

## F. THE MARKET FOR AMPHETA-MINE-TYPE STIMULANTS

### New psychoactive substances have become a global phenomenon

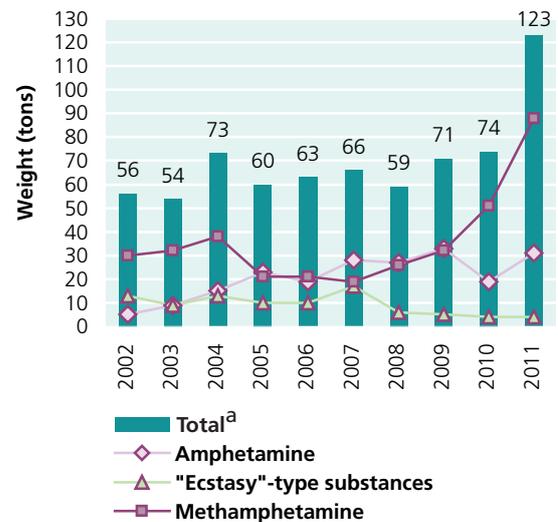
The range of new psychoactive substances on the markets for ATS is at its peak, exceeding the number of substances that are currently within the scope of the Single Convention on Narcotic Drugs of 1961 and the Convention on Psychotropic Substances of 1971. The issue of NPS is covered extensively in chapter II.

### Global amphetamine-type stimulant seizures rise to highest level ever recorded

Seizures of ATS have reached new highs: 123 tons in 2011 compared with 74 tons in 2010, a 66 per cent rise. Seizures increased across all regions, with Asia, North America and Europe registering dramatic increases.

The overall increase in ATS seizures is mainly due to surging methamphetamine seizures, which grew by 73 per cent from 51 tons in 2010 to 88 tons in 2011. The highest methamphetamine seizures were reported by Mexico, where seizures more than doubled, from 13 tons to 31 tons, and surpassed for the first time those of the United States which seized 23 tons in 2011, up from 15 tons in 2010. Seizures rose steeply in the Americas (28 tons to 54 tons), Asia (21 tons to 32 tons) and Europe (576 kg to 2 tons).

**Fig. 66. Global seizures of amphetamine-type stimulants, 2002-2011**



Source: UNODC, data from the annual report questionnaire and other official sources.

<sup>a</sup> Including seized amphetamine, "ecstasy"-type substances, methamphetamine, non-specified amphetamine-type stimulants, other stimulants and prescription stimulants. For the categories of other stimulants and prescription stimulants, seizures reported by weight or volume only are included.

Methamphetamine accounts for 71 per cent of global ATS seizures and, as in previous years, most of the world's methamphetamine seizures (61 per cent) are reported by countries in North America. After a significant surge in methamphetamine seizures in Mexico in 2010, seizures doubled again from 13 tons to 31 tons, making it the

### Categories of new psychoactive substances sold on the global market

**Synthetic cannabinoids:** These are cannabinoid receptor agonists which produce effects similar to those of *delta*-9-tetrahydrocannabinol (THC), the principal psychoactive component in cannabis. Synthetic cannabinoids are often laced with herbal products and sold as *Spice*, *K2*, *Kronic*, etc.

**Synthetic cathinones:** These are analogues and derivatives of the internationally controlled substance cathinone, one of the active components of the khat plant. They generally have stimulant effects and include frequently reported NPS such as mephedrone and methylenedioxypropyl-alerone (MDPV).

**Ketamine:** A human and veterinary anaesthetic which acts as a stimulant at low doses and a hallucinogen at high doses. It is one of the most widespread NPS in Asia.

**Phenethylamines:** This group contains substances related to amphetamine and methamphetamine, and generally produces stimulant effects. However, modification of these compounds can lead to potent hallucinogens such as Bromo-Dragnfly.

**Piperazines:** These substances are frequently sold as

"ecstasy" because of their central nervous system stimulant properties. The most commonly reported substances in this group are N-benzylpiperazine (BZP) and 1-(3-chlorophenyl)piperazine (*m*CPP).

**Plant-based substances:** This group includes plants with psychoactive properties. The most frequently reported are:

Kratom (*Mitragyna speciosa*), a plant indigenous to South-East Asia that contains the alkaloid mitragynine; a stimulant at low doses and sedative at high doses.

*Salvia divinorum*, a plant indigenous to forest areas in Oxaca, Mexico, which contains the active ingredient salvinorin A, a hallucinogenic substance.

Khat (*Catha edulis*), a plant native to the horn of Africa and the Arabian peninsula. The leaves of the plant are chewed, resulting in the release of the stimulants cathinone and cathine.

**Other substances:** These include aminoindanes (stimulants), phencyclidine-type substances (hallucinogens) and tryptamines (hallucinogens).

