Special Segment
The changing nature of “ecstasy”
About the SMART Update

The threat of synthetic drugs is one of the most significant drug problems worldwide. After cannabis, amphetamine-type stimulants (ATS) are the second most widely used drugs across the globe, outstripping the use of cocaine and heroin. Since 1990 the illicit manufacture of ATS has been reported from more than 70 countries and the figure keeps rising. Along with ATS, the continued growth of the new psychoactive substances (NPS) market over previous years has become a policy challenge and a major international concern. A growing interplay between the new drugs and illicit drug markets is being observed. By October 2013, the emergence of NPS had been reported in more than 85 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, Global SMART provides capacity building in East and South-East Asia, the Pacific, Latin America and Africa and regularly reviews the global ATS situation. Features of UNODC Global SMART are online data collection, situation reports and regional assessments. The first global situation assessment on NPS “The challenge of new psychoactive substances” was published in March 2013, pursuant to Commission on Narcotic Drugs resolution 55/1 (2012). The SMART Early Warning Advisory web-portal offers regularly updated information on NPS and related legislation (https://www.unodc.org/NPS).

The Global SMART Update is designed to provide regular brief reporting on emerging patterns and trends of the global synthetic drug situation. Given the speed at which changes in the ATS and NPS markets occur, it is especially important to have a simple sustainable mechanism for frequent information sharing from different parts of the world. The Global SMART Update is published twice a year and is available in English and Spanish. Electronic copies of the SMART Updates and other publications are available at http://www.unodc.org/unodc/en/scientists/smart.html.

The Update reports various synthetic drug information, such as significant or unusual drug or precursor seizures, new locations, methods and chemicals used for clandestine manufacture, new trafficking groups or routes, changes in legislation to address the problem of synthetic drugs, emerging drugs or user groups, and health implications related to their use.*

In this issue

Each issue of the Update contains a special coverage and thematic segments. Previous issues highlighted the increasing dimension of ATS trafficking from Africa to East and South-East Asia; the ATS situation in South Asia; the changing faces of illicit ATS manufacture; the spread of new psychoactive substances across the globe and, the legal situation and responses to the challenge of new psychoactive substances and the road ahead.

The special segment of the current issue addresses the changing nature of the content of drugs and substances sold as “ecstasy”. For this purpose, the historical background of MDMA and the original active component of ecstasy is outlined; a description of MDMA, its legal status and its mechanism of action is presented and reported adverse effects associated with its use are briefly summarized. Finally, the composition of pills currently sold as “ecstasy” is discussed.

While data on ATS seizures is often easy to obtain, information on the demand for ATS and NPS remains scarce and anecdotal in nature. Nevertheless, the Update continues to make a determined effort to highlight information on ATS and NPS use. Various drug demand-related subjects are covered in this issue, including facts that have come to light on the combined use of MDMA and new psychoactive substances and their impact in selected countries. The Update also covers the latest developments in the illicit manufacture of ecstasy in Europe and the increasing use of ecstasy in a powdered form, which is reported to be rapidly gaining prominence in some regions of the world.

*The information and data contained within this report are from official Government reports, press releases, scientific journals or incidents confirmed by UNODC Field Offices. Additional or updated information from previously reported incidents may also be included where appropriate. Information denoted with an asterisk (*) are from ‘open sources’ where UNODC is waiting for official confirmation and therefore should be considered only preliminary. 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: Global SMART Update Volume 11, March 2014. Cover picture © U.S. Customs and Border Protection.
The changing nature of “ecstasy”

3,4-Methylenedioxymethamphetamine (MDMA) was the original chemical found in pills sold as ecstasy and the two names have been used interchangeably. However, in the last few decades several substances under international control and new psychoactive substances (NPS) that mimic or produce effects similar to MDMA, have been identified as components of pills sold as “ecstasy”. Chemical analyses of “ecstasy” pills around the world have revealed that their composition is rather diverse, varying from products with MDMA as the sole psychoactive substance, through mixtures of MDMA with other psychoactive substances, to pills which do not contain MDMA but rather other psychoactive substances which mimic its effects. Thus, users can no longer be certain of the content of pills sold as “ecstasy” and are thereby exposed to increased health risks and potentially dangerous effects. In addition, data on the prevalence of MDMA use may be inaccurate due to the varying composition of “ecstasy”.

