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# GLOBAL SMART UPDATE



**Post-UNGASS 2016: NPS trends,  
challenges and recommendations**

**2016**

## About the SMART Update

Synthetic drugs constitute one of the most significant drug problems worldwide. After cannabis, amphetamine-type stimulants (ATS) are the second most widely used drugs across the globe, with use levels often exceeding those of heroin and/or cocaine. Along with ATS, the continued growth of the *new psychoactive substances* (NPS) market over the last years has become a policy challenge and a major international concern. A growing interplay between these new drugs and traditional illicit drug markets is being observed. By July 2016, the emergence of NPS had been reported from 102 countries and territories. Trends on the synthetic drug market evolve quickly each year.

The UNODC Global Synthetics Monitoring: Analyses, Reporting and Trends (SMART) Programme enhances the capacity of Member States in priority regions to generate, manage, analyse, report and use synthetic drug information to design effective policy and programme interventions. Launched in September 2008, the Global SMART Programme provides capacity building to laboratory personnel, law enforcement and research officers in the Pacific, East and South-East Asia, South Asia, the Near and Middle East, Africa and Latin America; and regularly reviews the global amphetamine-type stimulants and *new psychoactive substances* situation. Its main products include online drug data collection, situation reports, regional assessments and the UNODC Early Warning Advisory (EWA) on *new psychoactive substances*. The EWA is a webportal that offers regular updates on *new psychoactive substances*, including trend data on emergence and persistence, chemical data, supporting documentation on laboratory analysis and national legislative responses (available at: [www.unodc.org/NPS](http://www.unodc.org/NPS)).

The Global SMART Update (GSU) series is published twice a year in English and Spanish and provides information on emerging patterns and trends of the global synthetic drug situation in a concise format. Each issue of the Global SMART Update contains a special coverage and thematic segments. Electronic copies of the Global SMART Updates and other publications are available at: [www.unodc.org/unodc/en/scientists/publications-smart.html](http://www.unodc.org/unodc/en/scientists/publications-smart.html). Past issues have covered topics such as injecting use of synthetic drugs, legal responses to NPS, key facts about synthetic cannabinoids, regional patterns of methamphetamine manufacture and the changing nature of 'ecstasy'.\*

## In this issue

The current issue provides an overview of NPS trends, challenges and legal approaches in light of the recent 2016 United Nations General Assembly Special Session (UNGASS) on the World Drug Problem<sup>1</sup>. This issue is fully dedicated to the aforementioned topic and does not contain country-specific segments. It explores the current status of *new psychoactive substances* with regard to trends, public health threats, challenges and legal responses. It highlights key features and trends of the NPS problem, including the challenges faced by several countries to achieve the fundamental issue of identification and detection, and measures such as legislative responses and international law enforcement cooperation initiatives implemented at the national and international level to address the issue. In addition, it accentuates the key operational recommendations of the 2016 UNGASS on the World Drug Problem related to addressing the threats of NPS in the framework of the 2030 Sustainable Development Agenda.



<sup>1</sup> E/CN.7/2016/1 V.16-01405 (E)

\*This report has not been formally edited. The contents of this publication do not necessarily reflect the views or policies of UNODC or contributory organizations and neither do they imply any endorsement. Suggested citation: UNODC, Global SMART Update Volume 16, September 2016.

# Post-UNGASS 2016: NPS trends, challenges and recommendations

## Introduction

The unprecedented emergence in recent years of potentially dangerous psychoactive substances that are not under international control has led to their increased abuse, hospital emergency admissions and sometimes fatalities. These new psychoactive substances (NPS), while often marketed as “legal” alternatives to substances under international control, pose a public health risk. In 2014, the UNODC-WHO Expert Consultation on NPS recognized the need for prioritising the control of the most *harmful, prevalent, and persistent* NPS under the international drug conventions. Early Warning Systems (EWS) play a key role in monitoring and providing timely responses to these substances and protecting public health through risk communication. Pursuant to the Outcome Document of the 2016 United Nations General Assembly Special Session on the World Drug Problem (UNGASS) entitled “Our joint commitment to effectively addressing and countering the world drug problem”,<sup>1</sup> heads of States and Government have recognised the importance of reinforcing national and international efforts and increasing global cooperation to respond to the challenges and threats of NPS and amphetamine-type stimulants. In the operational recommendations of the Outcome Document, Member States outlined concrete measures and called for their implementation through balanced, comprehensive programmes.

Drawing on a Conference Room Paper<sup>2</sup> submitted to the Commission on Narcotic Drugs in March 2016 and the UNGASS Outcome document, this issue of the Global SMART Update reviews the current situation of NPS at the international level with a focus on current responses and remaining challenges on the way towards the review of the 2009 Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem<sup>3</sup> in 2019.

## Understanding the synthetic drugs problem

The 2009 *Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem* recognized systematic global monitoring as the key to understanding the synthetic drugs problem. In response to the increased NPS threat, UNODC began to gradually incorporate NPS in its Global Synthetics Monitoring Analysis Reporting and Trends (Global SMART) programme. Launched in September 2008,

the Global SMART programme had been helping targeted Member States to improve their capacity in monitoring synthetic drugs through the generation, management, analysis, reporting, and use of information on those types of drugs, and provided a comprehensive overview of the challenges associated with NPS.

The Early Warning Advisory (EWA) of UNODC has served as a resource for the identification and prioritization of candidate substances for scheduling notification as specified by the International Drug Control System. The EWA continues to work towards enhancing the ability of countries to anticipate NPS threats and to reduce public health risks through its early warnings, which is consistent with the *Sustainable Development Goal 3*, entitled to ‘Ensure healthy lives and promote well-being for all at all ages’, of the 2030 Agenda for the Sustainable Development Goals.