**Fig. 67. Countries reporting the highest methamphetamine seizures, 2010-2011**



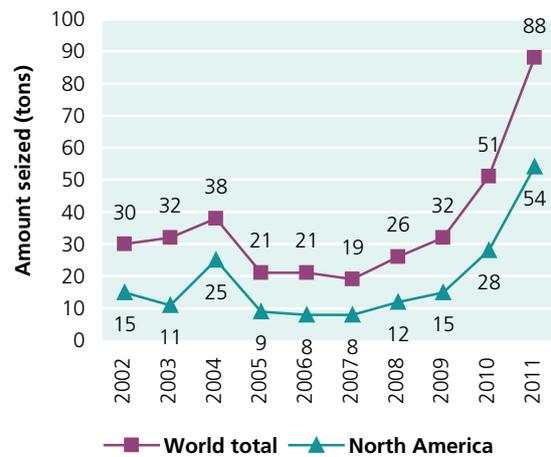
Source: UNODC, data from the annual report questionnaire and other official sources.

country where the most methamphetamine was seized. East and South-East Asia also continue to make up a significant share of the global methamphetamine market, with the highest seizures reported from China (10 tons in 2010 to 14 tons in 2011), Indonesia (354 kg to 1 ton), Malaysia (920 kg to 1 ton) and Thailand (6 tons to 10 tons).

Methamphetamine laboratories were reported by all regions. Most methamphetamine laboratories continue to be reported by the United States, where their numbers quadrupled from 2,754 in 2010 to 11,116 in 2011. In North America, Mexico and Canada reported 159 and 35 laboratories respectively, both showing an upward trend compared with 2010. In addition, 350 laboratories were reported by countries in Europe, most of them by the Czech Republic, where 338 laboratories were identified. To compound the situation, new methamphetamine laboratories have been reported by some countries for the first time. The dismantling of one methamphetamine laboratory was reported by Belgium and four such laboratories were seized in the Russian Federation. Poland saw a re-emergence of the existence of methamphetamine laboratories with the identification of two laboratories for the first time since 2007. Clandestine manufacture is also taking place in Oceania, with 109 methamphetamine laboratories reported by New Zealand.

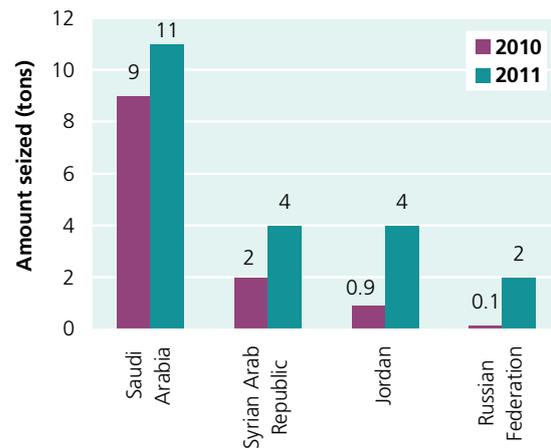
Amphetamine seizures were also on the increase in 2011, the most significant taking place in the Near and Middle East and South-West Asia, from 14 tons in 2010 to 20 tons in 2011. As in previous years, the highest amphetamine seizures were registered by Saudi Arabia (11 tons), the Syrian Arab Republic (4 tons) and Jordan (4 tons). Total seizures rose by 55 per cent, from 20 tons in 2010 to 31 tons in 2011, after having declined in 2010. Increases were reported by all regions. In Europe, particularly in the Russian Federation, seizures of amphetamines increased from 142 kg in 2010 to more than 2 tons in 2011. Laboratory

**Fig. 68. Methamphetamine seized worldwide and in North America, 2002-2011**



Source: UNODC, data from the annual report questionnaire and other official sources.

**Fig. 69. Countries reporting the highest amphetamine seizures, 2010-2011**



Source: UNODC, data from the annual report questionnaire and other official sources.

Note: With the exception of the Russian Federation, which reported seizures in "powder form", all other countries shown in this table seized amphetamines in pill form (mostly Captagon).

activity was reported to have increased in Belarus, where nine laboratories were seized in 2011 after none had been reported in 2010 and two in 2009. At the global level, the number of reported amphetamine laboratories remained largely stable, with 131 laboratories uncovered in 2011 compared with 103 in 2010. Europe accounted for most laboratories (69 laboratories) seized worldwide. With regard to the Near and Middle East region, where most of the world's amphetamine seizures are made, Lebanon reported the seizure of three laboratories manufacturing amphetamine base and two Captagon<sup>94</sup> laboratories.

<sup>94</sup> Captagon was originally the trade name for fenetylline, a synthetic stimulant. Analysis of seized Captagon pills show that most contain amphetamine and other ingredients such as caffeine and theophylline.

**Fig. 70. Countries reporting the highest “ecstasy”-type substance seizures, 2010-2011**



Source: UNODC, data from the annual report questionnaire and other official sources.

