INTERNATIONAL NARCOTICS CONTROL BOARD

Precursors

and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances

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Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2013 on the Implementation of Article 12 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 (E/INCB/2013/4)

The updated lists of substances under international control, comprising narcotic drugs, psychotropic substances and substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, are contained in the latest editions of the annexes to the statistical forms ("Yellow List", "Green List" and "Red List"), which are also issued by the Board.

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INTERNATIONAL NARCOTICS CONTROL BOARD

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and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances

Report of the
International Narcotics Control Board for 2013
on the Implementation of Article 12
of the United Nations Convention
against Illicit Traffic in Narcotic Drugs
and Psychotropic Substances of 1988

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Foreword

For over 20 years, in accordance with the mandate given to it by the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, as well as resolutions adopted by the Security Council, the Economic and Social Council and the Commission on Narcotic Drugs, the International Narcotics Control Board (INCB) has monitored and promoted national and international controls over precursors and chemicals used in the illicit manufacture of drugs. It has also carried out numerous tasks entrusted to it by the international community, including: to administer and report on the implementation of the international precursor control system; to monitor the licit movement of scheduled chemicals; and to monitor, analyse and report on trafficking activities.

The success of the international precursor control system is such that there is little diversion from international trade of the 23 scheduled precursors. A variety of tools and technology made available by INCB are partly responsible for this success. In particular, technology such as the Pre-Export Notification Online (PEN Online) system has, since 2006, allowed Governments to prevent the diversion of thousands of tons of chemicals without hampering legitimate trade.

Moreover, the flexible and proactive operational activities that the Board has initiated under Project Prism and Project Cohesion have helped to address urgent issues related to international precursor control, such as the increasing use of emerging, non-scheduled substances for illicit purposes. In this regard, the online Precursors Incident Communication System (PICS) is a promising new tool as it allows Governments to share information on diversions, attempted diversions and seizures of precursors and to launch investigations.

Each year, INCB, in its report on precursors, provides an overview of the licit international trade in and requirements for scheduled chemicals. It also analyses illicit activities related to the diversion of and trafficking in precursors aimed at circumventing the control system. Over the past few years, the Board has included a thematic chapter in its report on precursors. In its 2011 report, the theme was "Twenty years of international precursor control: progress and challenges", and the Board described the evolution and took stock of the chemical control framework. In the 2012 report, the theme was "Challenges in international precursor control", and the Board focused on the status of implementation of the legal framework at the national level, international controls, and emerging precursors and other non-scheduled substances, as well as the role of the Internet.

The thematic chapter of the 2013 report on precursors is entitled "Action to enhance international precursor control" and includes an analysis of regional priorities. The report contains the most salient conclusions and recommendations for 2014 and draws particular attention to the two most important recent developments: the diversion of and trafficking in scheduled chemicals at the domestic level; and the increasing use of non-scheduled chemicals in the illicit manufacture of drugs. It is extremely important that members of the international community take concrete measures to rapidly deal with these two issues by making use of the various tools and technology made available by INCB.

Viewed as a whole, the Board's reports on precursors are essential sources of information on all issues related to the evolving situation with regard to precursor control, in particular recent developments. However, the true value of the reports lies not only in the quality of the analysis, but also in the practical guidance they offer to government authorities on ways to deal with issues of chemical control.

I therefore invite the parties to the 1988 Convention and interested international organizations, particularly in preparation of the 2014 high-level review of the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem, to make use of the Board's reports on precursors, as those reports together provide a comprehensive overview of the licit trade and patterns of trafficking in precursors, as well as the measures that need to be taken to more effectively deny criminal organizations the chemicals they require to manufacture dangerous drugs.

Raymond **Yans**

President of the International
Narcotics Control Board

Preface

The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 provides that the International Narcotics Control Board shall submit a report annually to the Commission on Narcotic Drugs on the implementation of article 12 of the Convention and that the Commission shall periodically review the adequacy and propriety of Tables I and II of the Convention.

In addition to its annual report and other technical publications (on narcotic drugs and psychotropic substances), the Board has prepared its report on the implementation of article 12 of the 1988 Convention in accordance with the following provisions contained in article 23 of the Convention:

> 1. The Board shall prepare an annual report on its work containing an analysis of the information at its disposal and, in appropriate cases, an account of the explanations, if any, given by or required of Parties, together with any observations and recommendations which the Board desires to make. The Board may make such additional reports as it considers necessary. The reports shall be submitted to the [Economic and Social] Council through the Commission which may make such comments as it sees fit.
>
> 2. The reports of the Board shall be communicated to the Parties and subsequently published by the Secretary-General. The Parties shall permit their unrestricted distribution.

