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## 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, ATS illicit manufacture has been reported from more than 65 countries and the figure keeps rising. 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. Global SMART was launched in September 2008 and provides capacity-building in East and South-East Asia and, since 2011, in Latin America. Global SMART also regularly reviews the ATS situation in the Pacific region. Features of UNODC Global SMART are online data collection, situation reports and regional assessments. A review of the global ATS situation was issued in September 2011. The third annual review of patterns and trends of ATS and other Drugs in Asia and the Pacific was issued in November 2011, providing detailed data and information on 15 countries in East and South-East Asia, with regional coverage of South Asia and Oceania.

The Global SMART Update is designed to provide regular brief reporting on emerging patterns and trends of the fast changing global synthetic drug situation. Given the speed at which changes in the ATS 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.

The Update reports synthetic drug information in several categories, such as significant or unusual drug or precursor chemical seizures, new locations, methods and chemical used for clandestine manufacture, new trafficking groups or routes, changes in legislation to address the problem of synthetic drugs, environmental impact from their illicit manufacture and destruction, emerging drugs or user groups, and health implications related to their use.\*

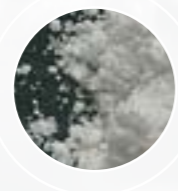
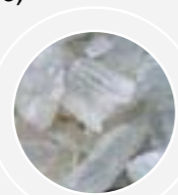
## In this issue

Each issue of the Update contains special coverage and thematic segments and as of the fourth issue (October 2010), the special segment has been enlarged to provide a more in-depth review of an issue that deserves particular attention. In the fourth issue, the Update highlighted the increasing dimension of ATS trafficking from Africa. The fifth issue examined the situation on ATS in South Asia. In the sixth issue, the special segment reviewed the latest developments on synthetic substances which are sold in ATS markets as 'bath salts' and 'plant food'.

Since October 2010, short regional overviews were added to provide snapshots of the situation in the regions of the world. Since 2010, the Update has been available in English and Spanish.

The special segment of the current issue reviews the changing approach of illicit ATS manufacture by drug trafficking organizations. International efforts to control the trade of precursor chemicals have resulted in some illicit manufacturers trying to bypass regulations by synthesizing, rather than purchasing and trafficking, scheduled chemicals from chemicals which are not controlled by the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Substances such as bisulfite adducts or glycidates are used to 'mask' the precursors, making them unrecognizable to law enforcement authorities. This new manufacturing trend of synthetic drugs poses a major challenge for drug control authorities in the near future.

While data on ATS seizures is often easy to obtain, information about the demand for ATS remains scarce and anecdotal in nature. Nevertheless, the Update continues to make a determined effort to highlight the human toll of ATS use. Various demand-related subjects are covered in this issue, including facts that have come to light about the use of synthetic drugs and its impact in various countries such as Australia, Bulgaria, Canada, China, Guatemala, Malaysia, Mexico, Netherlands, the United Kingdom and United States.



## Regional overviews

**Oceania.** Australia and New Zealand continue to be significant markets for ATS. ATS precursors are trafficked to Australia from South-East Asia due to strict domestic controls. In New Zealand, the Government has taken action against synthetic cannabinoids, most recently against AM-2233 (1-[(N-methylpiperidin-2-yl)methyl]-3-(2-iodobenzoyl)indole). Data on the ATS situation in the Pacific remains sparse but recent research suggests that methamphetamine use among the young population is relatively high in some countries and territories, indicating its availability even in fairly remote areas.

**East and South-East Asia.** One third of global ATS and half of global methamphetamine seized in 2010 originates from East and South-East Asia. Significant quantities of ATS continue to be illicitly manufactured in China, Myanmar and the Philippines. In addition, illicit ATS manufacture continued to expand in countries which were previously primarily transit countries for ATS such as Cambodia, Indonesia and Malaysia. Diversion of pharmaceutical preparations containing pseudoephedrine which are destined for the illicit manufacture of methamphetamine continues in the region. Transnational organized criminal groups from Africa and the Islamic Republic of Iran continue to be involved in the trafficking of methamphetamine to East and South-East Asia.

**South Asia.** South Asia continues to be targeted by organized crime groups as a source of ATS precursors, particularly ephedrine and pseudoephedrine. Illicit ATS manufacturing facilities are uncovered in regular intervals. Significant amounts of ketamine, a substance not under international control, continue to be trafficked from India to destinations in East Asia and North America. Since no comprehensive assessment on the ATS situation has been undertaken by the countries in the region, the extent of ATS use and manufacture within the region is unknown.

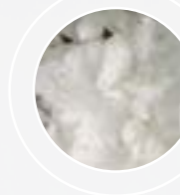
**West Asia and the Middle East.** Countries in this region continue to report significant seizures of amphetamine which is commonly sold as *Captagon* but the source of these pills has not been established. The illicit manufacture of methamphetamine has been reported from the Islamic Republic of Iran and crystallized methamphetamine manufactured in that country continues to be smuggled to a number of countries in South-East Asia and the Pacific. Several countries have high requirements of ATS precursors which makes them vulnerable to possible diversion of the chemicals to illicit markets. Data on ATS use is rarely reported from the region.

**Europe.** Europe remains a significant market for amphetamine which is being manufactured illicitly in the region. According to the European Monitoring Centre on Drugs and Drug Addiction and Europol, ATS laboratories are getting more sophisticated employing custom-made industrial equipment resulting in increased production capacity. The availability of methamphetamine still exhibits a positive trend, as countries in North and West Europe have started to report an increased presence of methamphetamine. New psychoactive substances such as methedrone or other cathinone analogues continue to be sold in ATS markets. Most recently, Austria and Switzerland have introduced measures against the sale and distribution of these substances.

**Africa.** Methamphetamine continues to be trafficked from African countries, particularly in West Africa, to destinations in East and South-East Asia. Most illicit ATS laboratories are reported from South Africa, where mostly methamphetamine and methcathinone is manufactured. Limited capacity and infrastructure to properly address the activities of drug trafficking organizations can be observed in some countries which may have a potentially destabilizing impact on security and development in the region as a whole.

**North America.** The United States remains an important ATS market. Many laboratories that are being dismantled are linked with Mexican drug trafficking organizations. Mexico reports increasing seizures of methamphetamine in large-scale manufacturing facilities and seizures of unscheduled chemicals frequently used in the illicit methamphetamine manufacture are also on the rise. Illicit ecstasy manufacture continues to be reported from Canada, with the finished product being trafficked to the United States but also to Asia and the Pacific.