MDMA, a failed medicine

The German pharmaceutical company, Merck, first filed a patent for MDMA in 1912. Although the patent was issued in 1914, it was not immediately investigated for use as a pharmaceutical product. In 1960, the synthesis of MDMA was reported for the first time followed by reports of its use in humans during the latter part of that decade. During the 1970s, MDMA was introduced in clinical psychotherapy in the United States, although the drug had never undergone formal clinical trials and was therefore not approved for use in humans. By the late 1970s and early 1980s, MDMA gained popularity in psychiatric practice. In 1970, MDMA was detected for the first time in pills seized in the United States, but it was only during the late 1970s and early 1980s that MDMA became popular among urban communities in the United States. By the mid-1980s, the use of ecstasy (the street name for MDMA coined in California partly due to feelings of euphoria and emotional warmth caused by the drug) became popular in the nightclub and electronic music scenes, and spread to the European continent and Oceania. In 1985, the United States placed MDMA under temporary control and was brought under permanent control under the Controlled Substances Act (Schedule I) in 1988, after being deemed to have no medical use, and a high potential for abuse. MDMA became an internationally controlled substance in 1986, and it is currently listed in Schedule I of the 1971 Convention on Psychotropic Substances together with its chemical analogues MDA and MDEA.

“Ecstasy” use continues to be popular in nightlife settings in urban centres, particularly among the youth. For instance, of the two million past-year users of “ecstasy” in Europe, 1.5 million were between 15 and 34 years of age. Oceania (2.9 per cent), North America (0.9 per cent) and Europe (0.7 per cent) are the three regions with the highest prevalence of ‘ecstasy’ use, according to the latest estimates.

What is MDMA?

MDMA is a derivative of amphetamine and a member of the phenethylamine family. MDMA and its chemical analogues such as 3,4-methylenedioxymphetamine (MDA) and 3,4-methylenedioxymethylamphetamine (MDEA) belong to the more general category commonly referred to as ecstasy-group substances.

MDMA hydrochloride, a white or off-white powder or crystals, is the most common salt form and is soluble in water. MDMA is usually made into brightly coloured pills or capsules and sold as ecstasy for oral use. It is also available in a powder form for nasal insufflation (snorting). Ecstasy can also be prepared for injection, although this mode of administration is uncommon. Recent reports from Australia and the United States have pointed to an increased presence of MDMA in powder as well as crystalline forms on the market. The powder form of MDMA is associated with the street name “Molly”. Pills sold as “ecstasy” in the market are known by names such as “E”, “X”, “XTC”, “Rolls”, “Beans”, “Adam”; “Molly” (powdered ecstasy), in addition to other names that often reflect the imprinted logo in the pills, e.g. “Mitsubishi”, “Playboy”, “Rolex”, and many others.

How is MDMA obtained?

The primary precursors of MDMA are safrole (including in the form of saffrole rich oils (SRO)), isosafrole, piperonal and 3,4-methylenedioxyphenyl-2-propanone (3,4-MDP-2-P, also known as PMK). SRO occurs naturally in over 360 tree species in South-East Asia. The oil is obtained from tree trunks, roots, bark, branches and leaves, and is used legitimately in the fragrance and insecticide industries. In Cambodia, SRO is extracted from the tree locally known as *Mreas Prov Phnom*, but the production, import, or export of SRO is prohibited in the country, to prevent its use as a precursor for MDMA. Despite these efforts, illegal production and trade has been growing and the demand for this precursor chemical is reportedly leading to deforestation. In 2008, the Australian Federal Police reported that...
one criminal group, illegally harvested over 900 tons of *Mreas Prov Phnom* wood, with an expected yield of 35 tons of safrole. In 2013, authorities in the Netherlands seized 12,000 litres and 1,800 litres of SRO in shipments arriving from Thailand and Cambodia, respectively.  

**How does MDMA work?**

Serotonin (5-HT), a naturally occurring neurotransmitter in the human body, is involved in the regulation of aggression, appetite, sleep, memory, mood, sexual activity, depression and temperature. It contributes to feelings of well-being, and subsequently referred to as a “happiness hormone”. As such, medicines that cause the release of, or prevent the removal of serotonin in the body have been used as antidepressants. Dopamine, another neurotransmitter in the body, is involved in the control of movement, cognition, motivation and reward. 

MDMA and its analogues, have an affinity for serotonin receptors in the body and are thus able to mimic the effects of serotonin. In addition, they increase the release of dopamine. As MDMA initially enhances brain concentrations of serotonin, its appeal rests on its psychological effect, which relates to its ability to induce in the user a profound feeling of attachment and connection. Human findings indicate immediate positive psychological effects of euphoria, increased energy and a feeling of closeness to others.  

