this is the case, it is important to highlight the UNODC statement that 'Given the absence of systematic measurements, however, the extent and trends in cannabis cultivation and production are

difficult to assess'. Further, and in another acknowledgement that data often reflects law enforcement activity, it is stressed how 'Most indirect indicators come from law enforcement authorities and, to a certain extent, reflect their priorities and resources' (1, p. 3, 37). Putting the scale of cultivation into context, we are also told that the distribution of cannabis cultivation across states is almost triple the 49 mainly Asian countries where opium cultivation 'might' take place, and more than 16 times the number of countries (all in the Americas) where coca cultivation 'might' take place.

At a more detailed level, Morocco was most reported by member states as the leading source of resin, with Afghanistan following behind. Trafficking in cannabis herb was seen to be largely intraregional. Again, displaying a welcome nuance to its analysis, the Report acknowledges the problems associated with using eradication as an indicator of production (3, p. 38). However, it does note that, based on quantities intercepted, trafficking in cannabis seemed to have stabilised at a high level in the past decade. Regionally, the Americas – followed by Africa – continue to report most herb seizures, while the largest quantities of resin intercepted continued to be reported in West and Central Europe, the Near and Middle East, South West Asia and North Africa (3, pp. 39-40).

In terms of cannabis use, we are informed that the situation has remained 'quite' stable at the global level in recent years, despite indications that it continues to increase, or depending on where the information is presented in the Report, is 'perceived' to have increased, in Africa and Asia (3, p. 41). Data show that use also continues to increase in North America and 'appears' most pronounced in the United States. Within Oceania, the Report shows a slight increase in Australia, while in Europe there appears to be stability. That said, as is often the way, the picture of stability is built on fluctuating trends within different states. In this case, high prevalence states like Germany, Spain and the UK remained stable while Denmark and France 'experienced an increase in cannabis use' (3, pp. 42-44).

Perhaps unsurprisingly bearing in mind the significance of the policy shifts and the resulting new territory concerning market dynamics, considerable attention is given – both in booklets 1 and 3 – to recreational cannabis markets in the United States, and to a lesser extent Uruguay.

Consequently, in a slight deviation from the usual narrow and isolated discussion of markets, the Report provides a useful overview of the policy landscape in the United States (including in a detailed annex to booklet 3),[27] highlighting that 'Most jurisdictions in the United States now permit access to medical cannabis while nine allow the cultivation of cannabis for recreational use' (1, p. 20; 3, p. 10). It is interesting to note how the UNODC chooses to emphasize the importance of the fact that 'in those jurisdictions, with the exception of the District of Columbia, licenses are now granted to for-profit companies to produce and sell a range of products for medical and non-medical use of cannabis' (1, p. 20). In its exploration of the possible impacts of policy shifts in some US states, the Report notes that where recreational use is now permitted 'cannabis use has increased among the adult population and remains higher than the national average'. This being the case, the UNODC also points out that this trend preceded the change in legislation in those jurisdictions. The conclusion is therefore drawn that 'It is difficult to quantify the impact of the new cannabis legislation as it seems that a combination of elements was already in the process of changing the cannabis use market in those jurisdictions when the legalization measures were put in place' (1, p. 20). Indeed, discussion in booklet 3 and elsewhere observes that major increases started in 2008 'in parallel with measures allowing the medical use of cannabis (although the cannabis products dispensed have not gone through the rigors of pharmaceutical product development), decreasing risk perception of harm from cannabis use and an ongoing debate around the legalization of the medical and recreation use of cannabis' (1, p. 21). Accordingly, we are told, 'Medical cannabis use regulations may have influenced the risk of non-medical cannabis use' (3, p. 49).

Also of note in the Report's discussion of cannabis market developments in the United States is the pertinent observation that increases in cannabis use across the country is 'disproportionately' associated with adults with low socio-economic status who are regular and heavy users (1, p. 21). Of further interest, within a section on use among high school students, the UNODC notes that current research on increasing use among this group in states that have legalised cannabis 'remains inconclusive' (3, p. 53). Further, the report goes on to say that 'It is not conclusive whether legalizing cannabis for recreational use among adults would influence its use among adolescents and further quality data and analysis representative at state level of long-term trends are required to address the question' (3, p. 53). It is also noted that 'There is

Box 6 World Drug Report 2017: Conclusions and policy implications flows

The Report includes a comprehensive set of 'Conclusions' and, rather than recommendations as was the case in 2016, 'Policy implications'.