There are indications of possible “ecstasy” manufacture in Mexico, with 2,500 litres of safrole, one of the principal precursors of MDMA, seized at an airport in 2011 and three shipments of safrole reported as suspicious since June 2010.<sup>95</sup> Large quantities of methylamine, a non-scheduled chemical, which can be used in the manufacture of “ecstasy” as well as methamphetamine, have been seized in Mexico with a total of 154,000 litres reportedly seized by mid-2011.<sup>96</sup> The number of “ecstasy” laboratories remained stable (39 laboratories), with the existence of “ecstasy” laboratories mainly reported by Oceania, East and South-East Asia and North America.

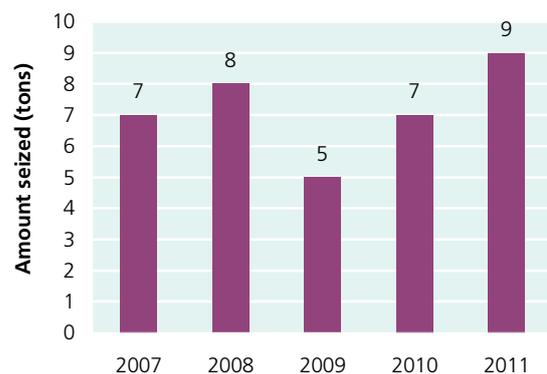
With respect to seizures, the global level of “ecstasy” seizures has been stable or declining since 2008. At 3.6 tons, compared with 3.8 tons in 2010, seizures of “ecstasy”-type substances decreased by 5 per cent in 2011, reflecting fewer seizures reported by Canada and China. However, seizures rose in Europe and Oceania. Most “ecstasy” was seized in the United States, the Netherlands and France.

### Increased seizures of crystalline methamphetamine in East and South-East Asia point to a more diversified market for amphetamine-type stimulants

Traditionally, methamphetamine pills are the most widespread ATS in East and South-East Asia. In 2011, however, seizures of crystalline methamphetamine reached their

highest level during the past five years, an indication that the ATS market has become more diversified. In 2011, a total of approximately 8.8 tons of crystalline methamphetamine were seized in the region, representing a 28 per cent increase over the approximately 7 tons seized in 2010. Record-level seizures were reported in a number of countries during the year. In 2011, more than 1 ton of crystalline methamphetamine was seized in Malaysia, representing a 39 per cent increase compared with 2010 and the highest total ever reported by the country. Indonesia seized more than 1 ton of crystalline methamphetamine in 2011, the highest total reported during the past five years. Seizures in Thailand reached a record high of more than 1 ton in 2011, much higher than the 706 kg seized in 2010. Record seizures were also reported from Cambodia (19 kg) and Singapore (14 kg), although the amounts seized were comparatively low by regional standards. The largest portion of crystalline methamphetamine seizures continued to be made in China, where more than 4 tons seized in 2011 accounted for half of the regional total.

**Fig. 71. Crystalline methamphetamine seizures in East and South-East Asia, 2007-2011**



Source: Based on data collected by the Drug Abuse Information Network for Asia and the Pacific including data for Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Lao's People Democratic Republic, Malaysia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam.

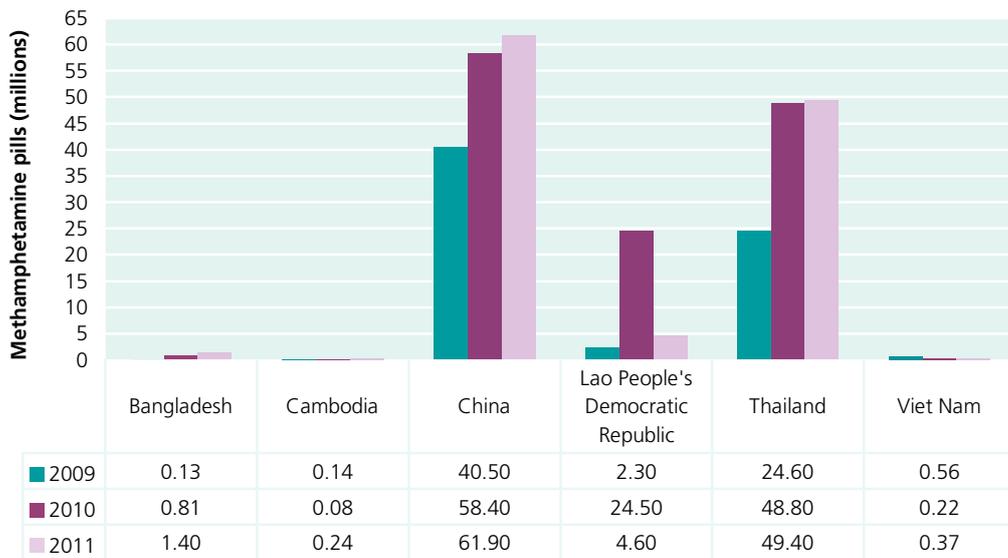
With respect to methamphetamine pills (“yaba”), the eastern Shan State in Myanmar remains a key source in the region. In 2011, authorities in Myanmar seized a small number of pill pressing machines and related equipment used to make methamphetamine pills from two separate clandestine methamphetamine manufacturing facilities.<sup>97</sup> However, the low number of manufacturing operations dismantled is inconsistent with the high amount of seizures made. Methamphetamine pills produced in Myanmar are trafficked to neighbouring countries, particularly China, the Lao People's Democratic Republic and Thailand. To a lesser extent, methamphetamine pills are also smuggled to

<sup>95</sup> European Monitoring Centre for Drugs and Drug Addiction and European Police Office, *EU Drug Markets Report: A Strategic Analysis*.