**The changing content of “ecstasy”**

In the middle 2000s, a world-wide shortage of MDMA was observed on the drug market, as a result of the successful control of its precursors. Shortages of the precursors used to make ecstasy-group substances such as piperonal, SRO and PMK led to a decreased supply of MDMA and its analogues as the main components in pills sold as ecstasy. In 2004, the Cambodian government classified *Mreas Prov Phnom* trees (source of SRO) as rare species under the Forestry Law, making harvesting illegal. Agreements on stringent controls on importation of precursors, namely of PMK, were later signed between the European Union and China. These controls were reflected in the drug market, with global seizures of PMK decreasing from 40 litres in 2009 to 2 litres in 2010, while seizures of SRO fell from 1,065 litres in 2009 to 168 litres in 2010.  

The continuing demand for ecstasy led to the use of alternatives to MDMA, which at an appropriate dose mimicked the effects of ecstasy-group substances. The market was also characterised by pills with a low content of MDMA and mixtures of MDMA and other psychoactive substances. Substances used as substitutes for MDMA included synthetic catinones such as mephedrone and piperazines such as benzylpiperazine (BZP). Hence, since 2005, pills sold in the market as “ecstasy” were increasingly found to contain other drugs and new psychoactive substances. Such modifications impacted users, who were misled about the content of “ecstasy” and the adverse effects associated with the use of substitute substances. While the toxicity associated with MDMA and its analogues, e.g. acute and sometimes fatal effects occurring within hours of administration and neurotoxicity manifested by irreversible destruction of central 5-HT receptors are well documented, information on the pharmacology and toxicity profiles of many of the substances used as substitutes in “ecstasy” pills remain limited. For example, PMMA (paramethoxy-N-methylamphetamine, known as “pink ecstasy”), a dangerous drug that carries the street name of “Dr Death”, is a stimulant drug with similar effects to MDMA but is associated with significant toxicity due to a slow onset of action and the related risk of unintentional overdosing. The unprecedented emergence of new psychoactive substances, most of which have pharmacological effects similar to MDMA, but for which the toxicological effects have not been yet established, means that users of “ecstasy”, who inevitably cannot ascertain the composition of the drug, take a high risk, with potentially fatal outcomes.  

Is “ecstasy” synonymous with MDMA?  

The term ecstasy was primarily applied to pills containing MDMA (in different degrees of purity) and cutting agents (such as caffeine). However in the last decade, a wide range of drugs have been identified in pills sold as “ecstasy”. These include amphetamines, ketamine, cocaine, ephedrine and more recently new psychoactive substances. For instance, in 2012, chemical analysis of seized “ecstasy” pills in New Zealand found them to contain little or no MDMA but a blend of other illicit and/or unscheduled substances including (but not limited to) 4-MEC, MDPBP, N-ethylamphetamine, Ethcathinone (BZP) and TFMPP. The evidence for the changing nature of “ecstasy” is overwhelming and its synonymy with MDMA may soon be merely of historical value.  

Regional differences in “ecstasy” composition  

The distribution of substances found in pills sold as “ecstasy” may vary from one geographical location to the other. An overview of substances recently found in

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8 International Narcotics Control Board, “Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances”, 2013.  

9 Neurotransmitters are chemical substances that transmit nerve impulses across the spaces in between nerve cells.  


11 International Narcotics Control Board, “Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances”, 2011.  


13 4-Methyl-N-ethylcathinone, a synthetic cathinone not under international control.  

14 3,4-Methylenedioxy-N-pyrrolidinobutylphenone, a synthetic cathinone not under international control.  

15 Substance listed in Schedule IV of the 1971 Convention on Psychotropic Substances.  

16 Not under international control.  

17 1-(3-Trifluoromethylphenyl)piperazine (TFMPP), a piperazine not under international control. United Nations Office on Drugs and Crime (UNODC), Annual Report Questionnaire for New Zealand, 2012.
In the European Union, it was estimated in 2006 that almost 10 per cent of pills sold as ‘ecstasy’ contained mCPP.22 This percentage increased to about 50 per cent in some Member States at the end of 2008 and beginning of 2009.23 The piperazine mCPP, alone or with other substances, was identified in 20 per cent or more of the pills analysed in Austria, Belgium, Croatia, the Czech Republic, Cyprus, Denmark, Finland, Portugal and the United Kingdom. In addition to NPS, amphetamines have also been found in pills sold as “ecstasy” in Luxembourg, Spain, Turkey24 and Croatia.25 Estonia has also reported the presence of new psychoactive substances such as PMMA and CPP,26 in pills sold as “ecstasy”.27