- As opioids continue to cause the highest negative health impact related to drug use, prevent and treat opioid use remain a priority
- Scale up prevention and treatment of 'drug use disorders' to meet target 3.5 of the SDGs (Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol), and leave no one behind (In line with SDG 10 and the overall philosophy of the SDA)
- Improve access to effective treatment for hepatitis C to reduce the heavy burden of disease among people who use drugs
- Address the specific challenges and needs of people who use drugs and who suffer from 'drug use disorders' as an integral part to ending tuberculosis
- Improve coverage of evidence-based prevention and treatment services to stop the rising number of new HIV cases among people who inject drugs and to meet target 3 of the SDGs ('Good health and well-being', with target 3.3 being 'Ending the AIDS epidemic by 2030')
- Promote alternatives to incarceration for possession, purchase or cultivation for personal consumption and appropriate cases of a minor nature: an effective human rights-based criminal justice response and an effective policy for preventing the spread of infectious diseases
- Continuous monitoring of the impact of new cannabis policies to provide an important knowledge base for the international community
- Develop a scientific approach for the medical use of cannabis
- Improve access to and availability of pharmaceutical opioids for medical use by addressing major impediments and putting in place adequate legal and regulatory frameworks
- Improve regional and international cooperation to fight against drug trafficking
- Enhance forensic capacity to address the complexity of the synthetic drugs market
- Better understand the harm to health caused by NPS via a global information system and pharmacology and toxicology
- Implement long-term and large scale sustainable development interventions twinned with drug control strategies to reverse recent increases in opium poppy and coca bush cultivation
- Monitor the possible increase in heroin trafficking through the Caucasus as a new branch of the Balkan route gaining importance
- Address illicit crop cultivation and drug trafficking to reduce the reach of some terrorist groups
- Develop a new generation of law enforcement interventions for technological change, including trafficking over the darknet
- Fight drug trafficking as a fundamental factor in the achievement of SDG 16 (Pease, justice and strong institutions); preventing organised crime groups diversifying their portfolios through strategies that go beyond the reduction and elimination of single illicit markets
- Go after drug money as one of the most effective approaches to combatting drug trafficking (With links to SDG 16.4 – to significantly reduce illicit financial flows)
- Role of the United Nations Convention against Corruption in achieving SDG target 16.5 (substantially reduce corruption and bribery in all their forms) and help to address the drug problem
- Strengthen the knowledge base of the drug problem by improving data, analysis and dissemination at the national, regional and international levels, including on the links between drugs and other issues.

no significant difference observed in the extent of cannabis use disorders among adults in the states that have measures for the medical or recreational use of cannabis and those that do not have such measures in place'. 'However', the Report continues, 'the policy changes allowing recreational use of cannabis may potentially increase cannabis use disorders among adults in the longer term' (3, p. 54). The key to the quality of discussion here, however, is the admission of uncertainty and the call for quality market monitoring and data collection. As the UNODC points out, 'The evaluation of the impact of measures allowing the commercial production, sale and recreational use of cannabis on health, criminal justice and other outcomes requires regular monitoring over time, and it may take years to determine their long-term effects on cannabis use and associated harm among adults, as well as their influence on cannabis use among adolescents'. In another welcome acknowledgment of the intricacy of the situation, the Report also notes that 'since the effects of changes in one state spill over and affect other states, there remain limitations to the evaluation of the effects of these policy changes due to extraneous factors' (3, pp. 47-48).

As with the situation in its northern neighbour, the UNODC analysis of cannabis regulation in Uruguay contains a useful description of the policy landscape and legal structures (for example, 3, pp. 54-56 and in the annex to booklet 3) and comes to similar conclusions concerning the implications of policy shifts. For example, it is noted that since 'the provisions regulating the recreational use of cannabis are being implemented gradually it is… too early to detect any effects from the regulations implemented to date' (3, p. 54) and that 'the impact of the provisions regulating the recreational use of cannabis in Uruguay will be evident only after they have been fully implemented, and will require close monitoring over time' (1, p. 21; 3, p. 10,56).

The drug problem and organised crime, illicit financial flows, corruption and terrorism

Booklet 5 is in effect what used to be the thematic chapter of the *World Drug Report*. A sizable publication in its own right, the impressively researched and well-written section of this year's offering draws on research by the UNODC itself as well as a wide range of outside sources. In so doing, it successfully fulfils its stated aim of providing an up-to-date assessment of the complex relationships between the drug problem and organised crime (OC) (see Box 7), illicit financial flows, corruption and terrorism/insurgency (5, p. 13). Reinforcing a reoccurring theme throughout this section, and to certain degree the entirety of the Report, the authors note that the information presented '… highlights where our knowledge is lacking and provides ideas for areas of further research' (5, p. 13).

In this regard it is surprising that the section does not engage with emerging research into links between OC, drugs and other criminal ventures.[28] Questions might also be asked concerning the choice of topic for booklet 5. While the issues discussed are given some prominence within the Outcome Document, so too were the issues of human rights and access to controlled medicines. Nonetheless, and providing a wide-ranging analysis of the intersecting domains covered, the discussion begins with an overview of the transformation in drug-related OC from the dismantling of the Colombian 'cartels' in the 1990s. It then follows developments through to the present day, including among other things the darknet (see Box 4), specific discussion of the relationship between drugs and OC in Germany and the emergence of 'network' organisations.

Discussion and analysis of the consequences of drug money in the international drug control system is equally as detailed, with the authors stressing that 'Billions of dollars flow through the hands of drug trafficking organizations each year' and pointing to the reality that 'what they do with that money can have a huge impact on local and wider economies' (5, p. 21). Highlighting, as elsewhere in the Report, obvious synergies to the SDA, considerable attention (5, pp. 22-30) is given to the relationship between efforts to counter illicit financial flows and SDG 16.4: 'By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime'. Analysis comprises a range of issues including the laundering of drug profits, the economic impact of drug money and 'all sorts of complex socioeconomic effects' related to such activity (5, p. 28).

Moving on to discuss the 'drug problem' and corruption (5, pp. 30-34), the UNODC points out that there is a 'mutually reinforcing relationship' between the two. More specifically, we are told, 'Corruption facilitates the production and trafficking of illegal drugs and this, in turn benefits corruption'. Analysis stresses the importance of

Box 7 Problems with the definitions of OC

Early on in booklet 5, the UNODC pose the question, what is an organised crime group? This is answered with a direct quote from the 2000 United Nations Convention against Transnational Organized Crime (UNTOC): 'A structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences…in order to obtain, directly or indirectly, a financial or other material benefit' (5, p. 15).