## A growing interplay between NPS and traditional illicit drugs

In the 2016 UNGASS Outcome Document, Member States have stressed the importance of addressing both ATS and NPS. Indeed, the emergence of NPS became an international concern from 2004 onwards, when the substances slowly started to appear within the amphetamine-type stimulants (ATS) market. In 2005, a worldwide shortage of MDMA, the original chemical found in pills sold as “ecstasy”, led to a decline of the “ecstasy” market. Nevertheless, the continuing demand for “ecstasy” led to the use of alternative chemicals to MDMA. Among others, synthetic cathinones (methyone or MDPV) and piperazines (BZP or mCPP) were used as substitutes for MDMA. In 2006, it was estimated that almost 10 per cent of the pills sold as “ecstasy” in the European Union contained mCPP.<sup>4</sup> Changes in the composition of pills sold as “ecstasy” were also accompanied by a shift in the drug market from street level drug dealers or “head shops” to a more widespread and readily available virtual market on the Internet, which altered the pattern of trading in relation to the distribution, sales and marketing of NPS.

During the decline of the “ecstasy” market, other substances started to emerge on the drug market. Mephedrone<sup>5</sup>, a substance with similar stimulant properties as (meth)amphetamine and cocaine, and MDPV<sup>6</sup> emerged in different regions in 2007. Products containing synthetic cannabinoids started to be sold in specialized shops and on the Internet, as substances

<sup>1</sup> A/RES/S-30/1

<sup>2</sup> E/CN.7/2016/1 V.16-01405 (E)

<sup>3</sup> Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem. High-level segment Commission on Narcotic Drugs, Vienna, 11-12 March 2009. United Nations, New York, 2009.

<sup>4</sup> European Monitoring Centre for Drugs and Drug Addiction, BZP and other piperazines drug profile <http://www.emcdda.europa.eu/publications/drug-profiles/bzp>

<sup>5</sup> Mephedrone is under international control since 2015.

<sup>6</sup> MDPV is under international control since 2015.

producing cannabis-like effects (e.g. JWH-018<sup>7</sup> which mimics THC, the main psychoactive substance in cannabis).

By 2008, synthetic cannabinoids became popular in some European countries, where they were presented as ‘legal highs’ with an aura of legality that often made them more attractive than cannabis. Users often perceived them as safe and thus were more prone to their use. During the same period of time other new substances appeared in the market. Phenethylamines, such as 4-fluoroamphetamine (4-FA) were identified in pills sold as “ecstasy” and in powder sold as “amphetamine”. In 2010, reports of phencyclidine-type substances such as methoxetamine (MXE), a substance related to ketamine with similar dissociative properties, also emerged in Europe.

### Key features of new psychoactive substances (NPS)

#### Unprecedented rate of NPS emergence at the global level

The emergence of NPS is a global phenomenon that affects all regions of the world, albeit, to a different extent. By December 2015, over 644 NPS had been reported by 102 countries to UNODC, showing a stark and unprecedented increase in NPS emergence since 2008. New NPS continue to emerge every year at an average rate of about one substance per week, making research and monitoring activities critical in improving understanding of the dynamic nature of the problem.

Despite more countries reporting a growing number of substances every year, some NPS are transient in

nature. Many NPS have only been reported by a small number of countries in a given year and some seem to have disappeared completely from the market. However, some substances, such as JWH-018 and methedrone have been on the market since monitoring began in 2008 have remained available on illicit drug markets for few years and are now under international control.

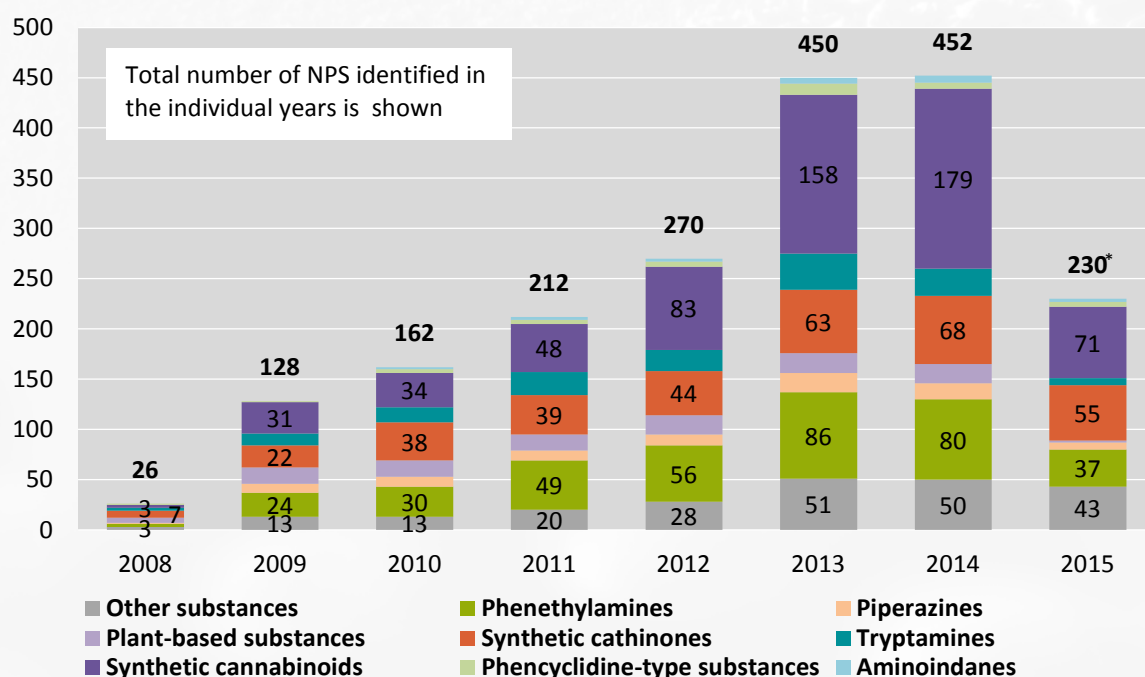
#### Regional diversity

Diverse regional patterns of NPS emergence are observed, both in terms of the presence of NPS groups and the number of NPS reported by individual countries. The ten countries that have reported the largest number of substances are spread across three regions: Asia (Japan), Europe (Finland, Germany, Hungary, Russian Federation, Sweden, Turkey, United Kingdom of Great Britain and Northern Ireland) and North America (Canada and the United States of America). The Americas (excluding Canada and the United States) and East and South-East Asia have also reported significant numbers of NPS. In other regions, including Africa, Central America, the Near and Middle East and Central and South-West Asia, data on NPS emergence remain limited, which hinders the assessment of the emergence of NPS globally.