**Central and South America.** Illicit manufacture of ATS and increased seizures of ATS precursors have been reported from some countries in the region, particularly Guatemala. In December 2011, 500 kg of methamphetamine were seized at a manufacturing facility located in the western part of the country. ATS laboratories have also been dismantled in Argentina and Nicaragua. The use of ATS and other synthetic substances frequently sold on ATS markets (e.g. ketamine) has been reported from many countries in Central and South America. However, since the traditional focus within the region is on cocaine and cannabis, it is likely that the true situation is underreported.



\*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 7, March 2012.

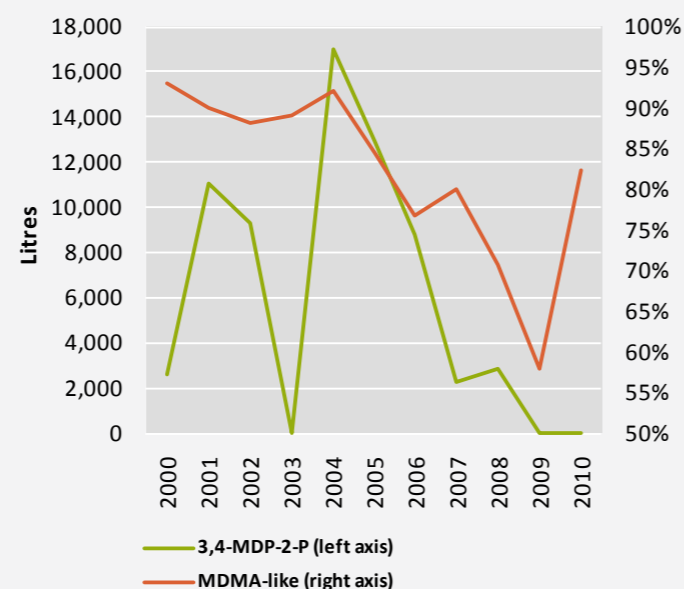


## The changing faces of illicit ATS manufacture

Illicit ATS manufacture requires several chemicals but is, to a certain extent, highly flexible. As a result of the strengthening of controls on the trafficking of the most commonly used precursors, illicit manufacturers have changed their approach. A new trend is emerging whereby traditional precursors are being replaced with alternate types of precursors and chemically modified precursors not under international control.

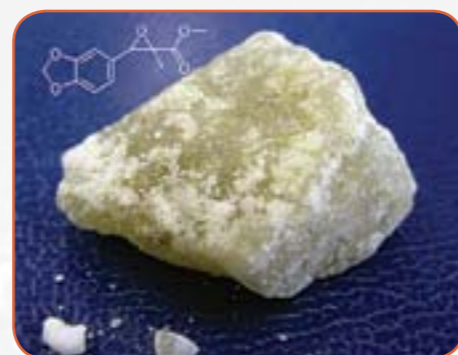
The precursors for ecstasy-group substances include safrole (also in the form of safrole rich oils), isosafrole, piperonal and 3,4-methylenedioxyphenyl-2-propanone (3,4-MDP-2-P) – also known as piperonyl methyl ketone (PMK) – which are all under international control. The internationally controlled substance 1-phenyl-2propanone (P-2-P), also known as benzyl methyl ketone (BMK) and its precursor phenylacetic acid can be used for the synthesis of both amphetamine and methamphetamine. Ephedrine and pseudoephedrine are the main precursors for methamphetamine and are also under international control, in their bulk form.

Global seizures of 3,4-MDP-2-P compared to ecstasy purity



Source: INCB 2010, Trimbos Institute 2010

There can be no ATS manufacture without precursor chemicals – so if supply of an essential precursor chemical such as 3,4-MDP-2-P is still low, how is a drug like ecstasy made?



3,4-MDP-2-P methyl glycidate (MMDMG, PMK-glycidate)

### Decline and recovery of the ecstasy market

In 2005, global seizures of 3,4-MDP-2-P (or PMK) began to decline sharply, to the extent that almost no seizures of the substance were reported in 2009. During the same period, seemingly as a direct result of the apparent shortage of this essential chemical, the ecstasy market went into decline. Historically, 3,4-MDP-2-P had been produced in China and was typically smuggled into Europe for illicit ecstasy manufacture. However, as China began to implement stricter controls and legal provisions to curb production which, along with successful law enforcement interventions, a decline in availability of the precursor was observed, and resulted in a decreasing content of MDMA in pills sold as 'ecstasy'. Recent trends indicate that the ecstasy market is in recovery but without the reemergence of 3,4-MDP-2-P.

Methyl 3-[3'4'-(methylenedioxy)phenyl]-2-methyl glycidate (MMDMG - also known as PMK-glycidate) was first detected in Australia in 2004 and is a non-controlled chemical 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, Slovak authorities seized 200 kg chemicals, which were a mixture of the chemicals 3,4-MDP-2-P, piperonal and MMDMG. MMDMG has also reportedly appeared in Belgium, Denmark, Estonia and Poland.

### New manufacturing methods in the ATS market

For the manufacture of amphetamines, the non-scheduled bisulfite adduct of the essential amphetamines precursor, P-2-P – also known as benzyl methyl ketone (BMK) – has been seized in several European countries in recent years in the form of a white powder which can be converted to form the liquid P-2-P with relative ease.



P-2-P bisulfite adduct

Alphaphenylacetonitril (APAAN), a direct precursor of P-2-P, is another non-controlled substance 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, Poland, Netherlands and Turkey.

### "Masked" ATS precursors

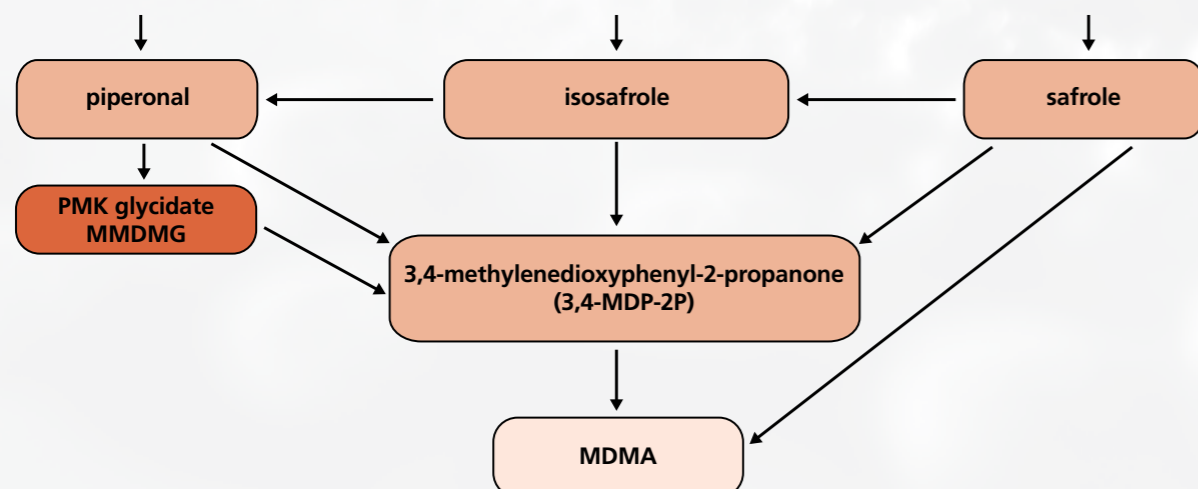
Substances such as the bisulfite adduct of P-2-P and MMDMG are often referred to as "masked" precursors, as criminals attempt to conceal the traditional form of ATS precursors (such as the liquid forms of P-2-P and 3,4-MDP-2-P) by packaging and smuggling these substances in a way that is unrecognizable to law enforcement authorities (e.g. due to different physical characteristics such as powder form instead of liquid, different labeling etc.) and then later converting them to the essential ATS precursor through the use of several easily available chemicals.