This basic restatement of the language within the UNTOC ignores the problems surrounding the precise nature of OC inherent within it and criticism that along with other articles, the Convention leaves too much discretion to the Parties. [29] Furthermore, the instrument's lack of definitional clarity has resulted in patchy legislative activity and implementation, and a consequential 'middling' or mediocre impact. It has been argued that some states are reluctant to engage with the Convention because 'there is little in the UNTOC concept to fix on, to legislate and train around – because the concept is largely content free'. This is a problem that, as with other hard law instruments, may derive from the reliance on the 'level of knowledge' at the time of drafting.[30] It can be argued, therefore, that the lack of recognition of these dynamics within the Report's assessment of the drugs-crime nexus results in an incomplete picture, whereby structural limitations are overlooked and all shortcomings are attributed to operational failures and a lack of data.

assessing different levels of corruption (high or low) and highlights its occurrence at various points along the drug supply chain; production, trafficking and consumption (5, pp. 31-32). An important omission here relates to the fact that it is generally only the larger and wealthier farmers who have the capability to engage in bribery, for example in ensuring that their poppy fields avoid eradication, particularly when governor led.[31] On a related point it is worth noting the Report's conclusion that while there may be a connection in terms of levels of bribery, there is no direct relationship between the level of development of a state and the degree of corruption (5, pp. 31,33). That said, levels of income inequality are found to play a role since 'in unequal societies' members of 'marginalized groups' may view 'corruption and involvement in criminal organizations as a viable way to improve their lives' (5, p. 33). Nevertheless, the Report notes, 'there have been few attempts to get to grips with the relationship between drugs and corruption' (5, p. 30).[32] Indeed, and implicitly touching on problems around measuring corruption and the effectiveness of interventions to reduce it, the UNODC stresses the need to close information gaps, pointing out that 'Much of the available information provides only a glimpse of the mechanism of corruption used by traffickers.' Further, it goes on to state, in 'addition to systematic reviews of drug and corruption prevention programmes to establish the most effective strategies, there is also a need for more detailed factual knowledge' (5, p. 34).

Replicating the detailed analysis applied to the other topics within the 'chapter', the Report's discussion of drugs, terrorism and insurgency comprises a comprehensive overview of the extent to which groups, including the Taliban, the Islamic State in Iraq and the Levant (ISIL) and the Revolutionary Armed Forces of Colombia (FARC), have benefited from drug money, along with a broader examination of the links between terrorist, insurgent and other non-state armed groups, violence and the illicit drug trade. As such, the discussion touches on a range of other groups including armed groups in the Syrian Arab Republic and terrorist organisations in West Africa (e.g. Al-Qaida, Al-Shabaab and Boko Haram). We are informed that 'From Latin America to the Middle East, funding for armed violence has in certain instances long been linked to the illicit drug trade' (5, p. 34).

Demonstrating that problems with data gaps are not the unique province of drug market analysis, it is noted how 'Data on the funding of terrorist, insurgent and non-State armed groups is incomplete, with estimates varying widely' – the caveat being that 'all aggregations must be treated with caution'. While this is the case, the UNODC contends that such figures do have some utility since they can give 'some likely orders of magnitude' (5, p. 37). Significantly, the Report notes that while terror attacks occur in intensive areas of drug manufacture and trafficking 'a correlation does not necessarily point to a causal

link' (5, p. 38). Regarding the case of Afghanistan and the relationship between opium poppy cultivation and insurgency (5, pp. 38-40), the discussion reveals that it has only been since 2010 that 'high and increasing levels of opium cultivation have shown a closer correlation with rising terrorist attacks'. This is put down to a range of complex reasons, key among them is the increasing difficulty for terrorist groups in the country to access 'traditional' sources of funding. Attention is also given to drug cultivation and terrorist, insurgent and non-state armed groups in Peru, Colombia and Myanmar (5, pp. 40-42). Examples in these countries, we are told, 'show the complex relationship between drug cultivation' and such groups (5, p. 40). To be sure, as the Report points out, 'While a causal relationship cannot be established, reductions in drug cultivation can go in parallel with lower levels of activity by such groups; and lower levels of insurgent activities can help to strengthen the application of the rule of law by the authorities and this contribute to a reduction in illicit drug cultivation' (5, p. 40).

In relation to terror tactics and drug money, it is stated that 'Evidence on the links between drugs, terrorism and insurgency is patchy, focuses on a small number of groups or builds on sources with an interest in emphasizing or diminishing those links', a point to which we will return. The Report also points out a key research dilemma in this field: most information is collected by intelligence agencies and is consequently not available for public scrutiny (5, p. 42). That said, one thing that does become clear from the available data is that engagement with illicit drug markets represent only one revenue stream for criminal and terrorist/insurgent groups, and that the prominence of drugs varies between groups. This is an important nuance often lost in reporting, media and otherwise, of linkages between violent non-state actors and drug markets.[33]

This is just one of the key findings to emerge from the Report's analysis. Following the UNODC's own ordering, and picking up on some of the points mentioned above, we offer a brief overview of them all (see 5, pp. 9-11).