In South America, the presence of ketamine in pills sold as “ecstasy” has been reported in Brazil.28 The analysis of “ecstasy” pills on the Canadian market in 2012 revealed the presence of methamphetamine and 2C-B,29 new psychoactive substances such as BZP, TFMP, MDPV,30 “FOXY”,31 2C-E,32 BTCP,33 alpha-PVP,34 as well as the prescription drugs such as diphenhydramine, procaine, benzocaine and lidocaine.35 Similarly, pills sold as “ecstasy” in the United States were found to contain methamphetamine, dimethyltryptamine36, benzylpiperazine, ketamine, TFMP, PMMA and prescription drugs such as cocaine, lidocaine, phenacacetin, methorphan.37

Almost five decades after its introduction on the drug scene, “ecstasy” has evolved into one of the most dangerous products on the market, not least because of the well-documented dangers of MDMA, but due to the uncertainty of what it now contains. Forensic analysis is more than ever before, essential in understanding the nature of the “ecstasy” market and in accurate reporting of the prevalence of MDMA use.

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18 Not under international control.
19 “Narcotics Bureau Quarterly Report, 3Q – 2012 (July-September)”. Narcotics Bureau, Hong Kong Police Force (HKNP), presented at the Eighteenth Asia-Pacific Operational Drug Enforcement Conference (ADEC), Tokyo, 26-27 February 2013. PMMA (1-(4-methoxyphenyl)-2-methylaminopropane) is a phenethylamine not under international control.
20 These substances included MDMA, methamphetamine, MDA, ketamine, 4-methylmethcathinone (mephedrone); JWH-018, 3,4-methylenedioxyprovalerone (MDPV), 3,4-Methylenedioxymethcathinone (methylene), fluormethcathinone, 1-(3-trifluoromethylphenyl)piperazine, methylmethcathinone (4-MEC), 1-benzylpiperazine (BZP), pentedrone; United Nations Office on Drugs and Crime (UNODC), Annual Report Questionnaire for Singapore 2012.
21 These NPS included ketamine, methylene and unspecified synthetic cannabinoids; United Nations Office on Drugs and Crime (UNODC), Annual Report Questionnaire for Indonesia 2009-2012.
22 1-(3-Chlorophenyl)piperazine, a piperazine not under international control.
26 Substance not identified due to lack of detailed information.
28 United Nations Office on Drugs and Crime (UNODC), Annual Reports Questionnaire, Brazil 2012.
29 Substance listed in Schedule I of the 1971 Convention on Psychotropic Substances.
30 3,4-Methylenedioxymethcathinone, a synthetic cathinone not under international control.
31 Foxy is a commonly known brand name for NPS that frequently contains tryptamines such as 5-MeO-DiPT.
32 4-ethyl-2,5-dimethoxyphenethylamine, a phenethylamine not under international control.
33 1-(1-Benzothiophen-2-yl)cyclohexylpiperidine, a substance not under international control.
34 α-Pyrrolidinopropiophenone, a cathinone not under international control.
36 Substance listed in Schedule I of the 1971 Convention on Psychotropic Substances.

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### Table 1: Substances found in pills sold as ‘ecstasy’

<table>
<thead>
<tr>
<th>Substances</th>
<th>Americas</th>
<th>Asia</th>
<th>Europe</th>
<th>Oceania</th>
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<td>2C-B</td>
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<td>2C-E</td>
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<td>4-MEC</td>
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<td>α-PVP</td>
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<td>Amphetamine</td>
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<td>BTCP</td>
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<td>CPP**</td>
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<td>DMT</td>
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<td>Eutylone (bk-EBDD)</td>
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<td>Fluorometh-cathinone</td>
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<td>JWH-018</td>
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<td>Ketamine</td>
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<td>mCPP</td>
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<td>Mephedrone</td>
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<td>Methamphetamine</td>
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<td>Methoxetamine</td>
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<td>Methylethcathinone</td>
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<td>Methylene</td>
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<td>N-ethylamphetamine</td>
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<td>N-ethylcathinone or BZP</td>
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<td>Pentedrone</td>
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<td>PMMA</td>
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<td>TFMP</td>
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*Prescription drugs and cutting agents are not listed in this table
** Substance not identified due to lack of detailed information

Note: substances in bold letters are substances under international control

In South-East Asia, pills sold as “ecstasy” have been found to contain a variety of new psychoactive substances, primarily ketamine. Diversion from the licit production of ketamine for medical purposes in the region has been identified as one of reasons for its wide availability. In Hong Kong (China), pills sold as “ecstasy” have been reported to contain amphetamine-type stimulants and new psychoactive substances, such as ketamine,18 TFMP and PMMA.19 Similarly, Singapore20 and Indonesia have reported the presence of new psychoactive substances in pills sold as “ecstasy”.21