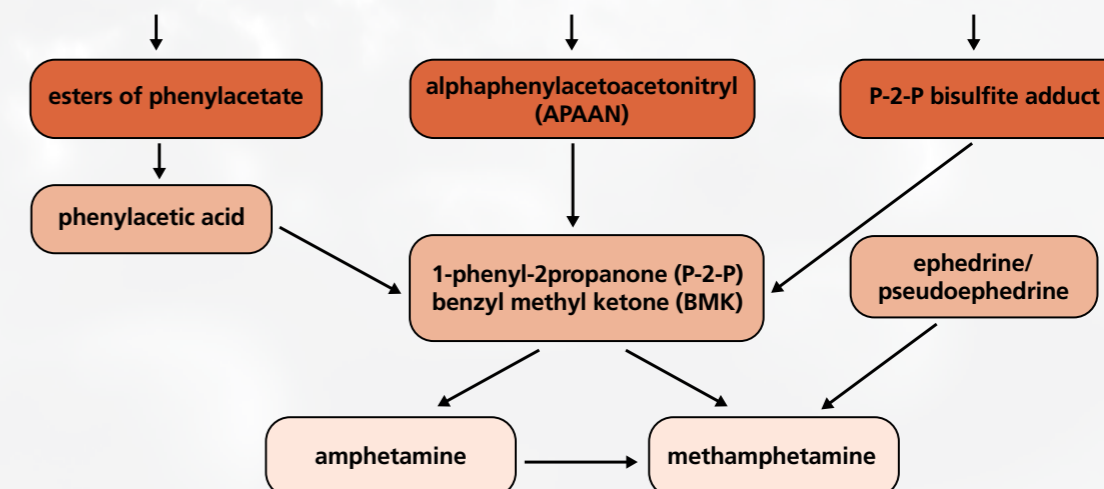
Conversion of APAAN to P-2-P

The increasing appearance of non-controlled 'pre-precursor' substances - many of which have little known legitimate use other than for the manufacturing of controlled precursors - is not confined to Europe, and is expected to be a continuing trend in global seizures which presents a myriad of new challenges to drug control authorities.

### Flexible MDMA manufacture

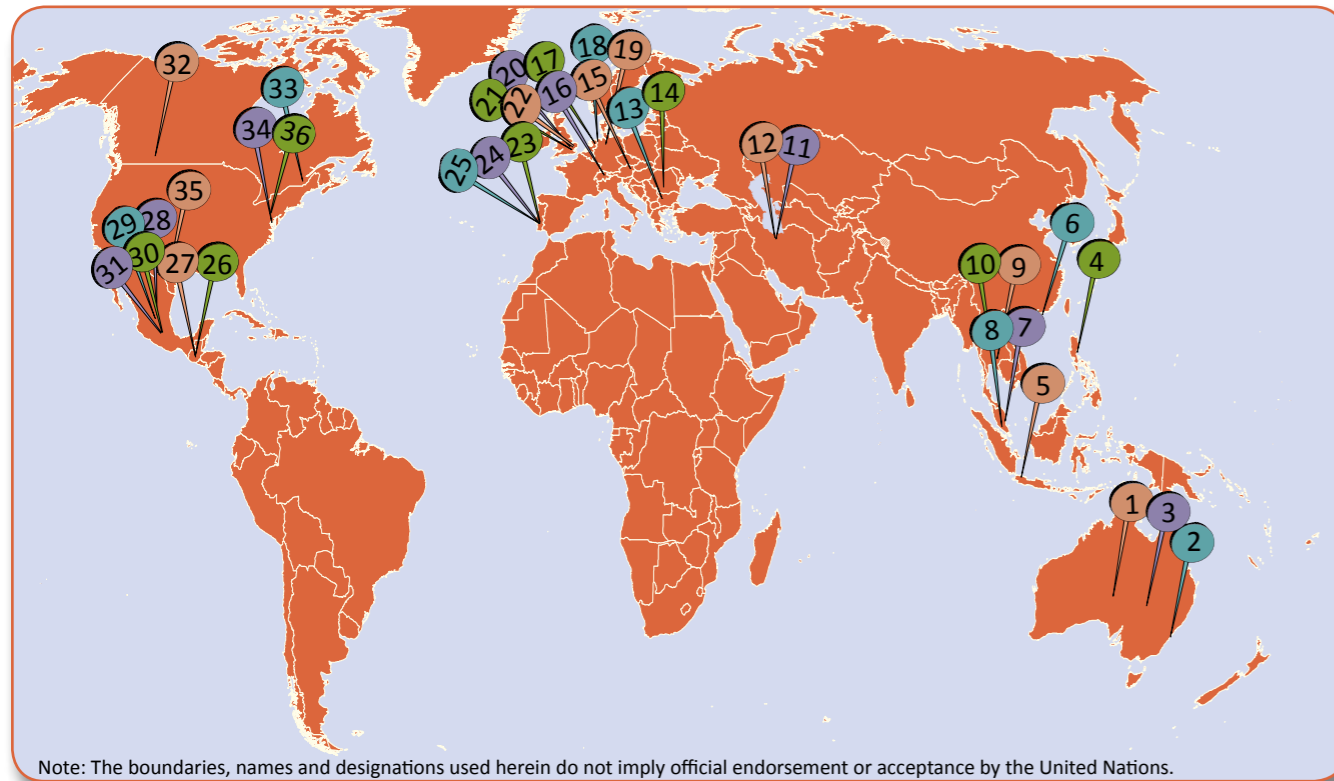


### Flexible amphetamines manufacture





## Regions covered in this issue



Global SMART segments are arranged based on regional threat. Oceania has among the highest prevalence rates for ATS use in the world, while the number of ATS users are greatest in East Asia. Therefore, the map and corresponding index of segments begins with recent events from Oceania and East Asia and then moves geographically westward. The numbered pins on the map above correspond with the index of segments below.