Changing business models for drug trafficking and organised crime

- ***Organised crime groups branch out*** – Research shows that organised crime groups have widened their 'portfolio' of activities. New crime areas such as cybercrime and environmental crime have emerged and fewer groups are exclusively dedicated to drug trafficking, while more are also operating in other illicit sectors, including counterfeiting of goods, trafficking in human beings, smuggling of migrants and trafficking in weapons (1, p. 21; 5, p. 9).
- ***Drugs continue to be important to organised crime groups*** – In 2014, transnational organised crime groups around the globe 'were estimated to have generated between approximately one fifth and one third of their revenues from drug sales' (1, p. 21; 5, p. 9).
- ***Drug trafficking is no longer the preserve of large criminal groups*** – Groups with a strong hierarchical structure, such as those in Mexico and Japan, and to some extent those in the Russian Federation, continue to be involved in the illicit drug trade, with hierarchical top-down organisations still the most widespread type of organised criminal group in Europe. However, evidence now exists to show that 'looser, horizontal networks are becoming increasingly significant' (1, p. 21-22; 5, p. 9).
- ***Technology is playing a role in creating relatively low-risk drug markets*** – The so-called 'mobile communications revolution' has offered new opportunities to traffickers, since there is no longer a need for personal contact with clients and 'low-level "runners"' can collect cash and dealers can let the customer know where to collect drugs using messages sent over encrypted networks' (1, p. 22). Furthermore, the darknet has helped changed the way many people who use drugs engage with the illicit market (see Box 5) (1, p. 22; 5, p.9).

Drug crime proceeds damage economies in the long-term

- ***About 30 per cent of cocaine proceeds contribute to illicit financial flows*** – Research suggests that around 30% of proceeds of cocaine sales at the global level was laundered abroad in 2009, based on the calculations the UNODC developed. Interviews conducted in 2016 as part of a study with crime convicts in Italy came to a similar conclusion, suggesting that 'roughly' one third of the money spent by cocaine users was being laundered across borders' (1, p. 22; 5, p. 9).
- ***Drug money can make countries poorer*** – Although short-term inflow can boost investment and Gross Domestic Product, long-term

effects 'tend to be negative', especially when the drug-related proceeds comprise a sizable portion of the total economy of a community or a country. In this case drug money has the capacity to inflate property prices, distort export figures, create unfair competition, reinforce skewed income and wealth distributions and increase corruption. In the process, legitimate businesses without access to illicit funds may be 'squeezed out' of the market and new legitimate investments may not take place (1, pp. 22-23; 5, pp. 9-10).

Corruption facilitates illicit drug markets, which fuel corruption

- ***Corruption exists all along the drug supply chain*** – As discussed above, opportunities for corruption exist at each stage. For example, at the production level farmers may bribe eradication teams, producers may bribe judges and police officers, and manufacturers may exploit workers in chemical companies in order to source precursor chemicals. Further down the chain, traffickers may bribe custom officials and 'take advantage of weaknesses in transport firms'. And at the consumer level, users may source drugs through corrupt doctors and pharmacists' (1, p. 23; 5, p. 10).
- ***Corruption, the illicit trade and poverty reinforce each other*** – According to World Bank research, corruption entrenches poverty by discouraging foreign investment. In 'a narco-economy, this is doubly true' since foreign firms, seeing the corrupted justice system and pervasive money-laundering that characterise narco-economies are unlikely to make or increases investments. International Monetary Fund research also shows that corruption increases the level of income inequality and that 'higher levels of income inequality are known to encourage drug trafficking and corruption'. In fact, the drug industry may perpetuate and exacerbate income inequality, which may in turn cause the expansion of drug production and trafficking (1, p. 23; 5, p. 10).

The drug trade benefits some terrorist, insurgent and non-state armed groups

- ***UN-designated terrorist groups: The Taliban continues to benefit*** – With its involvement in the drug trade well documented, it can be seen how the Taliban has taxed entities involved in illicit opiate production, manufacture and trafficking in Afghanistan. More broadly, the UNODC has estimated that non-state armed groups raised about $150 million in 2016 from the Afghan illicit opiate trade in the form of taxes on cultivation of opium poppy and trafficking in opiates. It is noted, however, how 'The overall drug related income…maybe higher still'. The UN Security Council has estimated that the overall annual income of the Taliban is around $400m, with half likely to be derived from the illicit drug economy (1, p. 23; 5, p. 10).
- ***The Revolutionary Armed Forces of Colombia play a significant role in the drug trade*** – FARC involvement in the drug trade in Colombia is longstanding. Over the years, it provided security for crops, taxed precursors and use of landing strips, sold coca paste and become involved in interregional trade. Further, 'Several sources estimate the total annual drug income of FARC at close to $1 bn. FARC agreed in 2016 to halt its involvement in the drug business after the peace agreement signed with the Government' (1, p. 23, 5, p. 10).
- ***Evidence implicating other groups is thin*** - Media reports and some official evidence refer to ISIL and other armed groups in the Syrian Arabic Republic being involved in the production and consumption of 'captagon' tablets – typically amphetamine mixed with caffeine. While ISIL operates in an area likely to be a manufacturing hub, no 'conclusive evidence' has emerged so far because other groups operate in the same area. Elsewhere, Boko Haram reportedly helped drug traffickers to smuggle heroin and cocaine across West Africa. And to the North, there is some evidence that Al-Qaida in the Islamic Maghreb has been involved in cannabis and cocaine trafficking, or at least in protecting traffickers. However, 'overall income from the drug sector appears to have been rather modest' (1, p. 24; 5, p. 11).
- ***Income from drugs is key for some terrorist, insurgent and non-state armed groups*** – While this is the case, much depends on the location of a particular group. Indeed, some benefit from being where drug crops are grown, while others that 'aspire' to control large amounts of territory need huge financial resources and have relied on organised crime and the illicit drug trade to fund their ambitions' (1, p. 24; 5, p. 11).
- ***Drugs are just one revenue stream for most groups*** – As noted above, terrorist and other non-state armed groups are 'adept' at tapping