#### Detection and identification of new psychoactive substances

The detection and identification of NPS are critical to supply reduction, data collection, health interventions and form the basis of effective drug policy responses. This key issue is reflected in the Commission on Narcotic Drugs (CND) resolution 57/9, entitled “Enhancing international cooperation in the identification and

Figure 1. The global trend of individual NPS reported in the EWA from 2008 to 2015

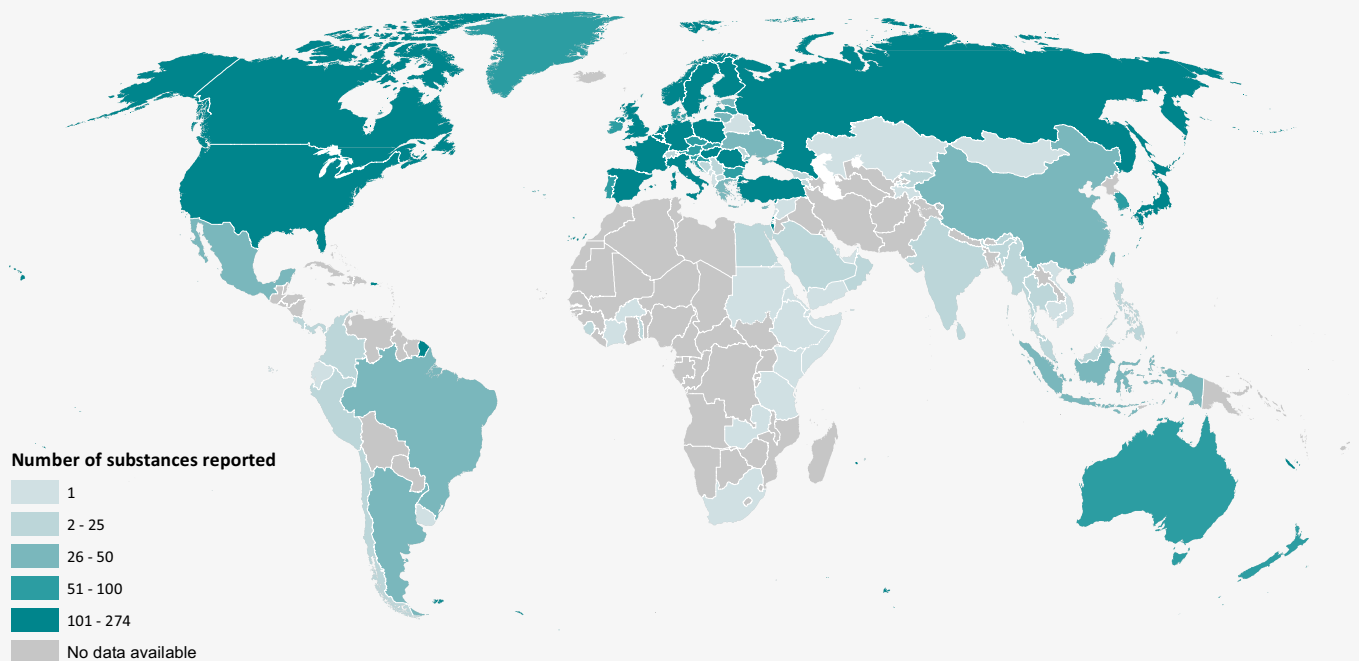


Source: UNODC Early Warning Advisory on NPS.

\*Note: The 2015 data is provisional and incomplete.

7 JWH-018 is under international control since 2015.

Map 1. Number of NPS reported globally to the UNODC EWA from 2008 to 2015



Source: UNODC Early Warning Advisory on NPS, 2008-2015.

Note: The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations. Dashed lines represent undetermined boundaries. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between the Sudan and South Sudan has not yet been determined.

A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

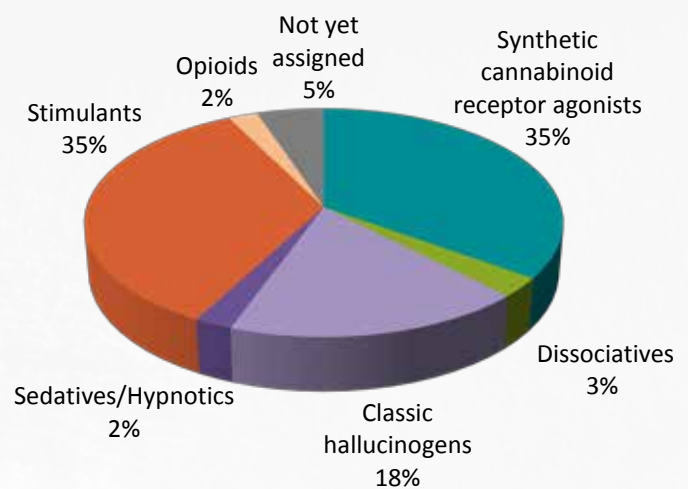
reporting of new psychoactive substances and incidents involving such substances”, which underscored the need to detect, analyse and identify NPS as part of a scientific evidence-based, balanced, comprehensive and integrated approach to drug policy that seeks both to reduce demand and restrict supply to prevent abuse. However, relevant institutions of several countries face challenges to support such an approach as many forensic laboratories have insufficient capacity to detect and identify NPS in seized material and in biological specimens.

Inadequate capacity to identify, analyse and report NPS is also reflected in the responses of Member States to the 2014 UNODC survey on NPS. A majority of countries responding to the survey reported that their law enforcement authorities (customs and police) faced difficulties identifying NPS under national control.<sup>8</sup> Only 9 per cent of the countries, which provided responses, reported that identification of NPS was not a problem for law enforcement authorities.