In South-East Asia, pills sold as “ecstasy” have been reported in Japan.26 The analysis of “ecstasy” pills on the Canadian market in 2012 revealed the presence of methamphetamine and 2C-B,29 new psychoactive substances such as BZP, TFMP, MDPV,30 “FOXY”,31 2C-E,32 BTCP,33 alpha-PVP,34 as well as the prescription drugs such as diphenhydramine, procaine, benzocaine and lidocaine.35 Similarly, pills sold as “ecstasy” in the United States were found to contain methamphetamine, dimethyltryptamine36, benzylpiperazine, ketamine, TFMP, PMMA and prescription drugs such as procaine, lidocaine, phenacacetin, methorphan.37
The segments presented were selected to illustrate the thematic focus of this Global SMART Update issue. The sequence of the segments follows roughly an east-west direction from Oceania, which has among the highest prevalence rates for ATS use in the world, through East Asia, with its large number of ATS users to other regions and continents. The numbered pins on the map above correspond with the index of segments below.

**Index of segments**

**1.** CHIMAY, Belgium – 23 August 2013  
**2.** GLASGOW, United Kingdom – 27 January 2014  
**3.** LONDON, United Kingdom – 28 August 2013  
**4.** PALMA DE MALLORCA, Spain – 21 September 2013  
**5.** BUENOS AIRES, Argentina – 09 January 2013  
**6.** SANTIAGO, Dominican Republic – 16 August 2013  
**7.** CUCUTA, Colombia – 27 August 2013  
**8.** SAN JOSE, Costa Rica – 15 November 2013  
**9.** ATLANTA, United States – 27 September 2013  
**10.** WASHINGTON, United States – 02 December 2013
Australia: increasing seizures of ecstasy
SYDNEY, Australia – 29 December 2013. MDMA seizures by Federal Police are reported to have increased significantly in the past two years from nearly 11 kg in 2010-11 to 155 kg in 2012-13. MDMA detections by custom authorities at the border have also increased by 330 per cent (from 964 detections to 4139 detections). A reported increase in police seizures of ecstasy in powder form points to a recovery of the ecstasy market in the country. Experts fear that the ecstasy market will follow a trend observed in the United States, i.e. a resurgence of MDMA in a powder form, often known as “Molly”. While pills are still by far the most popular form of ecstasy used among partygoers in Australia, other forms of the drug are rapidly entering the market, including capsules, powder or crystals, which users perceive to be of higher quality.*

Australia: 25I-NBOMe found in pills sold as “ecstasy”
HUNTER, Australia – 12 December 2013. Health authorities have warned that pills sold in Hunter (New South Wales) as “ecstasy” do not contain MDMA but rather 25I-NBOMe, a psychoactive substance not under international control that mimics the effects of LSD. The warning was issued after forensic analysis was carried out on pills recently seized by local police. NBOMe substances have been linked to the death of two teenagers from Sydney and from the Central Coast. The pills were reported to be printed with a lightning bolt or the logo of “Louis Vuitton”. The emergence of NBOMe substances on the ecstasy market and as substitutes for LSD has also been reported by other countries, including the United Kingdom, Chile and Colombia (see Global SMART Update, Vol. 10, segments 20, 26 and 27)*.

Philippines: methamphetamine-MDMA blend sold as “ecstasy”
MANILA, Philippines – 12 December 2013. The Philippine Drug Enforcement Agency (PDEA) has reported the identification of a ‘new’ variety of “ecstasy” in the country. According to a press release, this is a blend of MDMA and methamphetamine hydrochloride, which is sold in a capsulated form and in a variety of colours. This discovery comes as a result of chemical analysis conducted by the PDEA Laboratory Service on 38 capsules seized during a drug raid in Quezon City, in early December. Precursors and chemicals used for the manufacture of the drug are reportedly imported from countries in South-East Asia to the Philippines through bulk shipment. The new blend is reported to be gaining popularity among club-goers in the Philippines.

Malaysia: 275,000 ecstasy pills destined to Indonesia seized
KUALA LUMPUR, Malaysia – 06 November 2013. Over 275,000 ecstasy pills with an estimated value of USD 5 million were seized from two Indonesian nationals in Selangor (west coast of Malaysia). One of them, a fisherman, was allegedly smuggling the drugs into Indonesia along the west coast using improvised jetties, apparently taking advantage of the lack of law enforcement activity in the area.*
Thailand: seizure of 12 tons of ecstasy precursors destined for the Netherlands

BANGKOK, Thailand – 02 August 2013. Around 12 tons of safrole-rich oil - a main precursor for ecstasy manufacture - have been seized by officers of the Thailand Narcotics Control Board. The precursor, stored in 671 barrels, was seized from a drug trafficking group while being prepared for export to Rotterdam (Netherlands). It is estimated that nearly 86 million ecstasy pills could have been prepared with the safrole-rich oil, which was concealed in vegetable oil containers. In a similar incident in 2011, Belgian authorities reported the seizure of 10,000 litres of safrole-rich oils originating from Thailand.