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### Australia: 30 kg of methamphetamine seized

**AUSTRALIA – 21 December 2011.** Two Chinese nationals attempting to smuggle 30 kg of methamphetamine into Sydney have been arrested, as a result of an investigation by the Joint Organised Crime Group (JOCG), a key multi-agency response to target organized drug-related crime in New South Wales. The methamphetamine, seized from two sea cargo containers at Port Botany (South-Eastern Sydney), has a wholesale value of over USD 5 million. Australian Customs and Border Protection officers in Sydney targeted sea cargo consignments that had arrived from Shekou, Southern China and detected the methamphetamine inside the frames of the shipping containers. The JOCG is a taskforce targeting organised crime and comprises the Australian Federal Police, Australian Customs and Border Protection Service, New South Wales Police Force, the New South Wales Crime Commission and the Australian Crime Commission.



Source: AFP



Source: AFP

### Australia: significant seizure of pseudoephedrine (118 kg)

**PORT BOTANY, Australia – 29 November 2011.** A total of 118 kg of pseudoephedrine, along with 98 kg of heroin were seized at Port Botany (South-Eastern Sydney) in a joint operation of the Australian Customs and Border Protection Service and the Australian Federal Police, preventing illicit drugs worth more than USD 30 million from reaching the illicit drug market in Australia. The consignment from the Islamic Republic of Iran is believed to have originated from Afghanistan and was packed in 3,105 cartons declared as containing 'red raisins'. An x-ray examination of the cartons revealed inconsistencies, and upon further inspection, a powdered substance was discovered concealed within the linings of the cartons. Further testing identified the presence of heroin and pseudoephedrine. Five search warrants were executed, leading to the arrest of a man from Peakhurst (New South Wales).

### Australia: one in five detainees test positive for methamphetamine in 2011

**AUSTRALIA – November 2011.** Statistics from the Australian Institute of Criminology's *Drug Use Monitoring in Australia* programme show that in the first three quarters of 2011, 21% of alleged criminals held in custody tested positive for methamphetamine. Results were derived from voluntary urinalysis undertaken by detainees and represent a 6% increase compared to 2010. Methamphetamine use among criminal offenders peaked in 2003 and 2004 when methamphetamine was detected in 30% of detainees and declined in the subsequent years down to 13% in 2009. Both 2010 and 2011 saw renewed increases, with 16% of detainees testing positive in 2010 and 21% testing positive in 2011. According to detainees, the quality and availability of methamphetamine had increased significantly during 2011 as well as the amount of street dealers peddling the drug. The report states that in 2011 the proportion of detainees who believed the quality of methamphetamine had improved from the previous year increased to 26% from 18% in 2009.

### Philippines: three clandestine laboratories dismantled

**MANILA, Philippines – 6 January 2012.** Three illicit laboratories were seized and five Chinese nationals were arrested in raids conducted by the Philippine Drug Enforcement Agency (PDEA) in the exclusive residential community in Ayala Alabang. The authorities had been monitoring the activities of the group for almost a year prior to the arrests. Finished products, drums containing controlled precursors and chemicals, as well as high-end laboratory equipment were discovered on the site. According to the PDEA, the estimated manufacturing capacity of the facility was about 10 kg of methamphetamine ('shabu') per production cycle which takes about two to three days. Agents recovered laboratory equipment, chemicals, empty packs of the ephedrine-containing pharmaceutical preparation Novahis-D and about 3 kg of methamphetamine. Inventory is still ongoing to determine the exact volume and value of all the evidence seized.



### Indonesia: 50 kg crystalline methamphetamine worth USD 34 million seized

**JAKARTA, Indonesia – 10 January 2012.** In a joint raid against an international drug trafficking ring, the National Narcotics Board and the Soekarno-Hatta International Airport Police seized 50 kg of crystalline methamphetamine worth about USD 34 million, and 357,000 ecstasy pills. A national of Malaysia was arrested in an apartment in Taman Angrek (West Jakarta) in connection with the seizure. The raid was conducted following a tip-off from an Indonesian national who had been arrested at the airport for trying to smuggle drugs. Surveillance of the suspect's movements (which included transactions from Jakarta to Banjarmasin and Pontianak, and from Medan to Surabaya and Jakarta), confirmed that he had been controlling the Malaysia-based drug trafficking organization, which according to the narcotics directorate of the National Police, smuggles high quality drugs from Malaysia. The seized ecstasy was allegedly manufactured in the Netherlands while the crystalline methamphetamine is believed to have originated from the Islamic Republic of Iran.



Source: Hong Kong Customs

### Hong Kong: seizure of 3.6 kg methamphetamine smuggled from Benin

**HONG KONG, China – 1 December 2011.** About 3.6 kg of crystalline methamphetamine were seized in the transit lounge of Hong Kong International Airport, after Hong Kong Customs intercepted a woman in air transit from Benin (West Africa) to Thailand. The methamphetamine had an estimated market value of about USD 374,000 and was concealed in the suspect's luggage. Under the Dangerous Drugs Ordinance Order, drug trafficking is a serious offence, which entails a maximum penalty of life imprisonment and a fine of approximately USD

644,000. The increasing seizures from West Africa in East and South-East Asia point to increased involvement of West African drug trafficking networks within the region.

### Malaysia: five million pseudoephedrine tablets seized

**SEPANG, Malaysia – 31 December 2011.** Five million pseudoephedrine tablets weighing some 903 kg were seized by Customs Department and the Police. According to Customs, the chemicals could have been used to manufacture more than 80 million methamphetamine pills worth about USD 202 million. A Singaporean, a Taiwanese and two Malaysians were arrested during the operation. Following an anonymous tip of that prohibited goods were transported by two vehicles, the Police stopped two cars and upon further inspection 50 boxes containing 5,000 bottles of pharmaceutical preparations containing pseudoephedrine were found.\*



Source: Bernama

### Malaysia: new trafficking mode for methamphetamine?

**KUALA LUMPUR, Malaysia – 11 November 2011.** Two seizures amounting to 125 kg of high-purity methamphetamine worth USD 8.6 million at Port Klang (south-west of Kuala Lumpur) indicate a possible new trend in the modus operandi used in ATS trafficking, as traffickers look to smuggle drugs by sea instead of air. Heightened surveillance at Kuala Lumpur International Airport might have caused trafficking organizations to shift drug smuggling activities to Port Klang (45 km away from the airport). The methamphetamine was smuggled in hidden compartments of containers which purportedly contained decorative household items. Police also confiscated USD 44,000 in cash as well as several luxury cars. According to the Federal Narcotics Investigation Department, Iranian drug trafficking organizations no longer smuggle drugs in small quantities, but have embarked on large-scale operations in view of the high demand within the region. This seizure was the largest in 2011, spreading widespread fear that Malaysia could be targeted to become a major transit point for international drug traffickers.