### Mimicking the effects of traditional drugs

NPS are very diverse in terms of their effects and chemistry and those identified to date mimic the effects of the six main groups of substances controlled under the international drug conventions, namely opioids (e.g. heroin and morphine), synthetic can-

Figure 2. Proportion of NPS by pharmacological effect, December 2015



Source: UNODC Early Warning Advisory on NPS, 2008-2015.

nabinoid receptor agonists (e.g. cannabis), dissociatives (e.g. phencyclidine), classic hallucinogens (e.g. LSD and 2C-B), sedatives/hypnotics (e.g. diazepam) and stimulants (e.g. cocaine and amphetamine-type stimulants).

### Threat to safety, individual and public health

An issue of global concern are the unknown adverse effects and risks to public health associated with the use of NPS. Addressing the paucity of health-related and toxicological data is crucial to accurately informing scheduling decisions. The scarce data available give indication of the negative health consequences that NPS may pose. The use of synthetic cannabinoids

<sup>8</sup> Out of 45 countries that provided information on legislation in the UNODC survey on NPS, 30 indicated that they experienced challenges in implementing legislation to control NPS. Of those 30 countries, 80 per cent reported that their law enforcement authorities (customs and police) faced difficulties identifying NPS under national control. Source: 2014 UNODC survey on NPS, distributed to all Member States.

Figure 3. Examples of seized products of NPS containing combinations of substances



Source: UNODC survey on new psychoactive substances, 2014.

(e.g. JWH-018), for instance, has been linked to fatal and non-fatal intoxications, as well as seizures, tachycardia and hypertension.<sup>9</sup> Many adverse effects have also been linked to synthetic cathinones. MDPV, has been associated with severe agitation, violent behaviour, tachycardia, psychosis, paranoia as well as fatal intoxications. The danger associated with NPS use is accentuated by the intentional mislabelling of products and their unknown purity and composition.

Four years after the CND first expressed concerns regarding the emergence and associated dangers of NPS in its resolution 55/1, entitled “Promoting international cooperation in responding to the challenges posed by new psychoactive substances”, NPS continue to emerge on the market at a fast pace, while the understanding of their associated health and social harms remains limited. The injecting use of NPS has been reported from several countries. People who inject these substances are reported to be at high risk of acquiring and transmitting HIV and other blood-borne infectious diseases through the sharing of injection equipment and high-risk sexual behaviour.<sup>10</sup>

Additional threats to public health are posed by products containing combinations of NPS as their combined effect on body and mind is difficult to predict. Mixtures have been found to contain controlled substances such as cocaine, MDMA and amphetamine or various NPS of the same group (e.g. synthetic cannabinoids) or across diverse NPS groups. In 2013, Europe reported more than 110 NPS products that combined up to seven different NPS.

### Stability and change

The NPS market has shown to be resilient as a result of its flexibility. The range of substances offered is rapidly adapted to changes e.g. when legal controls are introduced or when substances become less popular because of their harmful effects. Of the 30 countries that experienced challenges implementing legislation to control NPS, 23 confirmed that NPS under national control were promptly replaced by new, uncontrolled substances. Substances under control in one country resurfaced in countries with weaker legal NPS frameworks or on the Internet. An example of NPS market resilience is provided by synthetic cannabinoids. This group of substances evolves constantly in response to changes in national legislation. Chemical families with successive structural modifications evolve continuously to keep those substances in an ambiguous legal status. For instance, the emergence of the naphthoylindoles (e.g. JWH-018) was quickly followed by the emergence of naphthoylindazoles (e.g. THJ-018) and more recently of indazole carboxamides (e.g. AKB-48).<sup>11</sup>

The Internet poses a great challenge in addressing the NPS problem, as it is an important distribution channel that enables an easy, anonymous and low-risk supply of NPS and offers high rewards to suppliers and retailers. Internet websites participating in the trade of NPS may be based in entirely different countries from those where the NPS are manufactured and/or supplied to, and the disparity of laws in various regions poses a challenge in adopting a comprehensive approach for the prosecution of violations. A further

<sup>9</sup> WHO Expert Committee on Drug Dependence: thirty-sixth report (Geneva, Switzerland, 16-20 June 2014).

<sup>10</sup> For more information on injecting use of synthetic drugs, including NPS, and country examples, see UNODC, Global SMART Update, Volume 15, Vienna, 2016

<sup>11</sup> Kikura-Hanajiri R et al. “Changes in the prevalence of new psychoactive substances before and after the introduction of the generic scheduling of synthetic cannabinoids in Japan.” Drug Testing and Analysis, 2014 Jul 1;6(7-8):832-9.

complication is the sale of products containing controlled NPS on the “darknet”, which can only be accessed with anonymizing software.

## Current responses at the national, regional and international level

### Early Warning Systems (EWS)

EWS play a key role in monitoring, early detection and timely responses to the emerging threats of NPS. Monitoring is paramount to understanding the NPS market and its characteristics, and it provides an evidence base to inform policies and responses to address the ongoing challenges posed by NPS. Many countries have adopted strategies to monitor NPS either by including them into their existing drug monitoring systems (e.g. Australia, Belgium, Canada, Chile, Colombia, Italy) or by creating systems specifically designed for that purpose (e.g. the United Kingdom Forensic Early Warning System). In terms of regional monitoring systems, the EWS of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is an example of best practice in terms of regional cooperation in the use of early warning.

At the global level, NPS monitoring is carried out through the UNODC EWA on NPS. Launched in 2013 and pursuant to CND resolutions 55/1 (2012) and 56/4 (2013), the UNODC EWA collects information on the global appearance of new substances from currently 102 countries and territories. The UNODC EWA contributes to improved monitoring and understanding of NPS, sheds light on the complexity of the problem and serves as a knowledge hub and platform for sharing best practices. It also offers information on NPS trends, the interplay of NPS with existing drug markets, national legislative responses, manuals for drug testing laboratories and technical information (e.g. analytical methodologies, reference documents, and mass spectra data) to support Member States in the detection and identification of NPS.

Between 2008 and 2015, a total of 644 NPS had been reported to the UNODC EWA and the number of individual substances reported continues to rise. The UNODC EWA provides a platform to “Strengthen domestic information-sharing and promote information exchange at the regional and international levels on effective prevention and treatment and related legislative measures in order to support the development of effective, scientific evidence-based responses to the emerging challenge of new psychoactive substances with regard to their adverse social and health consequences”, a key recommendation of the 2016 UNGASS Outcome Document.