UNODC: the “ecstasy” market has resurfaced in East and South-East Asia

BANGKOK, Thailand – 08 November 2013. After a decline of ecstasy use in the region over the past few years, Cambodia, China, Indonesia, Thailand and Viet Nam reported a new increase in ecstasy use in 2012, according to the UNODC report “Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs: Challenges for Asia and the Pacific” 2013. The number of “ecstasy” pills seized in the region tripled to over 5.4 million pills in 2012, from about 1.6 million pills seized in 2011. Although “ecstasy” is not reported as the most common drug of use by any country in the region, it is perceived by experts as the second most common illicit drug of use in Australia, New Zealand and Viet Nam. Like other regions in the world, many of the seized pills sold as “ecstasy” were found to contain substances other than MDMA, including synthetic cathinones, ketamine, piperazines and phenethylamines, especially in (but not limited to) Australia, China, Indonesia, Japan, New Zealand, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam.

Malaysia: significant seizure of ecstasy in Kuala Lumpur and Selangor

KUALA LUMPUR, Malaysia – 26 September 2013. Police seized drugs with an estimated value of nearly USD 15 million in what is reported to be one of the biggest seizures in recent years. The drugs included 27 kg of ecstasy pills, 210 kg of methamphetamine and 41 kg of heroin, hidden in packages labelled as “Chinese herbal tea”. The raids were conducted in Cheras (a suburb in Kuala Lumpur) and Kajagang (a town in Selangor, on the west coast of Peninsular Malaysia) and resulted in the arrest of five suspects. The drugs are believed to have been smuggled from Myanmar, but the investigation remains open.

Malta: pills sold as “ecstasy” found to contain only caffeine

VALLETTA, Malta – September 2013. In addition to the use of psychoactive substances other than MDMA and its analogues MDA and MDEA in tablets sold as “ecstasy”, there is evidence that non-controlled substances such as caffeine, are being marketed as ecstasy. In September 2013, a Court in Malta acquitted a man accused of possession of over 12,000 “ecstasy” pills after forensic analysis showed that the pills only contained caffeine and no illicit substance.*
Switzerland: piperazines and synthetic cathinones found in “ecstasy” pills

ZUERICH, Switzerland – 12 December 2013. Analysis of substances sold as “ecstasy” pills in the country have shown that like in other European countries, these pills contain substances other than MDMA. These substances include amphetamine-type stimulants, piperazines (especially m-CPP) and synthetic cathinones. In December 2013, Zuerich municipal police seized 20,000 ecstasy pills during a routine car check. Two suspects were arrested. The raids led the police to several searches throughout the canton, which further resulted in the seizure of 1 kg of amphetamines and the arrest of two other suspects.*

Belgium: largest ecstasy manufacturing facility ever found in the European Union

OPGLABBEEK, Belgium – 23 October 2013. Synthetic drug manufacture seems to be increasing in the country. Belgian Police, supported by Europol, dismantled the largest ecstasy manufacturing facility ever found in the European Union, which was located in an old pig barn, near Opglabbeek (northwest area of Belgium and the Netherlands). Following a law enforcement operation on 18 October, 35 tons of unspecified chemicals, valued at around USD 4 million, were seized. The laboratory was reported to cover 1000 squares metres, with a significant output capacity of several hundred kilos of MDMA per week. Five suspects, presumably part of an international organised crime group, were arrested. This is the second seizure of a large-scale ecstasy manufacturing facility in the country in 2013 (see segment 11).

Belgium: large-scale ecstasy manufacturing facility dismantled in Chimay

CHIMAY, Belgium – 23 August 2013. A laboratory for ecstasy manufacture located at a farm warehouse near the town of Chimay (southern Belgium) was dismantled by Asse Federal Police, supported by Europol, in what was reported as one of the largest illicit synthetic drug manufacturing facility ever discovered in Europe. As a result of the operation, nearly one ton of crystalline MDMA, several tons of safrole-rich oils, and other chemicals used in the manufacture of ecstasy were seized during the operation. The setup of the laboratory was reported to be unique due to the volume and large capacity of the custom-made equipment. The suspects include nationals from different countries and are believed to be part of an international drug trafficking group.