Contents

Page

Foreword . . . iii

Preface . . . v

Explanatory notes . . . xi

Chapter

I. Introduction . . . 1

II. Action taken by Governments and the International Narcotics Control Board . . . 1

A. Scope of control . . . 1

B. Adherence to the 1988 Convention . . . 2

C. Reporting to the Board pursuant to article 12 of the 1988 Convention . . . 2

D. Legislation and control measures . . . 2

E. Submission of data on licit trade in, uses of and requirements for precursors . . . 4

F. Annual legitimate requirements for imports of precursors of amphetamine-type stimulants . . . 4

G. Controls over international trade . . . 4

H. Activities and achievements in international precursor control . . . 7

I. Precursors Incident Communication System . . . 7

III. Extent of licit trade in precursors and the latest trends in precursor trafficking . . . 8

A. Substances used in the illicit manufacture of amphetamine-type stimulants . . . 8

Substances used in the illicit manufacture of amphetamines . . . 8

Substances used in the illicit manufacture of 3,4-methylenedioxymethamphetamine and its analogues . . . 16

Use of non-scheduled chemicals and other trends in the illicit manufacture of amphetamine-type stimulants . . . 17

B. Substances used in the illicit manufacture of cocaine . . . 20

C. Substances used in the illicit manufacture of heroin . . . 24

D. Substances used in the illicit manufacture of other narcotic drugs and psychotropic substances . . . 27

E. Substances used in the manufacture of non-scheduled substances of abuse . . . 28

IV. Action to enhance international precursor control . . . 28

A. Regional precursor priorities: Africa . . . 30

B. Regional precursor priorities: Central America and the Caribbean . . . 30

C. Regional precursor priorities: North America . . . 30

D. Regional precursor priorities: South America . . . 31

E. Regional precursor priorities: East and South-East Asia and South Asia . . . 31

F. Regional precursor priorities: West Asia . . . 31

G. Regional precursor priorities: Europe . . . 32

H. Regional precursor priorities: Oceania . . . 32

I. Global precursor priority . . . 32

V. Conclusions and recommendations 32

Glossary 35

Annexes*

I. Parties and non-parties to the 1988 Convention, by region, as at 1 November 2013 39

II. Annual legitimate requirements for ephedrine, pseudoephedrine, 3,4-methylenedioxyphenyl-2-propanone and 1-phenyl-2-propanone, substances frequently used in the manufacture of amphetamine-type stimulants 45

III. Substances in Table I and Table II of the 1988 Convention 51

IV. Use of scheduled substances in the illicit manufacture of narcotic drugs and psychotropic substances 52

V. Treaty provisions for the control of substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances 56

VI. Regional groupings 57

VII. Submission of information by Governments pursuant to article 12 of the 1988 Convention (form D) for the years 2008-2012 58

VIII. Seizures of substances in Tables I and II of the 1988 Convention, as reported to the International Narcotics Control Board, 2008-2012 63

IX. Submission of information by Governments on licit trade in, uses of and requirements for substances in Tables I and II of the 1988 Convention for the years 2008-2012 98

X. Governments that have requested pre-export notifications pursuant to article 12, paragraph 10 (a), of the 1988 Convention 105

XI. Licit uses of the substances in Tables I and II of the 1988 Convention 110

Tables

1. Governments failing to report as required under article 12, paragraph 12, of the 1988 Convention, 2012 3

2. Illicit cocaine-processing operations dismantled in coca-producing countries, by type of operation, 2008-2012 22

3. Acids and solvents in Table II of the 1988 Convention: percentage of global seizures reported by coca-producing countries, 2008-2012 23

4. Seizures of ammonium chloride reported by Governments on form D, 2008-2012 27

5. Countries utilizing basic tools of international precursor control, by region, as at 1 November 2013 29

6. Action to enhance international precursor control: regional priorities 29

Figures

I. Proportion of ephedrine and pseudoephedrine seizures and imports reported by Governments or form D, by region, 2008-2012 9

II. Seizures of ephedrine and pseudoephedrine reported by Governments on form D, 2008-2012 10

III. Analysis of seized methamphetamine in the United States, identifying methamphetamine manufactured with methods not based on the use of ephedrines; and seizures of ephedrines in Mexico, 2006-2012 15

* The annexes are not included in the printed version of the present report but are available in the CD-ROM version and in the version on the website of the International Narcotics Control Board (www.incb.org).

IV. Seizures of 3,4-methylenedioxyphenyl-2-propanone reported by Governments on form D, 2003-2012 16

V. Incidents involving *alpha*-phenylacetoacetonitrile communicated via the Precursors Incident Communication System (PICS), by quarter, 2012-2013 19

VI. Seizures of potassium permanganate reported by Governments on form D, 2008-2012 21

VII. Seizures of acids and solvents in Table II of the 1988 Convention reported by coca-producing countries, 2008-2012 23

VIII. Price of acetic anhydride on the black market in Afghanistan, 2006-2013 26

IX. Seizures of acetic anhydride and phenylacetic acid (including its esters) reported by Mexico on form D, 2008-2012 26

Maps

1. Governments invoking article 12, paragraph 10 (a), of the 1988 Convention, requiring pre-export notification for selected substances 5

2. Governments registered with and using the Precursors Incident Communication System (PICS) 8

3. Ephedrine and pseudoephedrine: seizures reported by Governments and notable trafficking routes 11

4. 1-Phenyl-2-propanone and phenylacetic acid: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013 15

5. 3,4-Methylenedioxyphenyl-2-propanone, isosafrole, piperonal, safrole and safrole-rich oils: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013 . . . 18

6. Potassium permanganate: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013 21

7. Acetic anhydride: seizures reported by Governments, 2008-2012, and notable transit routes, 2008-2013 25

Explanatory notes

The boundaries and names shown and the designations used on the maps in this publication do not imply official endorsement or acceptance by the United Nations.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Countries and areas are referred to by the names that were in official use at the time the relevant data were collected.