Box 8 Annual Report Questionnaires and the World Drug Report 2017

The international drug control conventions oblige states parties to provide data concerning the situation in their countries to the Secretariat of UNODC each year. In 2010, the CND endorsed a revised version of the forms on which this data is collected, the ARQ.[34] This is the chief source of the data on which the World Drug Reports are based,[35] and the 2017 Report is no exception. The ARQ is structured in the following way:

- **Part I:** Legislative and institutional framework
- **Part II:** Comprehensive approach to drug demand reduction and supply
- **Part III:** Extent and patterns of drug use
- **Part IV:** Extent and patterns of and trends in drug crop cultivation and drug manufacture and trafficking

The 2017 Report is based on information collected from governments and refers mainly to the drug situation in 2015. The UNODC sent out ARQs to 199 potential respondents, including 193-member states. It received 98 replies to the ARQ Part III, 'Extent and patterns and trends in drug use' (down from 101 the previous year), and 101 replies to ARQ Part IV, 'Extent and patterns of and trends in drug crop cultivation, manufacturing and trafficking' (down from 104 the previous year).[36]

In terms of geographical coverage, in Europe, 80% of countries responded; in Asia, 63% of countries responded; in the Americas, 57% of countries responded; in Africa, 24% of countries responded, and in Oceania, two out of 16 countries responded.

The Report notes that, in general, the quantity of data provided on illicit drug supply is 'significantly better' than that provided on drug demand. 79% of ARQs Part IV were 'substantially completed', compared to 67% of ARQs Part III. It should be noted that those ARQs that were more than 50% completed were classed as having been 'substantially filled in', while those having less than 50% completion were classed as 'partially filled in'.

The UNODC acknowledges that there is sometimes insufficient data to provide an accurate or comprehensive picture of world drug markets. In these circumstances, the ARQs are supplemented by other sources, usually government ones.

It should be clear from this overview of ARQ returns that there are large gaps in the data that they provide, despite them being the key source of information for the *World Drug Report*. As the UNODC notes, 'One major problem is the irregularity and incompleteness in ARQ reporting by Member States. Irregular reporting may result in absence of data for some years, and may influence the reported trend in a given year. Secondly, submitted questionnaires are not always complete or comprehensive, and thirdly, much of the data collected are subject to limitations and biases. These issues affect the reliability, quality and comparability of the information received'.[37]

into multiple revenue sources. Consequently, if drug money dries up there may be a shift to kidnapping for ransom, bank robberies, sale of natural resources or cultural artefacts. That said, 'groups aiming simply to stage shocking attacks on civilians can do so with negligible financial investment' (1, p. 25; 5, p. 11).

There is a scarcity of reliable data on terrorism and corruption

- ***Lack of understanding of the relationship between drugs and corruption*** – Many studies have focused on specific events or geographical areas. Others rely on perceptions of corruption. While these approaches have certain strengths, they highlight a paucity of data on the links between drugs and corruption across countries. For example, while intuitively such a correlation is anticipated, in terms of research, little is known about the way that different types of corruption interact with drug markets and political structures. Moreover, the way in which corruption and violence coexist also needs further investigation (5, p. 10).

- ***Huge variations in estimates of finances of terrorist, insurgent and other non-state armed groups*** – Little reliable data exist for estimating the overall wealth of terrorist, insurgent and other non-state armed groups, making it difficult to estimate the importance of the drug trade. Forbes International attempted to compile a list, but the income of the wealthiest 10 groups (around $5 billion together), was 'highly skewed, ranging from $25 million to $2bn per group' (1, pp. 25-26; 5, p. 11).
- **Limited evidence on drugs, terrorism and insurgency** – The Report notes that much of the work in this area tracks a small number of groups, or builds on sources with an 'interest in emphasizing or diminishing certain links'. Furthermore, we are told that 'most information on terrorism is collected by intelligence agencies and is classified, meaning that researchers must rely on media reports and studies issued by non-governmental organizations and think tanks' (p. 5, 11). While this is a valid concern, it is perhaps a little harsh to imply that research from 'think tanks' (including those based within universities) and NGOs[38] cannot contribute meaningfully to improving the limited evidence base.

Conclusion

As has been the case in recent years, the *2017 World Drug Report* represents another remarkable feat of data synthesis and analysis by the UNODC's Research and Trend Analysis Branch, Division for Analysis and Public Affairs. The publication covers an enormous range of issues in considerable, but accessible, detail. It is also positive to see that, alongside the increasingly forensic and nuanced market analysis, considerable space within the Report is once again devoted to the health consequences of drug use. On this theme, it might be argued that at points within the text more attention could be given to the key role played by 'effective scientific evidence based' interventions, particularly in relation to harm reduction among people who inject drugs. Nonetheless, it is hard to argue with the authors' own view that the publication 'provides the best picture of the drug problem that *can be assembled with the data and information available globally*' (emphasis added). It is also worth noting how the ongoing involvement of the *World Drug Report* Scientific Advisory Committee (established in 2015) has no doubt contributed to the maintenance of high scientific standards achieved through external peer review and the balanced and de-politicised character of the publication overall.