Source: mcot

### Thailand: major seizures of methamphetamine

**THAILAND – 22 January 2012.** Police seized more than 3,8 million methamphetamine pills and 71 kg crystalline methamphetamine worth USD 32 million during a raid on a house in Pathum Thani (central Province, North of Bangkok). Following an investigation into the use of a fake vehicle license plate, police found the drugs. Another incident occurred in the Province of Chiang Mai (North Thailand), where two drug smugglers were shot in a clash with paramilitary rangers close to the Thailand-Myanmar border. The remaining members of the drug ring managed to escape, leaving behind 100,000 methamphetamine pills and more than 10kg of crystalline methamphetamine and heroin. According to the rangers, the group of smugglers reportedly belong to the Red Wa network, which is located in the state of Shan in Central Myanmar.

### Thailand: 2 million pseudoephedrine tablets seized

**BANGKOK, Thailand – 2 December 2011.** Three Thai nationals have been arrested at Suvarnabhumi Airport for allegedly trying to smuggle two million pseudoephedrine tablets into Thailand. The tablets, worth USD 634,000, could have been used to synthesize 7.2 million methamphetamine pills with an estimated street value of approximately USD 44 million. According to an initial investigation, the pseudoephedrine preparations originate from the Republic of Korea and were intended to be sent to Thailand in order to manufacture methamphetamine pills in the country's northern region.\*



Source: mcot

### Call for increased cooperation at 'Operation Ice Trail' meeting

**TEHERAN, Iran (Islamic Republic of) – 17 & 18 January 2012.** The need to further enhance cooperation to counter crystalline methamphetamine trafficking at national and international levels to ensure increased information exchange was highlighted at the third operational working group meeting of 'Operation Ice Trail' organized by Interpol and held in Tehran. Participants underscored the importance of information-sharing with regards to seizures, concealment methods and any new modus operandi. Participants also emphasized the need for establishing a special 'Ice Trail' network among designated focal points within the participating countries, to enable them to carry out joint operations. 'Operation Ice Trail' is a joint project by Interpol members aimed at reducing the flow of crystalline methamphetamine, and offers a platform for countries to exchange operational case related data regarding possible source, transit and final destination countries. The meeting was attended by 40 high-ranking officials from 11 countries as well as representatives from UNODC and the Regional Intelligence Liaison Office (World Customs Organization).

### Islamic Republic of Iran: 3 mt crystalline methamphetamine seized since March 2011

**TEHERAN, Iran (Islamic Republic of) – 17 January 2012.** According to Iran's Police Chief Brigadier General Esmayeel Ahmadi Moqaddam, Iranian police has discovered and seized 3 mt of crystalline methamphetamine from March 2011 to the beginning of January 2012. The Commander of the anti-narcotics squad of Iran's Law Enforcement Police stated that drug trafficking organizations are using the internet to promote and encourage the manufacture and use of synthetic drugs in Iran. Iranian police and judiciary officials intensified measures against chemically produced addictive substances with the establishment of a central database and the amendment of the country's anti-narcotics law. The cooperation between the police and the judiciary was also strengthened in a new effort to combat organized crime. Iranian police forces, together with other governmental bodies, have conducted 11 joint operations with other states against synthetic drug networks.\*





Source: EUROPOL

### Bulgaria: amphetamine trafficking network dismantled

**SOFIA, Bulgaria – 12 January 2012.** Extensive investigations by European law enforcement authorities have resulted in the disruption of operations of an international organized crime network allegedly responsible for large-scale manufacture and trafficking of amphetamine. In cooperation with Bulgarian authorities, three illicit amphetamine laboratories were dismantled and three suspects were arrested. Bulgarian authorities seized 75 lt of amphetamine base (enough to manufacture about 120 kg of pure amphetamine), 15 kg of amphetamine and over 1400 lt of chemicals and equipment used for manufacturing.

Six key members of the criminal network were arrested in Germany, the Netherlands and Sweden, where an additional 30 kg of amphetamine were seized. The investigation began when Swedish authorities identified large quantities of amphetamine being trafficked into Sweden.

### Japan-bound methamphetamine seized in Bulgaria and Romania

**BULGARIA/ROMANIA – 11 November 2011.** A total of 25 kg of methamphetamine worth USD 1.3 million was seized in two separate raids in Bulgaria and Romania, leading to the arrest of five Romanians. The methamphetamine originated from Turkey and was destined for Tokyo. The Bulgarian Border Police seized more than 17 kg of methamphetamine and arrested three suspects in Harmanli, 30 km away from the Bulgarian-Turkish border. Joint investigations of the police of Bulgaria and Romania result in the arrest of another trafficker and the seizure of more than 7 kg methamphetamine in Neamt County (North Romania). The Romanian police also managed to arrest the alleged head of the drug trafficking network who was detained at Henry Coanda International Airport (Bucharest) on the way to Tokyo. The suspects will be charged for illegal international drug trafficking and face a maximum penalty of 25 years in prison.

### Austria takes action against new psychoactive substances

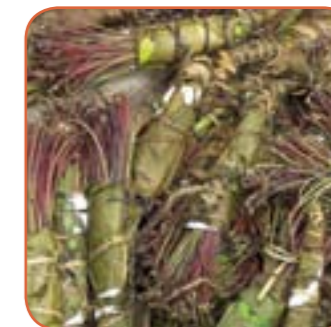
**VIENNA, Austria – 1 January 2012.** The sale of synthetic substances with psychoactive effects became illegal on 1 January 2012, according to new legislation covered by the New Psychoactive Substances Act. Selling such substances could entail imprisonment from one to ten years, depending on whether the offence caused a hazard to life, endangered the health status of more than ten people, or resulted in more than ten people suffering from grievous bodily harm after having used the drug. Users of these substances will not face any penalties. As of February 2012, manufacturers and distributors could face a prison sentence of up to two years. The legal use of such chemicals for commercial purposes or for research purposes is not affected by the law, but special authorization has to be sought from the Ministry of Health.