<sup>96</sup> *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2011 on the Implementation of Article 12 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988* (United Nations publication, Sales No. E.12.XI.4).

<sup>97</sup> Presentation by the Central Committee for Drug Abuse Control of Myanmar at the Global Synthetics Monitoring: Analysis, Reporting and Trends (SMART) Programme regional workshop, Phnom Penh, 24 and 25 July 2012.

**Fig. 72. Methamphetamine pill seizures by countries neighbouring Myanmar, 2009-2011**



Source: Based on data collected by the Drug Abuse Information Network for Asia and the Pacific, the National Narcotics Control Commission of China, the Office of the Narcotics Control Board of Thailand, and the Standing Office on Drugs and Crime of Viet Nam.

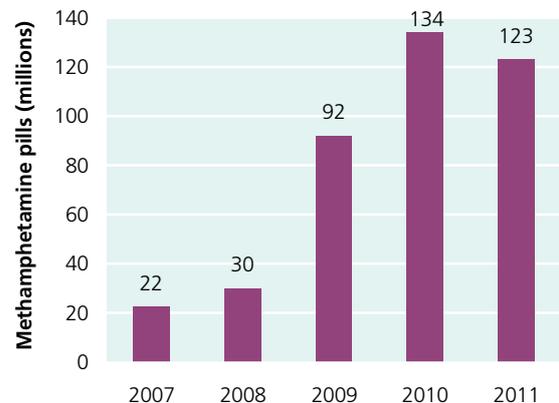
Bangladesh, where seizures of methamphetamine pills have increased, from 812,716 methamphetamine pills in 2010 to 1,4 million methamphetamine pills in 2011.

In 2011, seizures of methamphetamine pills remained high in East and South-East Asia, a total of 122.8 million methamphetamine pills were seized. While this figure represents a 9 per cent decrease compared with the 134.4 million pills seized in 2010, it is 33 per cent higher than the 92.1 million pills seized in 2009 and a five-and-a-half fold increase compared with the 2007 figure (22.4 million pills seized).

In 2011, the number of pills seized in China (61.9 million), Thailand (49.4 million), Myanmar (5.9 million) and the Lao People’s Democratic Republic (4.6 million) accounted for 98 per cent of the total seizures during the year (as these four countries did in 2010). The largest relative increases were reported by Cambodia (189 per cent), Myanmar (169 per cent) and Singapore (120 per cent), although the number of methamphetamine pills seized is low by regional standards. Viet Nam also reported a large increase (65 per cent) in methamphetamine pill seizures in 2011, with 366,000 synthetic drug pills seized, most of which were likely to have been methamphetamine pills. However, methamphetamine pill seizure data are not uniformly reported from Viet Nam, making year-by-year comparisons for that country difficult.

“Ecstasy” has been in decline in recent years, but in 2011 “ecstasy” seizures showed an increase in Brunei Darussalam, Cambodia, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea and Thailand. “Ecstasy” manufacture continues to be reported in the region, particularly in Indonesia and Malaysia. Manufacture in the region has consisted primarily of pill pressing and re-pressing operations, although some “ecstasy” production faci-

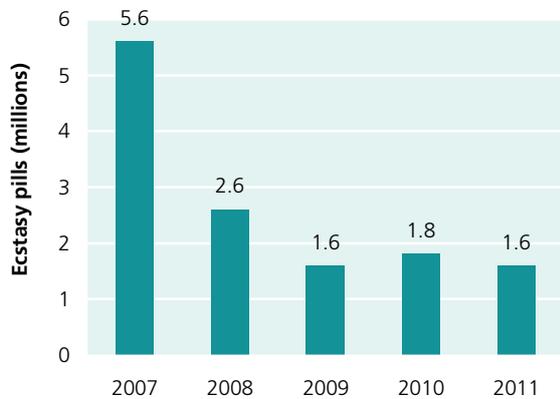
**Fig. 73. Methamphetamine pill seizures in East and South-East Asia, 2007-2011**



Source: Based on data collected by the Drug Abuse Information Network for Asia and the Pacific , including data for Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Lao’s People Democratic Republic, Malaysia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam.

ties have been dismantled in Indonesia. Saffrole-rich oils, which can serve as precursors in the manufacturing process, continue to be smuggled from Cambodia and China.