Certain challenges for EWS still remain, such as addressing and resolving the issue of data scarcity, in particular in the field of toxicology and health, to assess the risks to health and safety, in order to inform prioritisation of NPS in a more prompt and timely manner. The UNGASS Outcome Document calls for

active participation in early warning networks, promoting the use of surveillance lists, voluntary controls and enhancing bilateral, regional and international cooperation in the identification and reporting of NPS. This underlines the importance of EWS, at all levels, to anticipate developing threats, reduce public health risks, and enhance their preparedness to address the issues and challenges of NPS.

### Prevention by risk communication

Effective communication of the risks associated with NPS is critical in preventing their use and distribution. Some Member States have incorporated NPS in their drug prevention awareness programmes, in some cases using the Internet to disseminate information. More progress is still required despite these efforts, particularly in raising public awareness of the risks of NPS, improving education and sensitization of first responders, and devising strategies to reduce the negative health consequences associated with the use of NPS. Information on risks, toxicology, pharmacology and use of NPS is regularly made available in the UNODC EWA. Nonetheless, given their rapid emergence, one of the greatest risks lies in not knowing enough about the pharmacological and toxicological profile of many NPS when they appear on the market.

### Legislative responses

The unprecedented number of NPS and their rate of emergence present a challenge to drug control systems. Putting a potentially harmful substance under legal control may be a lengthy process that often requires evidence-gathering and a scientific review of harms. This means that there is a time lag from when an NPS comes onto the market to when legal control is implemented. NPS manufacturers often exploit this inevitable time lag by developing and marketing alternative substances to circumvent established controls. In an effort to protect public health, several Member States and the international community have explored a wide range of legislative responses to address the dynamics of the NPS market, particularly the rapid emergence and attempts by manufacturers to circumvent legislation, the diversity of the problem, and paucity of data to enable full evaluation of harm.

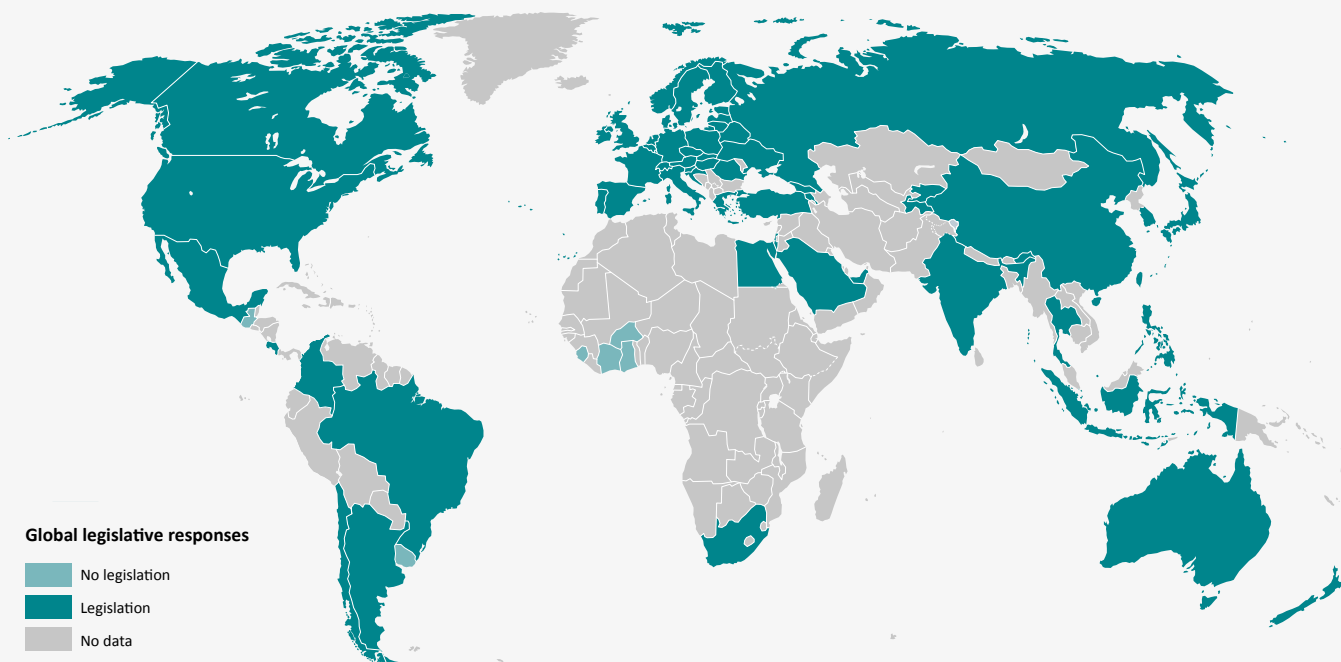
### International drug control system

The international drug control system was set up to protect human health and welfare by preventing drug abuse and dependence and ensuring access to drugs for medical and scientific purposes.<sup>12</sup> In situations of urgency, the international conventions allow for the establishment of temporary control measures to prevent widespread abuse before bringing a substance under international control.<sup>13</sup> Provisional controls can

<sup>12</sup> See the preambles of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol and the Convention on Psychotropic Substances of 1971 of United Nations, The International Drug Control Conventions, 2013.

<sup>13</sup> Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol and the Convention on Psychotropic Substances of 1971 of United Nations, The International Drug Control Conventions, 2013.

Map 2. Global legislative responses, countries and territories with legal responses to NPS as reported by the UNODC EWA



Source: UNODC Early Warning Advisory on NPS.

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be invoked when immediate action is required, as it could be the case of the rapid emergence of NPS. In accordance with the provisions of the Convention on Psychotropic Substances of 1971<sup>14</sup>, provisional control measures are discretionary and thus a Party is not bound to impose such measures, nor is it held accountable for refusing to apply them. Temporary measures are also foreseen in the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol but have thus far not been invoked. In 2014, Member States implemented discretionary provisional control measures, as prescribed under article 2 (3) of the 1971 Convention, for the first time.