### Switzerland: more than 50 substances put under national control

**SWITZERLAND – 1 December 2011.** The manufacture, sale and use of 52 synthetic psychoactive substances and seven classes of compounds became illegal on 1 December 2011 under a regulation enacted by the Swiss Agency for Therapeutic Products. Substances that were placed under national control include 2-/3- fluoroamphetamine, ethylone and pentylone. Cathinones (e.g. mephedrone) and naphthylpyrovalerones (e.g. MDPV, often sold as 'bath salts') also fall within the scope of the regulation. Customs and Police are now allowed to immediately confiscate goods suspected to contain these substances. The new regulation allows the government to act effectively and in a timely fashion to keep up with the rapidly-evolving illegal designer drugs market. A yearly multiple review of any newly available substances offers a flexible means to place any new synthetic substance under national control. Companies and laboratories which routinely use the banned substances will have to seek special authorization from the Ministry of Interior.

### Netherlands: khat under national control

**THE HAGUE, Netherlands – 10 January 2012.** The Dutch government placed khat, a leaf native to East Africa which is chewed for its stimulant properties, under national control in List II ("soft drugs") of the Opium Act. The decision was taken following a study by the Trimbos Institute (Netherlands) on the use of khat in the Somali community in the Netherlands, which stated that khat exhibits negative externalities towards society. The use of khat will not be punishable. This will impact the ATS market since the psychoactive chemicals, cathinone and cathine (norpseudoephedrine), derived from the plant, are closely related to amphetamine and have been placed under international control, listed in the 1971 United Nations Convention on Psychotropic Substances. While khat is not under international control, 15 European Union countries and Norway have placed khat under national control.



Source: DEA

### Netherlands seizes one ton of phenylacetic acid ethyl ester

**AMSTERDAM, Netherlands – 21 December 2011.** 1000 kg of phenylacetic acid ethyl ester (or ethyl phenylacetate) was seized by the Dutch Customs at Schiphol Airport. The substance is frequently used in the illicit manufacture of methamphetamine: esters of phenylacetic acid are used to obtain phenylacetic acid and, subsequently, phenyl-2-propanone (P-2-P), which is an immediate precursor of methamphetamine. The substance reportedly originates from China and is a common ingredient in some pharmaceuticals, agrochemicals, food and cosmetic products. The final destination for the substance is thought to be Mexico where numerous seizures of phenylacetic acid ethyl ester have been made over the past few months.

### Netherlands: possible new synthesis route for LSD?

**AMERSFOORT, Netherlands – 19 December 2011.** Seizures of elymoclavine (3 grams) and agroclavine (2 grams) in Amersfoort could indicate that drug traffickers are using a different route for synthesizing lysergic acid diethylamide (LSD). LSD is usually synthesized from ergotamine which belongs to the group of ergot alkaloids, controlled under the provisions of the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Ergot is a type of fungus which grows on rye and related plants, one of its psychoactive components is the alkaloid ergine (d-lysergic acid amide) LSA, a precursor of LSD. Agroclavine is another ergot alkaloid which can be oxidized to elymoclavine and then used for ergot-based drug synthesis. According to the Dutch Police, the chemicals originate from India and have never been seized before in the Netherlands.



Source: National Crime Squad, Netherlands

### UK: designer drugs affect brain chemistry

**HERTFORDSHIRE, United Kingdom – 14 December 2011.** The neurobiological effects of designer drugs mephedrone and methylone, analogues of cathinone, are similar to the drug MDMA, suggests research published in *Neuropsychopharmacology*. Mephedrone and methylone are structurally related to MDMA and used for personal experimentation and mood elevation. The new study elucidates the mechanism of action of these compounds and sheds light on the toxicity and abuse potential of substances that are known as 'bath salts' and 'plant food'. Animal studies showed that mephedrone and methylone have a similar effect on dopamine and serotonin as MDMA. Neurotransmitter release is similarly evoked by each of the compounds with a larger magnitude of effect on serotonin compared to dopamine. When higher doses of the drugs were ingested behavioural differences between the test groups were observed. MDMA ingesting rats exhibited severe hyperthermia and long-term depletion of serotonin was observed. Changes in serotonin levels in the brain can alter mood.





Source: UK Home Office

### UK: 235 kg amphetamine hidden in Christmas decorations

**ESSEX, United Kingdom – 17 November 2011.** A total of 235 kg amphetamine, 85 kg cannabis resin, 18 kg cocaine, 17 kg herbal cannabis and 15 kg heroin worth USD 5.5 million was recovered by the UK Border Agency. This marks one of the biggest seizures at the International Port of Harwich (130 km north-east of London) in 2011. The drugs were found in a trailer that arrived on a ferry from the Netherlands. The trailer contained a series of pallets with Christmas decorations and artificial Christmas trees with the drugs being concealed in some of the pallets underneath the top layer of the festive decorations. A Belgian national was arrested in connection with the seizure.

### UK: mephedrone users exhibit addiction symptoms

**LONDON, United Kingdom – November 2011.** Three in ten mephedrone users associated with the dance music scene exhibit symptoms associated with addiction, a study on the use, subjective effects and health risks of mephedrone by the Institute of Psychiatry, King's College London (*Addiction 106*) has found. A total of 100 UK-based drug users were interviewed for the study with 88% of them having used mephedrone the first time in 2009. Problems associated with dependence include withdrawal symptoms, failed attempts to stop, and taking larger and larger doses. 34% of respondents reported being concerned about their use of the drug, 22% said they had a persistent or strong urge to use it, and 15% said family or friends had expressed concerns about their use. The study concluded that mephedrone has a high abuse and health risk liability, with increased tolerance, impaired control and a compulsion to use, which are all predominant dependency symptoms.



Source: KLPD, Netherlands

### Europe: ATS laboratories increase manufacturing capacity

**LISBON, Portugal – 15 December 2011.** A joint report by Europol and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) suggests that illicit drug manufacture in Europe is growing in scale and sophistication. This can be observed in countries in the north-west of Europe (Netherlands and Belgium), where custom-made industrial equipment is used for manufacturing amphetamines. The improved equipment increases the manufacturing capacity and subsequently the yield from around 5 to 8 kg of amphetamine per

manufacture cycle to between 30 and 40 kg. In the 'north-east hub', particularly in Poland, manufacture is reported to be on the rise, the capacity of clandestine manufacturing facilities are reported to have risen from around 3 kg per manufacture cycle to between 4 and 8 kg.