Multiple Government sources of data were used to generate the present report, including the information provided each year on form D (information on substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances), notifications via the Pre-Export Notification Online (PEN Online) system, the Precursors Incident Communication System (PICS) and other official communications with competent national authorities. Unless otherwise specified, form D data are reported by the calendar year, the cut-off date for reporting being 30 June of the following year. The reporting period for data from the PEN Online system and PICS are from 1 November 2012 to 1 November 2013, unless otherwise specified. In cases in which PEN Online data are used for multiple years, calendar years are used. Additional information was also provided through international and regional partner organizations, as indicated in the report.

Reference to "tons" is to metric tons, unless otherwise stated.

The following abbreviations have been used in the present report:

APAAN	*alpha*-phenylacetoacetonitrile
ATS	amphetamine-type stimulants
GBL	*gamma*-butyrolactone
INCB	International Narcotics Control Board
INTERPOL	International Criminal Police Organization
MDMA	3,4-methylenedioxymethamphetamine
3,4-MDP-2-P	3,4-methylenedioxyphenyl-2-propanone
P-2-P	1-phenyl-2-propanone
PEN Online	Pre-Export Notification Online
PICS	Precursors Incident Communication System

Summary

The present report provides the most comprehensive overview of the latest trends and challenges in precursor control. The Board relies on the cooperation of Governments to share information that is essential to preparing the report and maintaining the international precursor control system.

The Pre-Export Notification Online (PEN Online) system remains the cornerstone of international precursor control in terms of monitoring licit trade in and preventing the diversion of precursors. The system is now used by 146 States and territories, and more than 2,000 pre-export notifications are communicated through it each month. In addition, since its launch in March 2012, the Precursors Incident Communication System (PICS) has rapidly established itself as an important tool in communicating actionable intelligence and strengthening the international precursor control regime. PICS allows relevant national law enforcement and regulatory authorities to report and share information on individual seizures of precursors, including numerous incidents involving chemicals previously not known to have been used in illicit drug manufacture. As at 1 November 2013, there were 350 registered users of PICS, including users from 78 Governments and 8 international and regional agencies. PICS has been used to communicate nearly 850 incidents involving 86 different countries and territories

Diversion of scheduled precursors from licit international trade is becoming less frequent, as traffickers divert substances from domestic trade channels, which are then smuggled out of the country, as is frequently the case for acetic anhydride. Traffickers are also turning to non-scheduled substances as highlighted by the rise in seizures of *alpha*-phenylacetoacetonitrile (APAAN), a substitute chemical that can be used in laboratories illicitly manufacturing amphetamine and methamphetamine with methods based on the use of 1-phenyl-2-propanone (P-2-P). Seizures of precursors used in the illicit manufacture of 3,4-methylenedioxymethamphetamine (MDMA, commonly known as "ecstasy"), appear to be rebounding, raising concern that MDMA may soon become readily available in major illicit markets. At the same time, cocaine manufacture is threatening to spread into Central America and other regions outside of South America.

It is encouraging that countries are reacting to these threats by introducing new responses at the national level and increasingly using international cooperation mechanisms to more effectively address them. That was witnessed in Australia, China, India, Peru and Viet Nam, where relevant national legislation was reinforced, and in Europe, where the European Commission continues to close gaps in legislation. Numerous international operations, as well as training activities aimed at countering diversion, have taken place, including under the auspices of Project Prism and Project Cohesion and international partners of the International Narcotics Control Board such as the International Criminal Police Organization (INTERPOL) and the World Customs Organization. Also of note is the increasing recourse to bilateral agreements, as was the case between China and Mexico.

Nevertheless, while the use of PEN Online and PICS is high, and Governments are taking action to address weaknesses in precursor control, the existing basic tools for countering the diversion of precursors have not been universally implemented, particularly in Africa. Several countries in Central America and the Caribbean also need to utilize some or most of the same basic tools and to improve controls over the import and export of precursors. Enhancing domestic controls, especially related to purchase limits, and/or cooperation with industry and retail suppliers to reduce the availability of precursor chemicals for illicit use should be a priority in North America. For countries in South America, there is a need to fully implement all

existing legislation and to improve the sharing of cross-border operational information on precursor incidents. In South Asia and in East and South-East Asia, the lack of basic information about precursor incidents has had an adverse effect on investigations in those regions, which continue to experience major problems with regard to the abuse of amphetamine-type stimulants. West Asian countries should develop a better understanding of their domestic markets, including the role of manufacturing companies and end users of scheduled precursors. In Europe, the use of non-scheduled substances in the illicit manufacture of amphetamine-type stimulants has emerged as a major challenge. Finally, with regard to Oceania, all small Pacific island States should become parties to the 1988 Convention; in general, countries in that region also need to enhance cooperation, at the national and international levels.

I. Introduction

1. The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988[1] provides for measures to prevent the diversion of precursor chemicals frequently used in the illicit manufacture of drugs. The International Narcotics Control Board (INCB) monitors the Governments' control over those precursor chemicals and assists Governments in preventing the diversion of such chemicals into the illicit traffic.