It has been noted throughout this analysis how gaps in data and knowledge across a range of domains, including within the issues discussed in booklet 5, remain challenging and generate a high degree of uncertainty in our understanding of many facets of 'the world drug problem'. And this point is not lost on the UNODC. Indeed, as has been the case for some time, the Report openly acknowledges myriad shortcomings in this regard, especially concerning the situation in Africa and Asia.[39] IDPC consequently echoes UNODC's calls to member states to improve funding to those countries that require capacity building and technical assistance within the realm of data capture and analysis. Indeed, beyond requests to improve the level of understanding at the nexus of the drug problem with OC, illicit financial flows, corruption and terrorism, one of the Report's key conclusions is the need to strengthen 'the knowledge base of the drug problem by improving data, analysis and dissemination at the national, regional and international levels' (1, p. 31).

That said, and reiterating some of the issues noted in the *IDPC Analysis of the World Drug Report 2016,*[40] one of the key points to come out of a reading of this year's Report stems not from the publication itself, which is of very high quality, but rather the data upon which it is constructed and hence the aspects of the 'world drug problem' it examines. This issue of increasing concern can be seen to play out in several ways. As touched upon above, return and completion rates for the ARQ remain patchy. This, as the Office discusses in the online methodology section (see Box 8), leads to considerable challenges vis-à-vis analysis and in-depth understanding of the dynamics of drug markets, including resultant health consequences. Nevertheless, improvements in completion and return rates will only go so far in refining the evidence base. This is particularly so when there is an increasing disconnect between what the *World Drug Report* tells us about the global situation and what the international community, through soft law instruments like the UNGASS Outcome Document, *claims* to emphasise.

As will be recalled, and as is noted in the Report, the Outcome Document explicitly calls for the collection of data and research to be undertaken on 'emerging issues such as NPS markets, illicit financial flows, the darknet and the links between drugs, terrorism, corruption and other forms of organized crime' (1, pp. 31-32). In this regard, as the Office also acknowledges, CND Resolution 60/1 invited it to 'reflect on possibilities to strengthen and streamline its existing data-collection and analysis tools,

including improving the quality and effectiveness of the annual report questionnaire, and to report to the Commission on possible ways to enhance these, for consideration by the Commission at its sixty-second session'.[41] While there is arguably an inherent tension between the simultaneous strengthening and streamlining of the ARQ, particularly in light of new and valid areas of concern, this is certainly a welcome and necessary process. Yet, it will be increasingly difficult to reconcile the Report's assertion that it 'provides ample evidence to guide the international community on key aspects of drug policy' when the data upon which it is based does not incorporate any human rights indicators, or proxies thereof, as they pertain to the implementation of drug policy. It should be recalled that the issue of human rights is given prominence throughout the Outcome Document, including in relation to states' considering, 'on a voluntary basis' furnishing information to the CND.[42] Moreover, its preamble contains the agreed view that 'targeted interventions that are based on the collection and analysis of data, including age- and *gender-related data*, can be particularly effective in meeting the specific needs of drug-affected populations and communities' (emphasis added). As noted earlier in relation to the Executive Director's preface, the protection of human rights is of course core to the functioning of the entire UN system and prominent within system-wide initiatives like the SDA, which as shown in the Report connects with drug policy in numerous ways.

Furthermore, the issue of human rights and drug policy will arguably become more pressing in 2019, the target date established by the 2009 Political Declaration and Plan of Action for states to 'eliminate or reduce significantly and measurably' illicit drug supply and demand, the diversion and trafficking of precursors and money laundering.[43] Amidst a growing – and unavoidable – realisation that these targets are unachievable, as ironically shown once again within this year's Report, the attention of some member states is likely to shift away from scale and flows further towards the impact of drug policy on communities and individuals. Consequently, in addition to the attention currently given to health consequences of drug use, other human rights issues may become more prominent. If this is the case, it will open fundamental issues concerning the self-reporting basis of the ARQ,[44] a thorny and highly problematic issue that reflects inherent tensions within the UN system itself and goes way beyond any revision process currently underway. Nonetheless, through increased involvement of agencies from other parts of the UN, particularly the Office of the High Commissioner for Human Rights, it should be possible to better integrate human rights assessments, even in a voluntary manner, into the data sets upon which the *World Drug Report* is currently based.

Acknowledgements

The author, Dave Bewley-Taylor, would like to acknowledge the feedback, comment and general support of Marie Nougier, Ann Fordham and Coletta Youngers. Errors of fact, analysis or interpretation remain with the author.