#### **Prioritization of new psychoactive substances**

Given the diversity of NPS on the global drug market and in order to provide appropriate legal responses, the 2014 UNODC-WHO Expert Consultation on NPS recognized the need to prioritize for international control, the most *harmful, prevalent* and *persistent* NPS.<sup>15</sup> The consultation concluded that a phased approach to NPS prioritization was required, with the two main criteria for consideration being evidence of harm (or potential harm) of a substance, and the prevalence (or proxies for prevalence) of its use. In 2015, nine NPS were prioritized for review by the WHO ECDD at its 37th Meeting in November 2015<sup>16</sup>. This process has ultimately led to

the scheduling of seven substances during the 59<sup>th</sup> session of the CND, held on 16 to 22 March 2016.<sup>17</sup>

#### **National legislative responses**

A wide range of legislative responses have been adopted by Member States at the national level to control NPS that are considered a health threat.<sup>18</sup> Several countries have adopted more than one type of legislation.

Most countries, on which information on national legal responses is available on the UNODC EWA, introduced controls on NPS on a substance-by-substance basis (i.e. individual listing). Countries have implemented these controls either through legislative processes or through rapid procedures and/or temporary controls. Temporary bans enable the introduction of time-limited controls on NPS to protect public health until sufficient scientific evidence becomes available to inform permanent control decisions.

A number of Member States have applied analogue and/or generic controls. Analogue controls function through the concept of “chemical similarity” to a controlled drug, which enables the control of substanc-

<sup>14</sup> See Art. 2, para. 3, of the 1971 Convention.

<sup>15</sup> E/CN.7/2015/CRP.2.

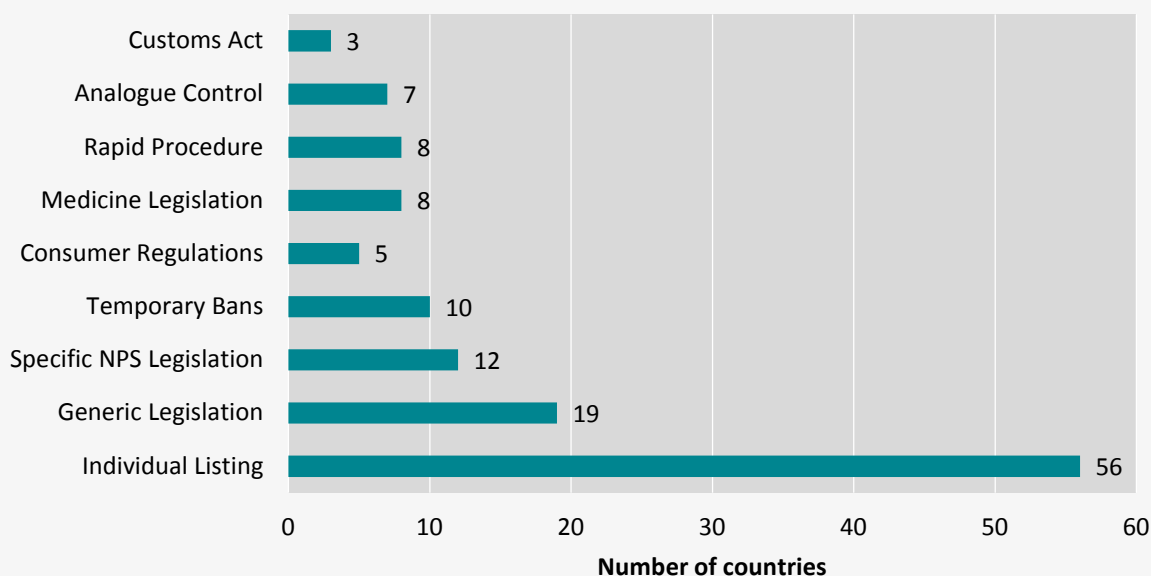
<sup>16</sup> 37<sup>th</sup> WHO Expert Committee on Drug Dependence 16-20 November 2015, provisional agenda [www.who.int/medicines/access/controlled-substances/37th\\_ECDD\\_Provisional\\_Agenda.pdf](http://www.who.int/medicines/access/controlled-substances/37th_ECDD_Provisional_Agenda.pdf).

<sup>17</sup> UNODC EWA news clip. March 2016 - UNODC: Seven substances “scheduled” at the 59th Session of the Commission on Narcotic Drugs <https://www.unodc.org/LSS/Announcement/Details/576da23b-cfb8-4327-a8b7-8be1fc41ce11>

<sup>18</sup> Analyses of national legislative responses are based on information provided by Member States to UNODC, such as the UNODC Annual Reports Questionnaire and the UNODC Member State Survey on NPS (July 2014) as well as on publicly available information from Government websites. UNODC Early Warning Advisory on NPS, May 2016.



Figure 4. National legislative approaches by number of countries  
(based on information provided by 59 countries)



Source: UNODC Early Warning Advisory on NPS, May 2016.

es that are structurally similar to and have a similar or greater effect on the central nervous system as a controlled substance. These controls operate on a substance-by-substance basis. Generic controls prohibit groups and subgroups of NPS at once to anticipate controls that may arise on new substances. They target the core molecular structure, which does not itself have to be psychoactive, with legislation specifying particular variations of the structure that could fall under control. Substances under the generic definition show a defined structural similarity to a known illicit drug or parent compound described in the legislation.

Some Member States have resorted to the use of consumer protection laws and/or medicines legislation to control NPS. Out of 59 countries on which information is available on the UNODC EWA, fourteen countries in Asia, Europe, North America and Oceania have employed these measures to protect public health and to reduce the supply of NPS by seizing stock and closing down retail outlets temporarily. In addition, given the particular characteristics of NPS, some countries have adopted NPS-specific legislation to tackle the problem. These legislative approaches range from a general bans on the distribution of NPS to pre-market approval regulatory regimes and controls on psychoactive substances which are intended for human consumption and capable of producing a psychoactive effect.