2. The present report on precursors has been prepared by the Board pursuant to article 23 of the 1988 Convention. Substantive reporting begins in chapter II, which provides statistical data and other information on action taken by Governments and the Board pursuant to article 12 of the 1988 Convention. Those data are drawn from a number of sources, including the following: form D; the Pre-Export Notification Online (PEN Online) system; the Precursors Incident Communication System (PICS); the results of task force operational support under Project Prism and Project Cohesion; and official national reports on the situation with regard to drug and precursor control.

3. Chapter III provides information on the extent of legitimate trade in precursor chemicals; on the latest major trends in trafficking in and the illicit use of those chemicals; on relevant cases involving suspicious and stopped shipments; on diversions or attempted diversions of those chemicals from international trade; and on seizures of those chemicals.

4. Chapter IV, entitled "Action to enhance international precursor control", builds on the thematic chapters in the Board's 2011 and 2012 reports on precursors.[2] The chapter outlines regional priorities to be addressed by Governments in response to the rapidly changing situation with regard to precursor trafficking at the national and international levels.

5. Chapter V provides conclusions and recommendations for Governments on effective precursor control at the national and international levels, including on ways to address the challenges posed by the use of non-scheduled substances in illicit drug manufacture.

6. Annexes I-XI[3] provide updated, practical information to assist competent national authorities in carrying out their functions, including information on estimated annual legitimate requirements for the import of selected substances frequently used in the illicit manufacture of amphetamine-type stimulants (ATS), a list of Governments that require pre-export notifications, information on the use of scheduled substances in illicit drug manufacture and a summary of applicable treaty provisions. Annexes can be found in the CD-ROM version of the present report and in the online version or the Board's website (www.incb.org). Governments may obtain a printed copy of the annexes by contacting the secretariat of the Board by e-mail (secretariat@incb.org).

7. The present report, together with the thematic chapters in the Board's 2011 and 2012 reports on precursors, provides an assessment of the effectiveness of precursor control, pursuant to the high-level segment on progress of precursor control as outlined in the Political Declaration and Plan of Action on International Cooperation towards an Integrated and Balanced Strategy to Counter the World Drug Problem[4] and is to be part of the input for the high-level review of the Political Declaration and Plan of Action to be conducted by the Commission on Narcotic Drugs at its fifty-seventh session, in 2014, and by the General Assembly at its special session to be held in 2016.

II. Action taken by Governments and the International Narcotics Control Board

A. Scope of control

8. In response to significant detections and seizures of *alpha*-phenylacetoacetonitrile (APAAN), an immediate precursor of 1-phenyl-2-propanone (P-2-P) and hence a "pre-precursor" of both amphetamine and

[1] United Nations, *Treaty Series*, vol. 1582, No. 27627.

[2] *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 the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988* (United Nations publication, Sales No. E.12.XI.4), chap. IV; and *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012 on the Implementation of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988* (United Nations publication, Sales No. E.13.XI.4), chap. IV.

[3] The annexes are not included in the printed copies of the present report but are available in the CD-ROM version of the report and in the version on the website of the International Narcotics Control Board (www.incb.org).

[4] See *Official Records of the Economic and Social Council, 2009, Supplement No. 8* (E/2009/28), chap. I, sect. C.

methamphetamine, the Board has sent a communication to the Secretary-General to formally initiate the procedures for the scheduling of APAAN in March 2013. The Secretary-General invited Governments to express their opinion regarding the proposed scheduling through a questionnaire distributed by the Commission on Narcotic Drugs.

9. A total of 42 Governments responded to the questionnaire, providing information on the licit manufacture and use of, and trade in, APAAN on their territories, its use in the illicit manufacture of drugs and any implications that the scheduling of the substance might have on legitimate industry and trade. On the basis of the responses received, the Board has submitted to the Commission on Narcotic Drugs a recommendation to include the substance in Table I of the 1988 Convention.[5] That recommendation is to be considered by the Commission at its fifty-seventh session, in March 2014.

B. Adherence to the 1988 Convention

10. As at 1 November 2013, the 1988 Convention had been ratified, acceded to or approved by 187 States and formally confirmed by the European Union (extent of competence: article 12).[6] Of the nine States that have yet to become parties to the 1988 Convention,[7] five are in Oceania (see annex I). **The Board urges the nine States that have yet to become parties to the 1988 Convention to implement the provisions of article 12 and accede to the Convention without further delay.**

C. Reporting to the Board pursuant to article 12 of the 1988 Convention

11. Governments are obliged to report to the Board annually information on substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances. The information, which is submitted on form D, is used to identify regional and global patterns and trends. The Board requested Governments to submit form D by 30 April 2013, in order to provide it with adequate time to assess the submitted information. As at 1 November 2013, a total of 123 States and territories had submitted form D for the year 2012 (see annex VII). Some Governments continue to miss the reporting deadline, fail to report altogether, submit blank forms or provide only partial information on precursor chemicals. The Governments that failed to report to the Board for the year 2012 as required under article 12, paragraph 12, of the 1988 Convention are listed in table 1. **The Board wishes to remind all States parties that reporting pursuant to the 1988 Convention is not an option but an obligation. All States parties are requested to complete the latest version of form D[8] and submit it in a timely manner.**