Scotland: dangerous controlled substance PMA sold as “ecstasy”

GLASGOW, United Kingdom – 27 January 2014. A warning of a “pink superman” pill that is currently being sold in the market as “ecstasy” has been issued by Police Scotland. According to the warning, the pill has a printed “superman” logo on one side and a “half score” line and “®” logo on the reverse. Forensic analysis revealed that these pills contain para-methoxyamphetamine (PMA), a substance controlled under the 1971 Convention on Psychotropic Substances and which has been linked to several deaths in the past. PMA, which also carries the street name of “Dr. Death” produces similar effects as MDMA but is life threatening at doses lower than that of MDMA. The slower onset of the effects of PMA compared to MDMA, presents a potential risk of overdose.*
United Kingdom: deaths related to ecstasy nearly tripled in 2012

LONDON, United Kingdom – 28 August 2013. In August 2013, the Office for National Statistics released figures on deaths related to drug poisoning in England and Wales in 2012. While the number of deaths involving amphetamines increased from 62 deaths in 2011 to 97 in 2012, the number of drug-related deaths due to ecstasy almost tripled from 13 in 2011 to 31 in 2012. A particularly worrying finding was the significant increase in the number of deaths related to para-methoxyamphetamine (PMA) and p-methoxymethamphetamine (PMMA), substances often sold as “ecstasy” but often associated with fatalities. The deaths related to PMA/PMMA rose from one incident in 2011 to 20 in 2012.

Spain: seizure of 8,000 ecstasy pills destined to be sold in Palma

PALMA DE MALLORCA, Spain – 21 September 2013. National police seized 8,000 ecstasy pills that were destined to be sold in Palma de Mallorca. In addition to the pills, 800 g of ergotamine – a precursor used in the manufacture of LSD –, two precision balances and an amount of over USD 2,000 were seized. Police started the operation following the identification of the sale of ecstasy pills among the youth in entertainment areas of the Island. This led to the arrest of a Dutch national, who at the moment of the arrest was found to possess documentation for the manufacturing of LSD – a substance under international control –. A national from Spain, who was allegedly in charge of distributing the drugs in the Island, was also arrested. A search of his residence led to the seizure of the ecstasy pills and of the ergotamine.

Argentina: increasing ecstasy manufacture in the country

BUENOS AIRES, Argentina – 09 January 2014. In January 2014, an ecstasy laboratory was dismantled in Mar de Ajo. Precursor chemicals for an estimated manufacture of nearly 600,000 pills were seized along with 700 ecstasy pills.* In September 2013, Buenos Aires Federal Police dismantled another synthetic drug manufacturing facility. Unspecified precursor chemicals for the manufacture of an estimated 100,000 ecstasy pills were seized along with 25,000 ecstasy pills and a pill-pressing machine. The operation was one of 15 raids carried out throughout the capital, which resulted in the seizure of nearly 200,000 ecstasy pills and precursor chemicals. Ecstasy seizures in the country rose significantly from nearly 18,000 ecstasy pills seized in 2011 to nearly 92,000 pills seized in 2012.

Dominican Republic: first report of a synthetic drug laboratory dismantled in Caribbean countries

SANTIAGO, Dominican Republic – August 2013. The National Drug Control Directorate together with the Public Prosecutors Office dismantled a clandestine laboratory in Canabacoa (north of the country) and seized 7,400 ecstasy pills, together with a small amount of cannabis and heroin. This is the first report of a clandestine laboratory for the manufacture of ecstasy in the Dominican Republic and of amphetamine-type stimulants in Caribbean countries.
Colombia: significant ecstasy seizure made at the Venezuelan border

**CUCUTA, Colombia – 27 August 2013.** Colombian National Police seized nearly 35,000 ecstasy pills, with an estimated value of approximately USD 500,000 in a package sent from Bogota to Cucuta (northeast of the country), a city located on the border to Venezuela. This seizure represents 87 per cent of the total ecstasy seizures reported by Colombia in 2012 (nearly 40,000 pills).* Increasing presence of ecstasy in the market has also been reflected in drug prevalence studies. According to the 2012 “II Epidemiological Study on Drug Use among University Students in the Andean Community” Colombia is one of the countries with the highest prevalence of ecstasy use among undergraduate students in the Andean countries. Lifetime prevalence of ecstasy use among undergraduate students in Colombia was 3.5 per cent in 2012. In comparison Ecuador reported a lifetime prevalence of 2 per cent, Bolivia 1.4 per cent and Peru 1 per cent. Moreover, ecstasy was reported as the third most used drug, after cannabis and inhalants (surpassing cocaine and cocaine base paste use), among undergraduate students in Colombia.