However, products containing NPS are often labelled as “not for human consumption” and sold as “research chemicals” to bypass existing consumer legislation. More than 40 per cent of the 45 countries that submitted responses to the 2014 UNODC survey on NPS indicated that traffickers used intentional mislabelling of products or packages containing NPS to bypass legislation.

### Enhancing capacity to detect and identify NPS

The Laboratory and Forensic Services programme of UNODC continues to assist Member States to develop and strengthen their capacity to detect and identify NPS by developing and disseminating recommended laboratory methods of analysis of recently controlled substances and providing key knowledge products and chemical reference standards to aid laboratory analysis of NPS in seized materials and biological specimens.

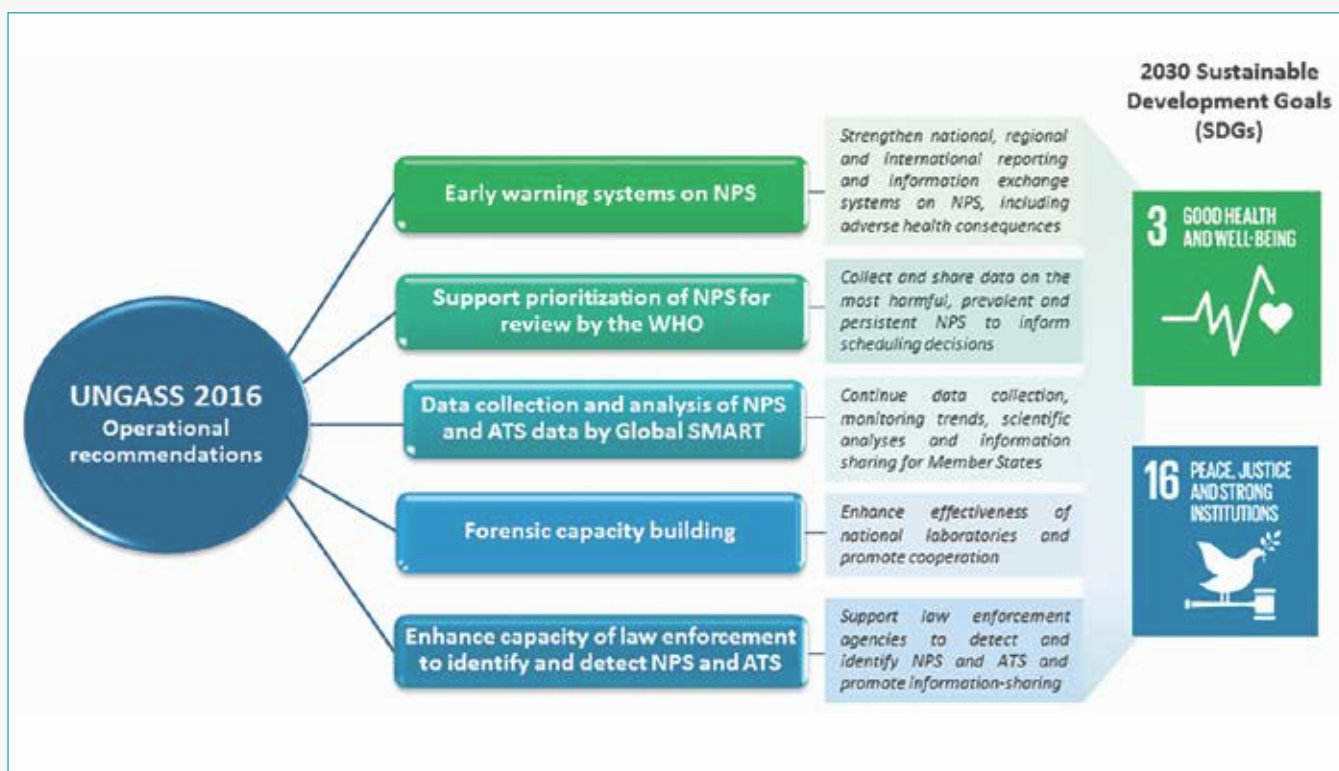
The UNODC International Collaborative Exercises (ICE) programme has enabled laboratories, from both developing and developed countries, to regularly monitor their performance in drug analysis including on NPS. With support, currently provided to over 200 national drug testing laboratories in more than 60 countries, ICE continues to be a critical source of information on emerging drugs for national laboratories worldwide, which in turn, are a valuable source of information on new drugs emerging in their countries.

While some progress has been made on a global scale, many countries continue to face major challenges in detecting and identifying NPS, monitoring and reporting, developing informed treatment interventions and in the implementation of scheduling decisions.

### Supply reduction

Differences in the control status of NPS from country to country can create opportunities for the manufacture and distribution of NPS. One of the patterns of the NPS market is that substances, which may not (yet) be under national control in the country of manufacture, are traded for example using Internet orders by mail. Over 50 per cent of respondents to the 2014 UNODC survey on NPS recognized that the trade or traffic of

Figure 5. Operational recommendations from 2016 UNGASS relevant for NPS



NPS through the Internet and postal networks makes it difficult to enforce NPS legislation.

Supply reduction relies on international cooperation. As part of its mandate to support governments in preventing the diversion of drug precursors and other substances used for the illicit manufacture of drugs, the INCB *Project ION* (International Operations on NPS) promotes international cooperation among law enforcement agencies to prevent and combat the illicit traffic of NPS. Project ION's Incident Communication System (IONICS) facilitates intelligence-sharing (e.g. information on suspicious shipments of, trafficking in, and manufacture or production of NPS) among law enforcement agencies and provides support to operational responses on NPS carried out by Member States. With the bulk of NPS importations taking place via mail and fast parcel services, the *Customs Enforcement Network* (CEN) of the World Customs Organization is a platform that aims to facilitate NPS-related operations among its Member States and provide a secure messaging system for cross-border operations. This platform represents a central global depository for enforcement-related information. The CEN database features more than 3,800 cases of NPS seizures reported between January 2012 and July 2013. In Asia and the Pacific, information on NPS seizures is shared through a platform managed by the World Customs Organization Regional Intelligence Liaison Office and fed from data submitted by customs offices in those regions.