12. Of the 123 Governments that submitted form D for 2012, 49 per cent reported having seized substances in Table I or II of the 1988 Convention in that year. (For details on the reported seizures of those substances, by region, see annex VIII.) Thirty per cent of Governments also reported for 2012 seizures of substances not in Table I or II. In several instances, significant seizures of precursor chemicals reported by some Governments in their national reports were never reported on form D. **The Board stresses the importance to all Governments of their obligation to provide on form D complete and comprehensive data on seizures of precursor chemicals.**

13. Governments submitting information on form D often fail to include details on, for example, methods of diversion, stopped shipments or the illicit manufacture of substances. That hampers the ability of the Board to identify and analyse emerging trends in trafficking in precursors and the illicit manufacture of drugs. **The Board wishes to remind Governments to provide details on methods of diversion, stopped shipments and the illicit manufacture of substances wherever possible.**

D. Legislation and control measures

14. In accordance with Economic and Social Council resolution 1992/29, the Board collects information on the specific controls applied to the substances in Table I and Table II of the 1988 Convention and maintains a directory of those requirements to assist Governments in monitoring trade in controlled chemicals. Since November 2012, several changes in control measures introduced by Governments have been brought to the attention of the Board.

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[5] For a list of substances in Table I and Table II, see annex III to the present publication.

[6] The Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol and the Convention on Psychotropic Substances of 1971 each have 183 States parties.

[7] Equatorial Guinea, Kiribati, Palau, Papua New Guinea, Solomon Islands, Somalia, South Sudan, Timor-Leste and Tuvalu.

[8] The latest version of form D is available in all six official languages of the United Nations on the Board's website (www.incb.org).

Table 1. Governments failing to report as required under article 12, paragraph 12, of the 1988 Convention, 2012

Angola	Guyana	Niger[a]
Antigua and Barbuda[a]	India	Norway
Bahamas[a]	Iran (Islamic Republic of)	Oman
Bahrain	Jamaica	Palau[a]
Barbados[a]	Kenya	Papua New Guinea[a]
Belize	Kiribati[a]	Rwanda
Botswana	Kuwait[a]	Saint Kitts and Nevis[a]
Burundi[b]	Lesotho[a]	Senegal
Cape Verde	Liberia	Sierra Leone[a]
Central African Republic	Libya[a]	Solomon Islands[a]
Chad	Madagascar	Somalia[b]
Comoros[a]	Malawi	South Africa
Congo	Mali[a]	Sudan[a]
Djibouti[a]	Marshall Islands[b]	Suriname[a]
Dominica[a]	Mauritania	Swaziland[a]
Dominican Republic	Micronesia (Federated States of)[a]	The former Yugoslav Republic of Macedonia[a]
Equatorial Guinea[a]	Monaco[a]	Timor-Leste[b]
Gabon[b]	Mozambique	Tonga[a]
Grenada[a]	Namibia	Zambia[a]
Guinea[a]	Nauru[a]	Zimbabwe
Guinea-Bissau	Nepal[a]	

[a] Government that failed to submit form D for any year during the period 2008-2012.
[b] Government that has never submitted form D.

15. In November 2012, Peru issued a new regulation through a legislative decree on control measures for chemicals, equipment and material used for the illicit manufacture of drugs. The decree establishes measures for the registry, control and inspection of goods that can be used directly or indirectly in the illicit manufacture of drugs. It defines the roles of different government agencies in that area.

16. India enacted a narcotic drug and psychotropic substance (regulation of controlled substances) order, which in March 2013 placed 12 more substances under domestic control, namely: ergometrine and its salts; ergotamine and its salts; isosafrole; lysergic acid and its salts; 3,4-methylenedioxyphenyl-2-propanone (3,4-MDP-2-P); norephedrine, its salts and preparations thereof; phenylacetic acid and its salts; 1-phenyl-2-propanone (P-2-P); piperonal; potassium permanganate; safrole and safrole-rich oils; and methyl ethyl ketone; and preparations containing ephedrine and pseudoephedrine.

17. In Australia, the Customs (Prohibited Imports) Regulations 1956 have been amended, adding *Ephedra sinica* to Schedule 4 and increasing control over its importation. Since April 2013, the plant material may not be imported into Australia unless the importer has been granted a licence to import it.

18. In response to illicit methamphetamine manufacture using ephedrine derived from plants of the genus *Ephedra*, the Supreme People's Court of China has strengthened regulations concerning ephedra, the natural source of the drug ephedrine. Since June 2013, any person who harvests or purchases ephedra for the purpose of manufacturing drugs may be charged with a drug-related crime.

19. In September 2013, the Government of Viet Nam classified 41 substances as precursors with strengthened control measures. The Government now requires agencies, organizations or individuals that study, examine, produce, transport, maintain, store, purchase, sell, distribute, use, process, exchange, import, export or transit those precursor chemicals to comply with strict new legal regulations in relation to the handling of those chemicals.