Endnotes

1. UN General Assembly (2016), *Outcome Document of the 2016 United Nations General Assembly Special Session on the World Drug Problem. Our Joint Commitment to Effectively Addressing and Countering the World Drug problem*, Thirtieth Special Session General Assembly, New York, 19-21 April 2016, https://www.unodc.org/documents/postungass2016/outcome/V1603301-E.pdf
2. *Booklet 1* summarises the content of the four subsequent substantive booklets and presents policy implications drawn from their findings. *Booklet 2* deals with the supply, use and health consequences of drugs. *Booklet 3* focuses on the cultivation, production and consumption of the three plant-based drugs (cocaine, opiates and cannabis) and on the impact of new cannabis policies. *Booklet 4* provides an extended analysis of the global synthetic drugs market and contains the bulk of the analysis for the triennial global synthetic drugs assessment. Finally, *Booklet 5* contains a discussion on the nexus between the drug problem, organised crime, illicit financial flows, corruption and terrorism
3. A note on referencing: all page numbers in parentheses are prefixed with a number (1 through to 5), which indicates the booklet from where the information or quote has been taken.
4. Bewley-Taylor, D., & Jelsma, M. (June 2016), *UNGASS 2016: A broken or b-r-o-a-d consensus? UN summit cannot hide a growing divergence in the global drug policy landscape,* Drug Policy Briefing No. 45 (Transnational Institute & Global Drug Policy Observatory), https://www.tni.org/files/publication-downloads/dpb_45_04072016_web.pdf
5. International Drug Policy Consortium (July 2017), *The 2017 Commission on Narcotic Drugs, Report of proceedings*, http://fileserver.idpc.net/library/CND-Proceedings-Report-2017_ENGLISH.pdf
6. According to the WHO definition, one DALY is one lost year of 'healthy' life. 'Healthy' years of life lost is the combination of life lost as a result of premature death and life lost as the result of disability (any short-term or long-term health loss)
7. See, for example: Arnensin, T. & Kapiriri, L. (2004), 'Can the value choices in DALYs influence global priority-setting?' *Health Policy,* **70**(2): 137-149; Sayers, B.M. & Fliedner, T.M. (1997), 'The Critique of DALYS: a counter reply', *WHO Bulletin*, **75**(4): 383-384, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2486969/
8. Hall, W. (2017), 'The future of the international drug control system and national drug prohibitions', *Addiction*, doi: 10.1111/add.13941
9. http://www.thelancet.com/gbd/2015
10. See, for example: International Drug Policy Consortium (January 2015), *IDPC response to the UNODC World Drug Report 2014*, p. 3, http://idpc.net/publications/2015/01/idpc-response-to-the-2014-unodc-world-drug-report
11. Hall, W. (2017), 'The future of the international drug control system and national drug prohibitions', *Addiction*, doi: 10.1111/add.13941.

Further, as noted elsewhere, while the production of synthetic drugs becomes an increasing problem in many parts of the world, the international community still grapples with the application of some kind of 'alternative development' approach; see: Buxton, J., Bewley-Taylor, D. & Hallam, C. (September 2017), *Dealing with synthetics: Time to reframe the narrative,* Policy Report No 6 (Global Drug Policy Observatory, Swansea University), http://www.swansea.ac.uk/media/Synthetics_FINAL_v5.pdf