Costa Rica: ecstasy market is beginning to recover

**SAN JOSE, Costa Rica – 15 November 2013.** A significant increase in ecstasy seizures has been reported by the Costa Rican Narcotics Institute. Between January and September 2013, 11,370 ecstasy pills were seized, compared with 293 pills in 2012 and 19,000 pills in 2011. The biggest seizure of ecstasy pills resulted from the dismantling of an international drug trafficking network, in August 2013. The network was allegedly sending drugs to Nicaragua using overland routes, as well as cocaine to Europe (Netherlands), while bringing ecstasy from the Netherlands and Germany for the local market. The Office of the Public Prosecutor confirmed that the international drug organization was effectively dedicated to cocaine trafficking and was receiving ecstasy through different modes of transportation (mail and human couriers). As a result of this operation, 1.6 kg of cocaine destined to Europe (Netherlands) and 11,100 ecstasy pills destined to be sold in the Costa Rican market were seized.

United States: DEA warns of the dangers of “Molly”

**ATLANTA, United States – 27 September 2013.** The Drug Enforcement Administration (DEA), Atlanta Field Division, issued a warning on the dangers of “Molly”, a synthetic drug that has recently surfaced at a number of large music events. According to the DEA, the pure, high quality powder form of MDMA, often referred as “Molly” had been adulterated with a number of dangerous and potentially deadly analogues of MDMA. The warning highlighted several recent reports of a substantial number of emergency room visits and even overdose deaths associated with “Molly”. For instance, it was reported that around 125 persons were hospitalized after ingesting “Molly” while attending a music festival in Washington. The death of two people and hospitalization of four others was also reported in New York. The substances leading to the deaths have not yet been confirmed by toxicological analysis.

United States: significant rise in ecstasy-related emergency visits among youth, over a six-year period

**WASHINGTON, United States – 02 December 2013.** Hospital emergency department visits related to ecstasy use increased 128 per cent between 2005 and 2011 (from 4,460 visits in 2005 to 10,176 visits in 2011), among patients younger than 21 years old, according to the 2013 report “Ecstasy-Related Emergency Department Visits by Young People Increased between 2005 and 2011; Alcohol Involvement Remains a Concern”, from the Substance Abuse and Mental Health Services Administration (SAMHSA). In 2011, there were approximately 1.25 million emergency department visits related to illicit drug use. It is reported that recently there have been several deaths associated with “Molly”, among young people taking it at concerts and raves. Another key finding highlighted in the report is the combined use of ecstasy and alcohol. In each year from 2005 to 2011, an average of 33 per cent of emergency department visits among those younger than 21 years old, involved ecstasy and alcohol.
Global SMART accomplishments for 2013

Since 2008, the Global SMART (Synthetics Monitoring: Analyses, Reporting and Trends) Programme has been working towards improving the capacity of targeted Member States to generate, manage, analyse, report and use information on illicit synthetic drugs. In 2013, the Global SMART Programme:

Published and launched

- The Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs: Challenges for Asia and the Pacific, 2013;
- The Global SMART Updates Volume 9 and 10 (in English and Spanish);
- The UNODC Early Warning Advisory on new psychoactive substances (https://www.unodc.org/NPS);

Organised

- The international expert consultations on new psychoactive substances in Vienna;
- A side event on “new psychoactive substances: regional approaches and challenges” at the 56th session of the Commission on Narcotic Drugs;
- A briefing for its stakeholders during the SMART Advisory Group Meeting in Vienna;
- The second SMART regional workshop on synthetic drugs in Latin America and the fifth SMART annual regional workshop on synthetic drugs in East and South-East Asia;

Contributed to

- The 2013 World Drug Report, including the thematic chapter on NPS;
- The 53rd regular session of the Inter-American Drug Abuse Control Commission (CICAD);
- The dissemination of information related to the synthetic drug situation at targeted conferences and events, e.g. such as the Meetings of Heads of National Drug Law Enforcement Agencies for Europe, Latin America and the Caribbean and for Asia and Pacific, G8 Roma-Lyon subgroup Experts Meeting on New Psychoactive Substances (April and October 2013), Senior Official Committee Meeting and Ministerial Meeting held under the Greater Mekong Sub-region’s MoU mechanism in Myanmar (May 2013)

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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. Information on the Global SMART Programme can be found via the internet at www.unodc.org and www.apaic.org or by contacting UNODC at the Vienna International Centre, P.O. Box 500, A-1400, Vienna, Austria.