20. Remedial measures have been adopted to control trade in acetic anhydride involving member States of the European Union. The European Commission has proposed new legislative measures for the monitoring of international trade in pharmaceutical preparations containing ephedrine and pseudoephedrine.

E. Submission of data on licit trade in, uses of and requirements for precursors

21. In accordance with Economic and Social Council resolution 1995/20, parties to the 1988 Convention provide data on their licit trade in, uses of and requirements for substances in Table I and Table II of the Convention. As at 1 November 2013, 112 States and territories had provided information on licit trade in those substances, and 108 had furnished data on licit uses of and requirements for one or more of those substances (see annex IX). The voluntary provision of those confidential data allows the Board to help prevent the diversion of precursors by monitoring legitimate international trade flows and identifying patterns of suspected illicit activity. **The Board commends those States parties which provide comprehensive and confidential data on trade in substances in Tables I and II of the Convention and urges all other parties to the 1988 Convention to provide those data in accordance with Council resolution 1995/20.**

F. Annual legitimate requirements for imports of precursors of amphetamine-type stimulants

22. In its resolution 49/3, the Commission on Narcotic Drugs requested Member States to provide the Board with annual estimates of their legitimate requirements for imports of four substances frequently used in the manufacture of ATS—3,4-MDP-2-P, pseudoephedrine, ephedrine and P-2-P—and, to the extent possible, estimated requirements for imports of preparations containing those substances.

23. As at 1 November 2013, 153 Governments had provided estimates for at least one of the above-mentioned substances—a total of 749 estimates. After the Board's 2012 report on precursors was published, Armenia and Cameroon provided such information for the first time. The estimated annual legitimate requirements submitted by States and territories as at 1 November 2013 are provided in annex II, which is regularly updated on the Board's website.

24. The Board has identified 42 Governments that provided estimates but did not include their annual legitimate requirements for the import of 3,4-MDP-2-P. As legitimate use of and international trade in that particular substance are virtually non-existent (during the reporting period, PEN Online was used for only one pre-export notification of 0.5 litre of the substance), the Board decided that, for those Governments providing estimates of annual legitimate requirements where estimates for 3,4-MDP-2-P were missing, a default value of 0 kg would be entered on the Government's behalf (see annex II). A footnote to the default entry would indicate that the Board was not aware of any legitimate need for the importation of that substance into the country.

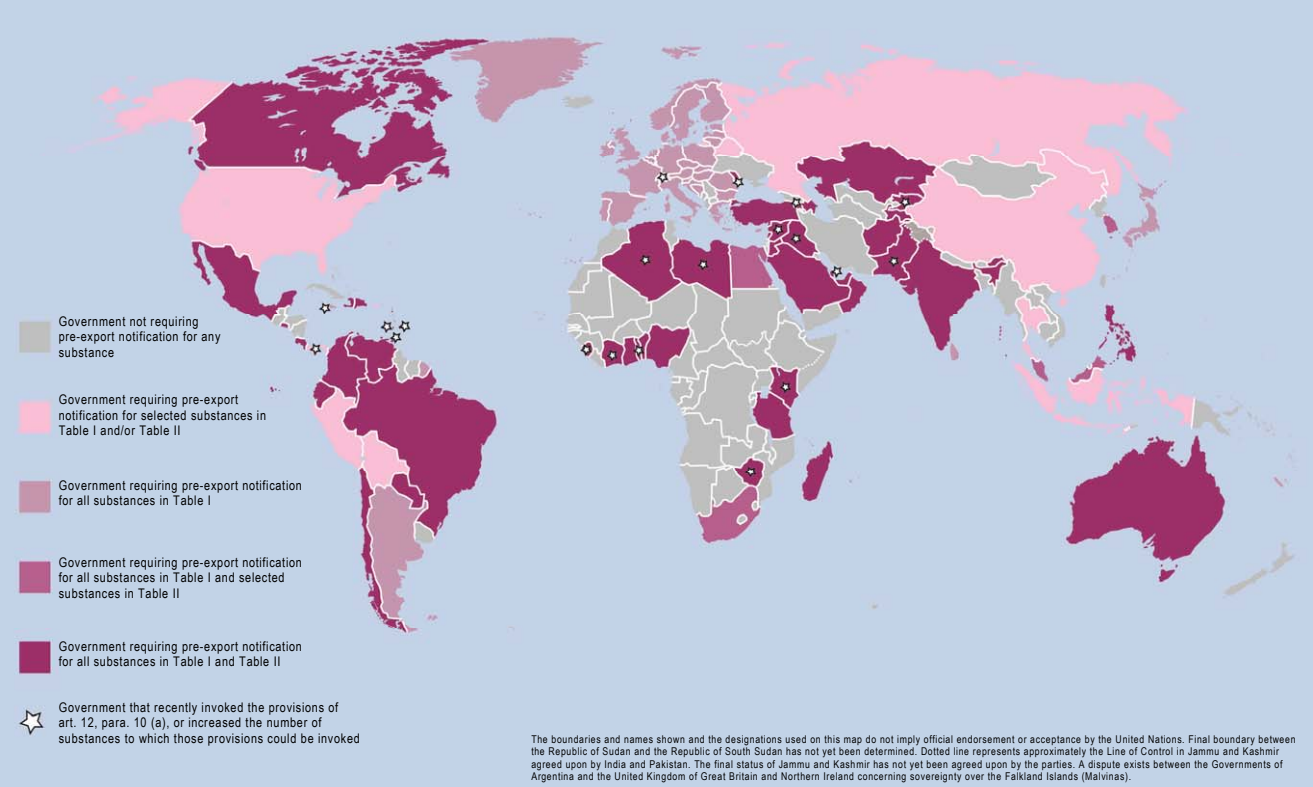
25. The Board continues to be concerned about the relatively high annual legitimate requirements for imports of ephedrine and pseudoephedrine and the subsequent risk of the diversion of those substances into illicit channels in many countries in West Asia. For example, Pakistan has continued its high-profile investigation into past cases involving the diversion of ephedrine. National regulations in Pakistan impose on individual pharmaceutical companies a maximum quota of 500 kg of ephedrine per year for the manufacture of pharmaceutical preparations containing ephedrine. Court filings allege that some companies were allotted quotas far in excess of that amount and were unable to clearly explain what had happened to those precursor allocations. If substantiated, the allegations will raise questions about the accuracy of the country's estimated annual legitimate requirements for ephedrines.