12. Mindful of this acknowledgment, it is somewhat strange that the Report chooses to give prominence at various points to 'Increasingly effective law enforcement', both in relation to interception rates of cocaine and opiates, without making direct reference to the limitations of seizure data (1, p. 17; 3, p. 9)
13. http://www.unodc.org/wdr2017/field/WDR_2017_Methodology.pdf
14. See, for example: Ort, C., et al (2014), 'Spatial differences and temporal changes in illicit drug use in Europe quantified by wastewater analysis', *Addiction,* **109**(8): 1338-1352
15. As has been the case in previous years, and is indeed so for other data sets within the Report (see endnote 19), there are some differences in views concerning the accuracy of the data underlying these headline figures. Communication with the Harm Reduction International team in relation to UNODC data and that compiled for the production of the Global State of Harm Reduction: https://www.hri.global/global-state-of-harm-reduction
16. Of note on this issue is the emergence of evidence to suggest that tramadol-branded substances seized in some parts of Africa sometimes do not contain the labelled quantities of the drug and are in fact highly adulterated. See: Klein, A. (6 November 2017), Presentation at WHO Expert Committee on Drug Dependence
17. McNeil, D.G. (4 December 2007), '"Opiophobia" has left Africa in agony', *The New York Times,* https://www.nytimes.com/2017/12/04/health/opioids-africa-pain.html
18. For example: Global Commission on Drug Policy (October 2015), *The negative impact of drug control on public health: The global crisis of avoidable pain,* http://www.globalcommissionondrugs.org/wp-content/uploads/2012/03/GCODP-THE-NEGATIVE-IMPACT-OF-DRUG-CONTROL-ON-PUBLIC-HEALTH-EN.pdf; Burke-Shyne, N., et al. (24 May 2017), 'How drug control policy and practice undermine access to controlled medicine', *Health and Human Rights Journal,* https://www.hhrjournal.org/2017/05/how-drug-control-policy-and-practice-undermine-access-to-controlled-medicines/
19. https://www.globaldrugsurvey.com/
20. Bancroft, A. & Reid, A.S. (2016), 'Concepts of illicit drug quality among darknet market users: Purity, embodies experience, craft and chemical knowledge,' *International Journal of Drug Policy,* **35**: 42-9
21. See, for example: Horton-Edisson, M. & Di Cristofaro, M. (August 2017), *hard interventions and innovation in crypto-drug markets: The escrow example,* Policy Brief No 11 (Global Drug Policy Observatory, Swansea University), http://www.swansea.ac.uk/media/Escrow_PB11_GDPO_AUGUST2017.pdf
22. With this in mind, and within the current debates around regulated cannabis markets, it is interesting to note how research also suggests that 'de facto legalization of cannabis and more tolerant approaches towards party drugs has not eliminated users' interest in trying NPS'; see: Hall, W. (2017), 'The future of the international drug control system and national drug prohibitions', *Addiction*, doi: 10.1111/add.13941
23. For a discussion of different estimates from the UNODC and the US government on coca/cocaine production in Bolivia and Peru, see: Yagoub, M. (16 and 28 November 2016), 'Challenging the cocaine figures'. *Insight Crime*, www.insightcrime.org/news/analysis/challenging-the-cocaine-figures-part-1-bolivia/ and https://www.insightcrime.org/news/analysis/challenging-the-cocaine-figures-part-iii-peru/
24. See, for example: Isacson, A. (12 September 2017), *Commentary: The most important trends in Colombia's drug policy, explained* (Washington Office on Latin America), https://www.wola.org/analysis/important-trends-colombias-drug-policy-explained/
25. Isacson, A. (13 March 2017), *Commentary. Confronting Colombia's Coca Boon Requires patience and a Commitment to the Peace Accords*, Washington Office on Latin America, https://www.wola.org/analysis/confronting-colombias-coca-boom-requires-patience-commitment-peace-accords/
26. Survey data published since the launch of the *World Drug Report 2017* indicates that there has been a 'dramatic' drop in opium cultivation in Myanmar. According to a UN official, this 'underscored a regional boom in demand for illegal synthetics drugs such as methamphetamine, which many Asian countries are struggling to combat'; see: Marshall, A.R.C. (6 December 2017), 'Myanmar's opium crop plummets, but no victory over Asia's narco-boom: UN', *Reuters*, https://uk.reuters.com/article/us-myanmar-drugs/myanmars-opium-crop-plummets-but-no-victory-over-asias-narco-boom-u-n-idUKKBN1E00O2
27. Booklet 3 contains a detailed annex covering the therapeutic effects of cannabis and cannabinoids, as well as the statistical association between cannabis use and health conditions
28. See, for example: Felbab-Brown, V. (2017), *The extinction market: Wildlife trafficking and how to counter it* (Hurst & Co)
29. Orlova, A. & Moore J. (2005), '"Umbrellas" or "building blocks"?: Defining international terrorism and transnational organised crime in international law', *Houston Journal of International Law,* **27**(2): 283; Schloenhardt, A., 'Transnational organised crime', in Boister N. & Currie, R.J. (2015), *Routledge handbook of transnational criminal law* (Abingdon, Oxon), p. 42
30. Boister, N., 'The UN Convention against Transnational Organised Crime', in Hauk, P. & Peterke, S. (eds, 2016), *International law and transnational organised crime,* (Oxford University Press), p. 148
31. Mansfield, D. (2016), *A state built on sand: How opium Undermined Afghanistan* (Hurst and Company)
32. It is important to note that the research into this issue is growing, see for example, Cockayne, C. & Roth, A. (October 2017), *Crooked states: How organized crime and corruption will impact governance in 2050 and what states can- and should – do about it* (United nations University), https://collections.unu.edu/eserv/UNU:6318/UNU-CrookedStates_Final.pdf
33. See, for example: Peter, G. (2009), *Seeds of terror: How heroin is Bankrolling the Taliban and al Qaeda* (Oneworld, Oxford)
34. Available here: https://www.unodc.org/arq/
35. For other sources, see: http://www.unodc.org/wdr2017/field/WDR_2017_Methodology.pdf
36. United Nations Office on Drugs and Crime (2017), *World drug report 2017: Methodology report*, http://www.unodc.org/wdr2017/field/WDR_2017_Methodology.pdf
37. Ibid.
38. See for example the work of the Global Initiative Against Transnational Organized Crime (http://globalinitiative.net/about/) which includes experts from academia, governments as well as the UNODC itself and has links to the London School of Economics International Drug Policy Unit (http://www.lse.ac.uk/United-States/international-drug-policy)
39. See, for example: 3, pp. 19-20, 23-24
40. International Drug Policy Consortium (December 2016), *IDPC analysis of the UNODC World Drug Report 2016*, http://idpc.net/publications/2016/12/idpc-analysis-of-the-unodc-world-drug-report-2016
41. https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_60/CNDres_2017/Resolution_60_1_60CND.pdf
42. UN General Assembly (2016), *Outcome Document of the 2016 United Nations General Assembly Special Session on the World Drug Problem. Our Joint Commitment to Effectively Addressing and Countering the World Drug problem*, Thirtieth Special Session General Assembly, New York, 19-21 April 2016, Paragraph 4 (h) https://www.unodc.org/documents/postungass2016/outcome/V1603301-E.pdf
43. Available here: https://www.unodc.org/documents/ungass2016/V0984963-English.pdf
44. See: Rolles, S. et al. (2016), *the Alternative World Drug Report, 2nd edition* (Count the Costs & Transform), p. 22, http://www.countthecosts.org/sites/default/files/AWDR-2nd-edition.pdf

Report design by Mathew Birch: mathew@mathewbirch.com
Cover artwork by Rudy Tun-Sánchez: rudo.tun@gmail.com

Tel: +44 (0) 20 7324 2974
Fax: +44 (0) 20 7324 2977
Email: contact@idpc.net
Website: www.idpc.net

Funded, in part, by:

OPEN SOCIETY FOUNDATIONS

ROBERT CARR FUND
for civil society networks

In this report, IDPC provides an overview and analysis of the data and topics presented in the 2017 UNODC World Drug Report. The report specifically looks at drug use and health, the new trends in an increasingly complex illicit drug market, and the links between organised crime, money laundering and corruption.

The International Drug Policy Consortium is a global network of NGOs that specialise in issues related to illicit drug production and use. The Consortium aims to promote objective and open debate on the effectiveness, direction and content of drug policies at national and international level, and supports evidence-based harm. It produces briefing papers, disseminates the reports of its member organisations, and offers expert advice to policy makers and officials around the world.