### EMCDDA snapshot on online shops selling new psychoactive substances

**LISBON, Portugal – 15 November 2011.** Most of the 631 Internet shops selling psychoactive substances are based in the United States (197) and the United Kingdom (121), according to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The number of shops has doubled since January 2011 (314 shops), and tripled compared to January 2010 (170 shops). Increases were reported in a number of online shops based in Canada, Czech Republic, Germany, Netherlands, New Zealand, Poland, United Kingdom and United States. The top three new psychoactive substances sold were kratom, salvia divinorum and hallucinogenic mushrooms, in addition 6-(2-aminopropyl) benzofuran, cathinones such as mephedrone and MDPV were also offered. In order to identify the online shops, three search engines (Google, one national and metacrawler.com) were used for each language searching for generic terms for new drugs and specified terms such as 'herbal blends' or 'mephedrone'. The search was carried out in 18 EU languages as well as in Russian and Ukrainian.

### EMCDDA reports low level of synthetic drug prevention activities within the EU

**LISBON, Portugal – 15 November 2011.** In spite of high levels of synthetic drug use in recreational settings, only 13 countries report the implementation of prevention or harm-reduction interventions in these areas, according to the European Monitoring Centre for Drugs and Drug Addiction's (EMCDDA) Annual Report 2011. The reported interventions continue to focus on information provision and counselling. A recent review of harm-reduction strategies implemented in recreational settings found that they are rarely evaluated and their effectiveness is not always clear (Akbar et al., 2011). Most interventions focus on training service staff in recreational settings, including on topics such as how to recognise signs of intoxication, and when and how to refuse service to customers. In an Austrian project, organizers of party events are assisted at the preparation stage and party-goers are offered counselling to help them develop a more critical approach to psychoactive substances and risk behaviour. Multi-component environmental models, which are among the programmes with more promising evaluation results, are mainly reported by countries in the north of Europe.



Source: Policia Nacional Civil (Guatemala)

### Guatemala: alarming seizures of methamphetamine precursors

**Guatemala – January 2012.** A total of 428,900 lt (2,063 barrels) of precursors were seized in January 2012, according to the National Civil Police. On 16 and 17 January 2012, approximately 50,000 lt (197 barrels) of methylamine, a chemical frequently used in the illicit manufacture of methamphetamine, were seized in two separate operations. Other chemicals seized by the police included monomethylamine, ethyl phenyl acetate and acetone, which are also used in the manufacturing process of methamphetamine. Recent months have seen a

considerable increase in Guatemala-bound precursor chemicals and this might indicate increasing manufacturing activity (see next story). Such large seizures of chemicals over a short period present a challenge to the authorities in terms of safe handling and environmentally-friendly disposal.

### Methamphetamine laboratory discovered in Guatemala

**SAN MARCOS, Guatemala – 14 December 2011.** A methamphetamine laboratory was discovered by the General Directorate of Criminal Investigation, Special Forces Police and Public Prosecutor's Office. The laboratory was located in Buena Vista Las Flores, Catarina, San Marcos in the west of Guatemala some 275 km from Guatemala City. At least 500 kg of methamphetamine estimated at more than USD 32 million are believed to have been manufactured by the laboratory. Authorities also confiscated manufacturing equipment as well as various chemicals that could be used in the synthesis of methamphetamine synthesis.



Source: Policia Nacional Civil (Guatemala)

### Mexico makes largest single seizure of methamphetamine (15 mt)

**Zapopan, Mexico – 7 February 2012.** A total of 15 mt of pure methamphetamine and 5 kg crystalline methamphetamine was seized on a ranch in the state of Jalisco, Western Mexico, after military personnel located an illicit laboratory for the manufacture of synthetic drugs. This marks the largest single seizure of methamphetamine that was ever made in Mexico. Various chemicals for the illicit manufacture of methamphetamine were also confiscated, including caustic soda and ammonia. No arrests were made. Experts estimate that the drug could have had a street value of around USD 4 billion in the United States and could have met the demand of 13 million users. The seized amount is equal to half of the global methamphetamine seizures reported to UNODC in 2009. This is already the seventh laboratory that Mexican authorities have dismantled in that particular region in 2012.





Source: SEMAR

### Mexico: precursor trafficking to Guatemala and Nicaragua

**MICHOCAN, Mexico – 17 January 2012.** In a joint action between the Tax Administration Service, the Secretariat of the Navy of Mexico and the Attorney General's Office, 12 containers with monomethylamine, a chemical used to manufacture methamphetamine, with an approximate weight of 195 mt were seized. The containers arrived at the Port of Lazaro Cardenas, Michoacan, from China. Ten of the containers were bound for Puerto Quetzal in Guatemala, and the remaining two were headed to the Port of Corinto in Nicaragua. This marks the first attempt of Mexico trying to traffic precursor chemical to Nicaragua and a repeated attempt of trafficking to Guatemala. The seizure may point to increased manufacturing activity in Central America and the rising influence of Mexican cartels in the synthetic drugs market within the region.

### Three ATS laboratories dismantled in Western Mexico

**MEXICO – 4 & 5 January 2012.** Mexico's army dismantled three clandestine synthetic drug laboratories in the West Central State of Jalisco, seizing more than 4 mt of methamphetamine, amphetamine and chemical precursors such as phenylacetic acid. The Defence Secretariat announced that 1,300 kg of methamphetamine and 710 kg of chemical substances were discovered at a laboratory in a city of Tlajomulco de Zúñiga. The second laboratory was raided by military personnel in Tala, where one suspect was arrested and 1,150 kg of chemical products as well as weapons were seized. On 5 January 2012, the third laboratory was uncovered in Zapopan, where soldiers confiscated 10 kg of amphetamine and 875 kg of chemical substances. Mexico's drug cartels are the main suppliers of illegal stimulants to the United States market, where a rising demand for synthetic drugs can be observed.



Source: SEDENA



Source: SEMAR

### Mexico: significant seizures of monomethylamine

**MEXICO CITY, Mexico – 28 December 2011.** Seven seizures of chemicals (741 mt) used to make methamphetamine, were reported from Mexico in December 2011, with six of them intended to be further shipped to Guatemala. The biggest four seizures (229 mt, 205 mt, 120 mt and 100 mt) were made in the Pacific Port of Lazaro Cardenas in the Western State of Michoacan and involved monomethylamine which is an unscheduled chemical. The chemicals arrived on a shipment from Shanghai, China, and were bound for Puerto Quetzal in Guatemala. Two smaller seizures of chemicals of more than 21 mt of monomethylamine and 23 mt of methylamine were made at the Port of Manzanillo, Colima State, also destined for Puerto Quetzal. While the monomethylamine had arrived from Peru, the methylamine originated from Turkey. In 2011, a total of 1,400 mt of chemicals were confiscated by Mexican Customs.