G. Controls over international trade

1. Pre-export notifications

26. By invoking article 12, paragraph 10 (a), of the 1988 Convention, Governments of importing countries may require exporting countries to inform them of exports prior to shipping. As at 1 November 2013, 98 States and 3 territories had formally requested pre-export notifications (see map 1 and annex X). Since the Board published its 2012 report on precursors, 13 more Governments have invoked articles of the 1988 Convention. Armenia, Barbados, Iraq, Kenya, Kyrgyzstan, Libya, Qatar, Saint Vincent and the Grenadines, Sierra Leone, Tonga, Trinidad and Tobago, and Zimbabwe invoked article 12, paragraph 10 (a), for all substances in Table I and Table II of the 1988 Convention, including pre-export notification for pharmaceutical preparations containing ephedrine and pseudoephedrine and for safrole-rich oils. Algeria, Côte d'Ivoire, the Syrian Arab Republic and Togo also invoked article 12 for all substances in Table I and Table II. Jamaica requested notification for all substances in Table I, including pre-export notification for pharmaceutical preparations containing ephedrine and pseudoephedrine and for safrole-rich oils. Panama requested notification for ephedrine, ergometrine, ergotamine, norephedrine and pseudoephedrine. The Republic of Moldova, which had previously requested notification for all substances in Table I and Table II, requested that notification be extended for pharmaceutical preparations containing ephedrine and pseudoephedrine and for safrole-rich oils. **The Board calls upon all remaining Governments to further strengthen the pre-export notification system by invoking the provisions of article 12, paragraph 10 (a), of the 1988 Convention without further delay.**

Map 1. Governments invoking article 12, paragraph 10 (a), of the 1988 Convention, requiring pre-export notification for selected substances
(As at 1 November 2013)



2. Pre-Export Notification Online

27. The PEN Online system, launched in March 2006, is a tool that makes it possible for the competent national authorities of exporting and importing countries to securely inform each other about international trade in precursors chemicals. The information shared through PEN Online enables the monitoring of licit global trade at the country and company levels. It also assists the competent national authorities and the Board in identifying and confirming the legitimacy of individual shipments of precursors and enables suspicious shipments to be suspended or stopped in an efficient and timely manner. On average, more than 2,000 pre-export notifications are communicated through the PEN Online system each month. Since the publishing of the Board's 2012 report on precursors, 11 additional States or territories[9] have registered to use the PEN Online system, bringing the total number to 146. A total of 52 States do not receive automated pre-export notifications[10] and are thus vulnerable to traffickers of precursor chemicals. **The Board urges those 52 States to register to use the PEN Online system and encourages all registered Governments to utilize the system.**

28. Governments should be aware that by registering for PEN Online they do not invoke article 12, paragraph 10 (a), of the 1988 Convention. Forty-five Governments that have registered to use PEN Online have not invoked article 12;[11]

[9] Algeria; British Virgin Islands; Burkina Faso; Cabo Verde; Côte d'Ivoire; Liberia; Libya; Macao, China; Marshall Islands; Solomon Islands; and Tajikistan.

[10] Angola, Antigua and Barbuda, Bahrain, Bosnia and Herzegovina, Botswana, Burundi, Cambodia, Cameroon, Central African Republic, Comoros, Democratic People's Republic of Korea, Democratic Republic of the Congo, Djibouti, Dominica, Equatorial Guinea, Fiji, Gabon, Gambia, Guinea, Guinea-Bissau, Guyana, Kiribati, Kuwait, Lesotho, Liechtenstein, Malawi, Maldives, Mauritania, Monaco, Mongolia, Mozambique, Nauru, Niger, Palau, Papua New Guinea, Rwanda, Saint Kitts and Nevis, Samoa, San Marino, Sao Tome and Principe, Somalia, South Sudan, Swaziland, the former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Tunisia, Turkmenistan, Tuvalu, Uzbekistan and Vanuatu.