In 2011, some 400 illicit synthetic drug manufacturing facilities were seized in East and South-East Asia, most of which were manufacturing methamphetamine. While this figure is lower than the number reported for 2010 (442), it is more than three times the number of illicit manufacturing facilities seized in 2007 (125). China continued to report high, albeit declining, levels of illicit synthetic drug manufacture with 357 illicit synthetic drug manufacturing facilities seized in 2011. It is unclear how many of these facilities were specifically manufacturing methampheta-

**Fig. 74. "Ecstasy" seizures in East and South-East Asia, 2007-2011**

Source: Based on data collected by the Drug Abuse Information Network for Asia and the Pacific, including data for Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Lao's People Democratic Republic, Malaysia, Myanmar, the Philippines, the Republic of Korea, Singapore, Thailand and Viet Nam.

mine. Illicit drug manufacture has expanded from the southern coastal areas of China to northern and central areas of the country; in 2011, illicit drug manufacturing facilities were seized in 29 of the 33 provinces, municipalities and autonomous regions of China.

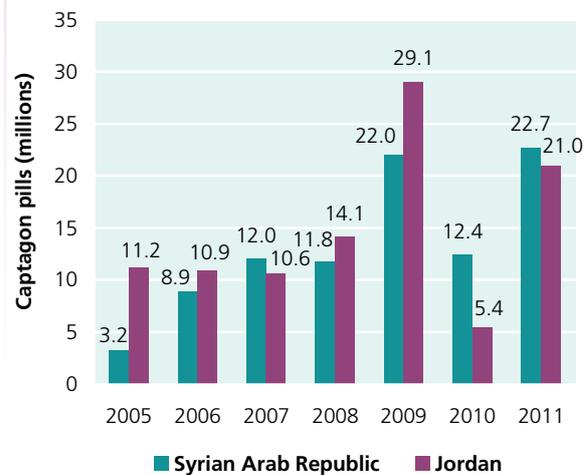
Illicit laboratories were also seized in Cambodia, Indonesia, Malaysia, the Philippines and Thailand; these were mostly smaller-scale laboratories, which are mobile and can be more easily relocated. Malaysia also reported the seizure of one illicit nimetazepam (Erimin-5) manufacturing facility, a substance which is frequently sold on the illicit ATS market.<sup>98</sup>

### Seizures of amphetamine, mostly Captagon, rise in the Near and Middle East

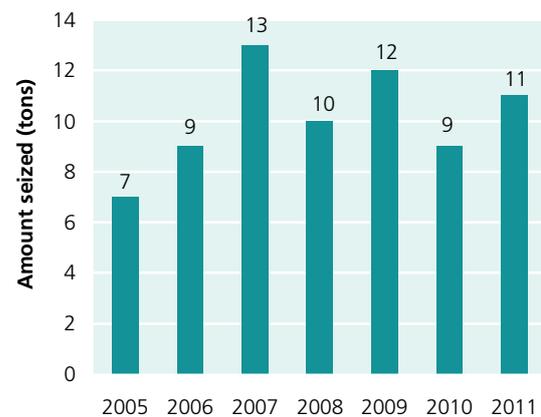
Near and Middle East seizures account for almost 64 per cent of global amphetamine seizures. Unlike any other region of the world, amphetamine is seized in the Near and Middle East in the form of Captagon pills. In 2011, significant increases were reported by Jordan, Kuwait, Qatar, Saudi Arabia and the Syrian Arab Republic. All the seizures were of Captagon pills. The three largest seizures in 2011 were made by Saudi Arabia and involved 720 kg, 705 kg and 666 kg seized in Haditha, Saudi Arabia, at the land border with Jordan.<sup>99</sup> Most amphetamine seizures are made in Saudi Arabia. In 2011, 11 tons were seized, which represents 37 per cent of global amphetamine seizures and 58 per cent of seizures made in the Near and Middle East.

<sup>98</sup> Nimetazepam is a benzodiazepine derivative, controlled in Schedule IV of the Convention on Psychotropic Substances of 1971, often marketed under the brand name Erimin.

<sup>99</sup> World Customs Organization, *Customs and Drugs Report 2011* (Brussels, 2012).

**Fig. 75. Captagon pill seizures in Jordan and the Syrian Arab Republic, 2005-2011**

Source: UNODC, data from the annual report questionnaire and other official sources.

**Fig. 76. Amphetamine seizures in Saudi Arabia, 2005-2011**

Source: UNODC, data from the annual report questionnaire and other official sources.

## The changing faces of illicit manufacture of amphetamine-type stimulants

Traditional precursors are being replaced with alternate precursors and chemically modified precursors that are not under international control. For the manufacture of amphetamines, for example, the non-scheduled bisulfite adduct of the essential amphetamine precursor 1-phenyl-2-propanone (P-2-P)<sup>100</sup> has been seized in several European countries in recent years in the form of a white powder that can be converted to form liquid P-2-P with relative ease. *Alpha*-phenylacetone nitrile (APAAN), a direct precursor of P-2-P, is a non-controlled substance

<sup>100</sup> P-2-P is also known as benzyl methyl ketone (BMK).