### PMMA alert in Canada

**CALGARY, Canada – 11 January 2012.** Calgary Police Service and provincial health authorities have renewed warnings about the dangers of paramethoxymethamphetamine (PMMA) following the toxicology results issued by Alberta Police after five people died in November and December 2011. The chemical PMMA is thought to be a less expensive substitute for manufacturing a drug similar in appearance to and sold as 'ecstasy' (MDMA). Preliminary toxicology reports showed that PMMA, methamphetamine and MDMA were present in all five drug victims. While the cause of each death is still under investigation, the presence of PMMA is a common link between each case. According to the Police, the majority of ecstasy pills seized in Calgary originate from British Columbia, where three people have also died from PMMA.



Source: Health Canada

### Canada: new study sheds light on effects of long-term amphetamine use

**MONTREAL, Canada – November 2011.** Amphetamine use in adolescence can cause neurobiological imbalances and increase risk-taking behaviour, with effects persisting into adulthood, even when drugs are not being used anymore. This new study conducted by McGill University Health Centre is one of the first to shed light on how long-term amphetamine use in adolescence affects brain chemistry and behaviour. The effect on important neurotransmitters and on risk-taking behaviour in adolescent rats was tested, which have similar brain chemistry to humans. The rats were given one of three doses (0.5, 1.5 and 5.0 mg/kg) of amphetamine during their adolescence and the drug was withdrawn when they reached adulthood. Key neurotransmitters serotonin, dopamine and norepinephrine were investigated and showed that abnormalities in brain activity had formed with regards to neurochemicals called 'monoamines'. These are associated with emotional disturbances and mental diseases such as depression or addiction. Further behavioural changes were observed such as hyper-activity when a moderate dose was received.

### US: more than 6,000 calls related to 'bath salts' exposure in 2011

**ALEXANDRIA, United States – 5 January 2012.** The number of exposures to synthetic substances frequently sold as 'bath salts' on illicit ATS markets increased to 6,072 in 2011, up from only 303 calls in 2010, according to the American Association of Poison Control Centers (AAPCC). The AAPCC also reports receiving more than 1,000 calls from people requesting information on 'bath salts' which might point to even larger numbers that are affected by these substances. Adverse health effects of 'bath salts' which were identified by the poison control centers include impaired perception, reduced motor control, disorientation, extreme paranoia and violent behaviour. Since September 2011, after the United States Drug Enforcement Administration (DEA) used their emergency scheduling authority to temporarily control 'bath salts', the number of calls related to human exposures has been steadily declining. The AAPCC maintains the National Poison Data System, a large database containing information about all poison exposure data across the country.

### US: disrupting the Mexican methamphetamine trade

**PHOENIX, United States – 20 December 2011.** The Drug Enforcement Agency (DEA) and Tempe Police announced the result of a 15-month long investigation 'Operation Crank Call' leading to the seizure of 296 kg of cannabis, 198 kg of methamphetamine, 56 kg of cocaine and of 2 kg of heroin and USD 7.8 million. The joint investigation of various law enforcement agencies targeted an extensive trafficking cell associated with the Mexican Sinaloa Cartel. Local drug dealers in Tempe, Mesa, Phoenix, Chandler and Avondale were identified, leading to the arrest of more than 203 people. This marks a significant interruption to the drug trafficking organizations. The DEA Phoenix Organized Crime Drug Enforcement Task Force brings a synergy to drug trafficking investigations combining resources and expertise of all participating agents, leading to great successes in the fight against the major Mexican cartels.



Source: DEA

### US: House passes Synthetic Drug Control Act

**WASHINGTON D.C., United States – 8 December 2011.** The U.S. House of Representatives passed the Synthetic Drug Control Act of 2011 (H.R.1254), which amends the Controlled Substances Act to place new synthetic drugs under Schedule I. Substances include mephedrone, which is commonly sold as 'bath salt' or 'plant food' and on which the Federal Drug Enforcement Agency approved a temporary emergency ban in October 2011. Synthetic cannabinoids are also included in the ban, targeting products which are sold in illicit ATS markets as 'Spice' and 'K2'. The bill surpassed the required two-thirds majority with 73% of the votes being in favour. Opponents of the bill argued that some of these chemicals are seen as being valuable to researchers looking to cure diseases such as Parkinson's disease. Under the bill, prison sentences of up to 20 years could be imposed for the distribution of even small quantities of the new synthetics.



### Global SMART accomplishments for 2011 and 2012

The Global SMART (Synthetics Monitoring: Analyses, Reporting and Trends) Programme improves the capacity of targeted Member States to generate, manage, analyze, report and use information on illicit synthetic drugs. The programme launched formal operations in September 2008 in Bangkok. In 2011 and 2012 the Global SMART Programme:

- prepared and launched the 2011 Global ATS assessment; the first such report since 2008
- prepared and launched the third regional ATS report 'Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs - Asia and the Pacific - 2011';
- produced two Global SMART Updates (in English and Spanish);
- produced a preliminary assessment on the ATS situation in Latin America;
- presented the latest information related to the global ATS situation at the 54th session of the Commission on Narcotic Drugs in Vienna;
- convened the third annual Global SMART Programme Advisory Group meeting;
- provided substantive input into the 2011 World Drug Report chapter on ATS;
- conducted the third SMART annual regional synthetic drug information workshop in East and South-East Asia;
- organized a pilot technical workshop in March 2011 (Argentina, Chile and Uruguay) as well as the first regional SMART workshop in Latin America in September 2011, in close cooperation with the Organization of American States (OAS);
- participated in the First International Multidisciplinary Forum on New Drugs organized by the European Monitoring Centre on Drugs and Drug Addiction in Lisbon in May 2011;
- disseminated information related to the synthetic drug situation at targeted conferences such as the 5th Synthetic Drugs Enforcement Conference held in Nunspeet (Netherlands) in November 2011 or the 24th IFNGO World Conference, the largest gathering of drug-related non-governmental organizations in the world, held in Kuala Lumpur in November 2011;
- presented the latest available ATS related-information at the 46th session of the Subcommittee on Illicit Drug Traffic and Related Matters in the Near and Middle East in Vienna in December 2011;
- participated in the 3rd Operational Working Group Meeting on Operation ICE TRAIL Teheran, Iran (Islamic Republic of) in January 2012.

### Recent Global SMART Publications

*2011 Patterns and Trends of Amphetamine-Type Stimulants and Other Drugs – Asia and the Pacific (November 2011)*

The report provides detailed data and information on 15 countries in East and South-East Asia, with regional coverage of South Asia and Oceania. The report examines the threat from the illicit manufacture, trafficking and use of ATS from within the region and from neighbouring regions.

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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.