Significant quantities of synthetic NPS, in particular synthetic cannabinoids, have been seized over the past few years, reaching 34 tons in 2014. The largest

amounts of NPS seizures were reported from North America and Europe.<sup>19</sup>

## The way forward: remaining challenges and operational responses

### Supply and demand reduction

The 2016 UNGASS Outcome Document recommends measures to address demand and supply reduction, including enhancing the quality and capacity of drug analysis laboratories. Despite efforts to improve the capacity of law enforcement authorities and forensic laboratories in the detection and identification of NPS, some Member States continue to have insufficient capacity to identify and monitor these substances. In addition, good capacity of forensic laboratories is a necessity for the development of comprehensive, evidence-based prevention and treatment models and thus paramount to countering the harmful effects of NPS. Therefore, enhancing this capacity and improving cooperation among stakeholders, through the use of existing NPS platforms, UNODC reference standards and further participation in the UNODC ICE programme, are key prerequisites for governments to comply with their control and reporting obligations under the international drug control treaties and to develop prevention and treatment programmes on NPS.

### Risk communication

Early warning systems offer an opportunity for awareness raising, the communication of associated risks of NPS and sharing of information at the national, region-

<sup>19</sup> UNODC, World Drug Report, 2016.

al and international level. However, awareness campaigns must be appropriately funded, expanded and promoted to be able to support countries in anticipating threats of NPS, reducing risks to public health and protecting children and young people from the harms associated NPS. Whilst some Member States have undertaken such efforts, awareness-raising campaigns have not been conducted on a systematic basis and do not exist in many countries and regions. Member States have called for improved knowledge and understanding of NPS and their associated public health harms in the 2016 UNGASS Outcome Document.

### Prioritization and legal controls

Notwithstanding the initial success in prioritizing substances for international control, the creation of a comprehensive global evidence base for prioritization, as a foundation for the international control of harmful NPS, continues to be hampered by difficulties in the detection and identification of NPS by some Member States. The capacity of forensic laboratories in both health care and law enforcement is key to the compliance of governments with the provisions of the international drug control treaties and thus needs to be strengthened. Various aspects of drug control depend on the ability of forensic laboratories to identify NPS, including the development of measures that individual governments can take to combat drug trafficking and abuse as well as governments' fulfilment of their reporting obligations under the international drug control treaties.

While progress has been made by the international community, significant efforts are still necessary to effectively address the NPS phenomenon. In this context, the capacity of WHO, UNODC, INCB and other relevant stakeholders needs to be strengthened, to build on the success of the prioritization process and facilitate informed scheduling decisions by the CND. Existing platforms such as UNODC EWA and INCB IONICS could be further expanded to disseminate early warning and surveillance lists to improve information-sharing and international cooperation among Member States. Consequently, there is a need to develop practical ways of prioritising the most *harmful, prevalent, and persistent* NPS at the national, regional and international level and outlining clear roles for stakeholders.

### Towards the 2030 Sustainable Development Goals (SDGs)

Providing an outlook towards the 2030 SDGs, the Outcome Document of the 2016 UNGASS states that "efforts to achieve the sustainable development goals (SDGs) and to effectively address the world drug problem are complementary and mutually reinforcing".<sup>20</sup> Indeed, the operational recommendations outlined in the document have multiple links to the SDGs, particularly Goals 3 and 16. To achieve Goal 3 on good health

and well-being, early detection of NPS and their associated health risks is key to strengthening the prevention and treatment of substance abuse (Target 3.5). This requires forensic laboratories capable of supporting health and emergency services and early warning systems, particularly in developing countries (Target 3.d), to communicate the associated risks. Enhancing the capacity of forensic laboratories to provide reliable, high quality evidence based on scientific methods is essential to "provide access to justice for all and build effective, accountable and inclusive institutions at all levels" (Goal 16). Forensic services need to be accessible and of high quality to promote the rule of law and ensure equal access to justice for all (Target 16.3). Forensic capacity building, data collection and information sharing among Member States on new trends, such as the emergence of NPS, contributes to building strong institutions to prevent violence and combat terrorism and crime (Target 16.a).

In the Outcome Document of the 2016 UNGASS, both the UNODC EWA and Global SMART Programme are highlighted as important instruments in integrating national, regional and international reporting and information exchange systems. The implementation of the recommendations will be key to catalyse and mobilise international action as a counter measure to address the emergence and challenges of NPS. Concerted efforts are required for the exchange of information and sharing of best practices, which can readily improve data collection mechanisms, prioritization practices of NPS, help countries make informed decisions on legal frameworks and the best approach, and enhance the preparedness of countries. Such efforts will strengthen the scientific evidence-based, balanced, comprehensive and integrated approach to drug policy that will ultimately reduce demand and restrict supply. Future challenges will be to maintain these efforts and find effective and prompt solutions in dealing with the dynamics of substances that are not under national or international control.

<sup>20</sup> A/S-30/L.1.

## Recent Global SMART Publications



Global SMART Update Volume 15 (English and Spanish)



Global SMART Update Volume 14 (English and Spanish)



Global SMART Update Volume 13 (now Russian)



Global SMART Update Volume 11 (now Russian)



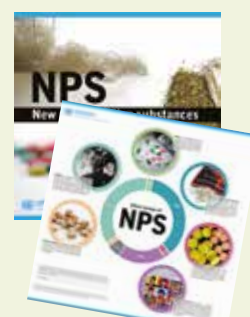
World Drug Report 2016



Information Bulletin on synthetic drugs in Latin America and the Caribbean (English and Spanish)



Early Warning Advisory Newsletter Volume 7, 8 and 9



Updated New Psychoactive Substance leaflet and poster (English)



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If you have comments on this report, or would like to contribute information that should be considered for future reports, please contact the Global SMART Programme at [globalsmart@unodc.org](mailto:globalsmart@unodc.org). Information on the Global SMART Programme can be found via the internet at [www.unodc.org](http://www.unodc.org) and [www.apaic.org](http://www.apaic.org) or by contacting UNODC at the Vienna International Centre, P.O. Box 500, A-1400, Vienna, Austria.