**Table 5. Seizures of methylamine in Mexico, December 2011**

Date	Seizure (tons)	Arriving from	Seized in	Bound for
08.12.11	205	China	Michoacán Port of Lazaro Cardenas	Guatemala Port of Quetzal
09.12.11	23	Turkey	Colima Port of Manzanillo	Guatemala Port of Quetzal
16.12.11	43	China	Baja California	Mexico Obregon, Sonora State
19.12.11	100	China	Michoacán Port of Lazaro Cardenas	Guatemala Port of Quetzal
23.12.11	229	China	Michoacán Port of Lazaro Cardenas	Guatemala Port of Quetzal
26.12.11	21	Peru	Colima Port of Manzanillo	Guatemala Port of Quetzal
28.12.11	120	China	Michoacán Port of Lazaro Cardenas	Guatemala Port of Quetzal

Source: Mexico, Navy Secretariat, 2011.

Note: Mexico regional information: Baja California (north); Colima (south-west); Michoacán (south-west); and Sonora (north-west).

which can easily be converted into P-2-P. APAAN was originally discovered in a large scale methamphetamine manufacturing laboratory in Malaysia in 2006 and, since 2009, has been seized in Belgium, the Netherlands, Poland and Turkey. In Poland, 700 kg of APAAN were seized in April 2011. The Netherlands reported the seizure of several laboratories where APAAN was being converted to P-2-P.

Another chemical that is widely used in illicit ATS manufacture and which is not under international control is methylamine which, together with phenylacetic acid or P-2-P, can be used in the illicit manufacture of methamphetamine, or may also be used in MDMA manufacture, together with (3,4-MDP-2-P). In 2011, a total of 1,400 tons of chemicals used to make methamphetamine were confiscated by customs authorities in Mexico. Seven seizures, comprising 741 tons of methylamine, were reported in December 2011. Six of them were intended to be shipped onwards to Guatemala, which seized large volumes of precursor chemicals in 2011 and 2012.

In January 2012, 195 tons of methylamine were seized in Mexico, marking the first attempt to traffic precursor chemicals from Mexico to Nicaragua and a repeated attempt of trafficking to Guatemala. These seizures may point to increased manufacturing activity in Central America and a rising influence of Mexican drug trafficking organizations in the synthetic drugs market within the region.

The increasing appearance of non-controlled “pre-precursor” substances, many of which have few known legitimate uses other than for the manufacture of controlled precursors, is expected to be a continuing trend in global seizures; this presents a myriad of new challenges for drug control authorities.

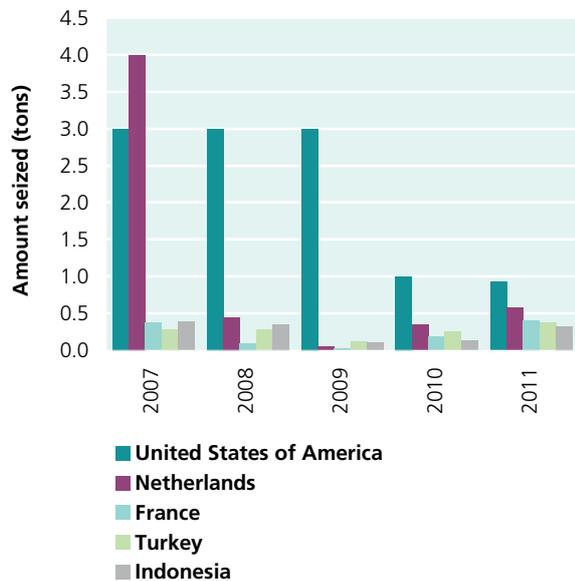
For instance, for “ecstasy” manufacture, methyl 3-[3’4’-(methylenedioxy)phenyl]-2-methyl glycidate (MMDMG, also known as PMK-glycidate) is an alternative to the internationally controlled precursor 3,4-MDP-2-P, also known

as piperonyl methyl ketone (PMK). MMDMG, which is not under international control, was first detected in Australia in 2004 and is made from piperonal, which is a precursor of 3,4-MDP-2-P. In May 2010, a small quantity of MMDMG was found in an “ecstasy” and methamphetamine laboratory in the Netherlands along with instructions for its conversion into 3,4-MDP-2-P for “ecstasy” manufacture. In October 2010, authorities in Slovakia seized 200 kg of chemicals, which were a mixture of 3,4-MDP-2-P, piperonal and MMDMG. In March 2011, Denmark seized 800 kg of MMDMG from an air cargo shipment that was reportedly one in a series of shipments destined for the Netherlands and had originated in China.<sup>101</sup> One conversion laboratory, where MMDMG was being converted to PMK, was seized in the Netherlands in 2011. MMDMG has also reportedly appeared in Belgium, Estonia and Poland.

### After a decline, “ecstasy” seizures show a rise in 2011 in Europe

In 2011, the largest seizures of “ecstasy”-type substances were reported in Europe, showing an increase from 1.3 tons in 2010 to 1.7 tons in 2011, surpassing the level of seizures in the Americas, which totalled 1.2 tons in 2011. Seizures in North America declined; in the United States from 1 ton in 2010 to 926 kg in 2011 and in Canada from 529 kg in 2010 to 192 kg in 2011. At the global level, the United States reported the highest seizures of “ecstasy”-type substances with 926 kg seized in 2011, followed by Netherlands with 583 kg and France with 409 kg. There were signs of a partial recovery of the “ecstasy” market in 2011, particularly in France where seizures increased from 180 kg in 2010 to 409 kg in 2011 and in the Netherlands with seizures of 343 kg in 2010 and 583 kg in 2011.

<sup>101</sup> *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2011.*

**Fig. 77.** “Ecstasy” seizures in selected countries, 2007-2011

Source: UNODC, data from the annual report questionnaire and other official sources.

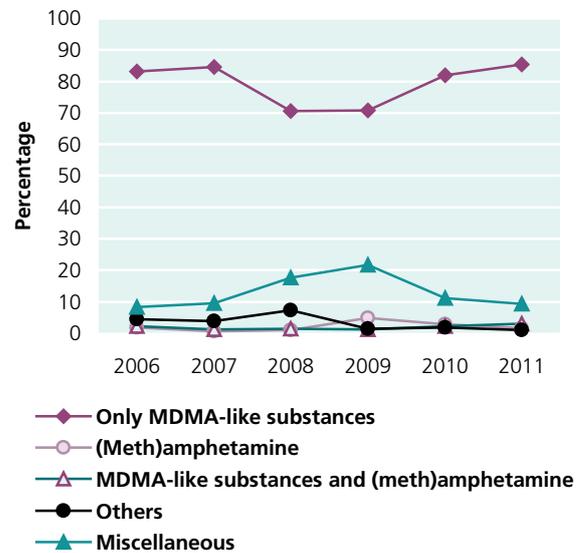
Turkey has emerged as a major “ecstasy” seizing country, with the quantities being intercepted slowly increasing over the past decade, reaching a peak of 1.7 million “ecstasy” tablets (474 kg) in 2005. After experiencing a decline in subsequent years until 2009, seizures started to increase from 251 kg in 2010 to 370 kg in 2011. In 2011, Brazil reported the highest seizures of “ecstasy” since 1987 amounting to 70 kg; in the past decade, most annual seizures reported by Brazil were below 1 kg.

There has been a decline in the number of “ecstasy” laboratories seized on a global level from 50 in 2009 to 43 in 2010 and 39 in 2011. The shift in manufacturing activity from Europe to other regions is illustrated by the increasing geographical spread; “ecstasy” manufacture was reported by Australia (16) Indonesia (6), Malaysia (6), the United States (5), Canada (4), France (1) and Belgium (1).

### Pills sold as “ecstasy” frequently contain other substances

A large proportion of seized drugs marketed on the street as “ecstasy” continue to contain substances other than MDMA. Amphetamines, for example, are common in pills analysed in Luxembourg, Spain and Turkey, according to reports from EMCDDA and Europol.<sup>102</sup> In most cases, however, these are NPS, that is, substances that are not controlled under the 1961 or 1971 Conventions. Ketamine, for example, is frequently sold as “ecstasy” in markets in East and South-East Asia. Many countries in Europe, on the other hand, report that mCPP, alone or with other substances, was identified in 20 per cent or more of the

<sup>102</sup> European Monitoring Centre for Drugs and Drug Addiction and European Police Office, *EU Drug Markets Report: A Strategic Analysis*.

**Fig. 78.** Content of pills sold as “ecstasy” in the Netherlands, based on laboratory analyses, 2006-2011

Source: Netherlands Institute of Mental Health and Addiction (Trimbos Institute), Drugs Information and Monitoring System.

Note: Data for 2011 are from January to June. Category “others” may include samples with MDMA and, for instance, caffeine and other pharmacologically active non-scheduled substances. In 2009 the miscellaneous category consisted mainly of mCPP (11.60 per cent) and mephedrone (7.4 per cent); in 2010 and 2011 this category consisted mainly of mCPP and caffeine.

pills analysed in Austria, Belgium, Croatia, the Czech Republic, Cyprus, Denmark, Finland, Portugal and the United Kingdom.

In New Zealand, 4-methylethcathinone (4-MEC) is reportedly the most common substance identified in pills sold as “ecstasy”. Forensic analysis of seizures of “ecstasy”-type street pills and powder used in their manufacture seized during the dismantling of a large-scale pill manufacturing facility and supply ring in 2011 and a related facility in 2012, identified 4-MEC, 3,4-methylenedioxy- $\alpha$ -pyrrolidinobutyrophenone (MDPBP), eutylone (*bk-EBDB*), *N*-ethylamphetamine, *N*-ethylcathinone, BZP and 1-(3-trifluoromethylphenyl)piperazine (TFMPP).

For more than 15 years, the Drugs Information and Monitoring System in the Netherlands has carried out laboratory analyses of pills sold as “ecstasy” and results show the significant developments that the “ecstasy” market has undergone over the years. A review of the composition of sampled pills over the past six years clearly indicates that the proportion of pills containing only MDMA-like substances increased in 2010 and 2011, from 82 per cent to 85 per cent, after the MDMA content reached the lowest levels in 2008 and 2009 (70 per cent in both years), probably because the precursor chemicals for “ecstasy” were difficult to obtain at that time. Mirroring the trends in other countries of the European Union, mCPP was also one of the most widely reported substances in pills sold as “ecstasy” in the Netherlands, but the number of mentions declined from 2010 to 2011, from 5 to 4 per cent. The

same is true for mephedrone, where the proportion dropped from 1 to 0.3 per cent from 2010 to 2011. The substance paramethoxymethamphetamine (PMMA) was also identified in a number of “ecstasy” pills sold in the Netherlands, with the presence of PMMA remaining largely stable (reported 29 times (1.2 per cent) in 2010 and 23 times (0.9 per cent) in 2011). This substance has gained notoriety by its presumed link to several fatalities in Canada and Scotland (United Kingdom). The review conducted in the Netherlands showed the benefits of continuous laboratory analyses, which provide valuable insights into the dynamics of ATS markets.

**Table 6. Substances frequently found in pills sold as “ecstasy”**

Substance	Americas	Asia	Europe	Oceania
4-MEC				●
Amphetamine			●	
BZP			●	●
Caffeine			●	●
bk-EBDB				●
Ketamine		●		
mCPP			●	
MDPBP				●
Mephedrone			●	●
Methamphetamine		●		
N-ethylamphetamine				●
N-ethylcathinone				●
PMMA	●		●	
TFMPP				●

Source: UNODC, data from the annual report questionnaire and other official sources.

## Methamphetamine trafficking from West Africa to East and South-East Asia continues

West Africa, a region not previously known for ATS, has gained increased prominence as a point of origin of methamphetamine trafficked to East and South-East Asia. In a UNODC report on the ATS situation in West Africa, methamphetamine was shown to have been trafficked from Benin, Côte d’Ivoire, the Gambia, Ghana, Guinea, Mali, Nigeria, Senegal and Togo.<sup>103</sup>

African drug trafficking organizations, which used to traffic primarily cocaine and heroin, are trafficking increasing amounts of methamphetamine in East and South-East Asia, usually by air courier and in fairly small quantities (between 0.5 kg and 3.0 kg). Asia is a prime location due to the size of its ATS market, which is one of the largest in the world, and due to the high prices that methampheta-

mine can command. In Japan, one kilogram of methamphetamine retails for at least \$212,600. EMCDDA and Europol report that West African criminal organizations also use major airports in the European Union to traffic methamphetamine manufactured in Africa to the Asian markets and that they recruit couriers in the European Union. Australia and New Zealand have also reported the increasing role of West African organized criminal groups in trafficking of ATS and ATS precursors to Australia and New Zealand.

Trafficking of methamphetamine by African groups has been reported by Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Lao People’s Democratic Republic, Malaysia, New Zealand, the Philippines, the Republic of Korea, Thailand and Viet Nam.

Nigeria, by far the largest country in West Africa in terms of both population and surface area, and Benin have been most frequently cited as the origin for trafficked methamphetamine. Mali has reportedly also emerged as a source. The Republic of Korea reported that in 2011, more than 4 kg of methamphetamine were smuggled into the country from Mali.<sup>104</sup>

In July 2011, Nigeria became the first and, so far, only country in West Africa to officially report illicit methamphetamine manufacture. The National Drug Law Enforcement Agency seized a methamphetamine laboratory with a reported manufacturing capacity of between 25 and 50 kg per manufacturing cycle near Lagos, Nigeria’s largest city. Several laboratories were seized in 2012.

There is a persistent lack of data from the African region, which can be seen from the scarce reporting of seizures of ATS and their precursors due to a general lack of awareness of ATS, as law enforcement authorities tend to focus on the interception of “traditional” drugs such as cannabis and cocaine.

<sup>103</sup> UNODC, *West Africa: 2012 ATS Situation Report—A Report from the Global SMART Programme* (Vienna, June 2012).

<sup>104</sup> Information provided by the Supreme Prosecutors’ Office of the Republic of Korea at the seventeenth Asia-Pacific Operational Drug Enforcement Conference, Tokyo, February 2012.