[11] Albania, Andorra, Bahamas, Bangladesh, Belize, Bhutan, Brunei Darussalam, Burkina Faso, Cabo Verde, Chad, Congo, Cuba, Eritrea, Georgia, Grenada, Guatemala, Honduras, Iceland, Iran (Islamic Republic of), Israel, Lao People's Democratic Republic, Liberia, Mali, Marshall Islands, Mauritius, Micronesia (Federated States of), Montenegro, Morocco, Myanmar, Namibia, Nepal, New Zealand, Saint Lucia, Senegal, Serbia, Seychelles,

thus, exporting countries are under no obligation to notify those PEN Online users prior to shipping scheduled precursor chemicals. **The Board calls on the 45 Governments that have registered to use PEN Online but have not yet invoked the provisions of article 12, paragraph 10 (a), of the 1988 Convention to invoke those provisions without further delay.**

29. The Board reiterates that the timely submission of notifications, the review of incoming pre-export notifications and the subsequent provision of feedback—fundamental elements of the PEN Online system—should be respected by all Governments. In some cases, however, chemicals are being shipped despite objections raised through the PEN Online system or without providing enough time for the importing country to review the pre-export notification, even after the Government of the exporting country has been repeatedly directed by the Board and other Governments to address the issue. Under national legislation allowing for the concept of "regular customer" status, the United States of America continues to export with little or no advance notification substances listed in Table I and Table II of the 1988 Convention. As indicated by the Board in its 2012 report on precursors,[12] that practice is not in accordance with that Government's obligations under the 1988 Convention. Several Governments have officially objected to the practice of the United States authorities whereby notifications are sent after shipments have already left United States territory. The recommended practice is to allow 5-14 days for the authorities of the importing country to verify the legitimacy of a shipment. **Governments of all countries exporting scheduled chemicals to countries whose Governments have invoked article 12, paragraph 10 (a), of the 1988 Convention are obliged to notify the authorities of the importing country about the export of a shipment of such chemicals prior to its departure for the importing country. Furthermore, the Board recommends that Governments register for, and actively use, the PEN Online system for such notifications.**

30. There have been cases in which Governments of importing countries have failed to systematically review incoming pre-export notifications and to respond to pre-export notifications within the usual period of 5-14 days. The authorities of the importing country should inform the authorities of the exporting country if more time is needed for the verification of a particular transaction and should ask them to delay the delivery of the shipment pending the outcome of the verification. **Governments of the importing countries are encouraged to respond to pre-export notifications by the verification deadline when denying authorization for a shipment. In cases where there are grounds for suspicion, the Governments of the exporting countries are encouraged to release the shipments only upon receiving official confirmation from the competent authorities of the importing country.**

31. During the reporting period, approximately 1.5 per cent of the replies received via the PEN Online system by Governments of importing countries were requests to stop or suspend shipments. In many cases, the importing company was not registered to trade in the substance in question or there was no valid import authorization for the shipment in question. In cases where the objection is sent after the deadline for responses, the Board works with the authorities of both the exporting country and importing country to ensure that the necessary steps are taken to suspend delivery of the shipment at the local level and/or to launch investigations. **The Board commends Governments of importing countries for utilizing the PEN Online system and encourages those that have not yet made use of the system to do so.**

32. Some countries export chemicals without sending a pre-export notification via the PEN Online system. For example, according to information provided on form D for 2012, the Governments of Brazil, China and the Republic of Korea—each requiring pre-export notification for shipments of acetic anhydride—reported receiving shipments of acetic anhydride from Saudi Arabia in 2012; however, no pre-export notifications relating to shipments originating in Saudi Arabia could be found in the PEN Online system, making it difficult to monitor the supply chain. **The Board wishes to remind Governments of exporting countries of their obligation under article 12 of the 1988 Convention to provide notification regarding exports of chemicals before such exports depart from their territory. Using the PEN Online system is the most efficient and effective way to provide such notification.**

33. Taiwan Province of China is a significant global trader of some scheduled precursors. According to trade statistics cited in the 2013 International Narcotics Control Strategy Report of the United States, in 2011 Taiwan Province of China was the third largest importer of ephedrine and the third largest exporter of pseudoephedrine. Outside the international control system, Taiwan Province of China also trades in a number of other substances under international control, including acetic anhydride. In its previous reports on precursors, the Board has identified significant seizures of precursors originating in Taiwan Province of China. According to data published online by the Food and Drug Administration of Taiwan Province of China, seizures of precursors of domestic origin remain at a high level: more than 6.6 tons of pseudoephedrine and 1.9 tons of ephedrine

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Solomon Islands, Sudan, Suriname, Uganda, Ukraine, Uruguay, Viet Nam, Yemen and Zambia.

[12] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012,* para. 31.

have been seized since 2004. The Board is not aware of any territory or State that has seized more norephedrine than Taiwan Province of China: 329 kg since 2004. The current situation represents a significant weakness in the international control system, where the diversion of chemicals into illicit channels is known to occur but the results of follow-up investigations—if any—are not known to INCB. **The Board once again encourages the Government of China to work with it to devise practical ways and means of addressing pre-export notifications, suspicious shipments and diversions involving precursors and Taiwan Province of China.**

H. Activities and achievements in international precursor control

1. Project Prism and Project Cohesion

34. Two international initiatives of the Board, Project Cohesion (in operation since 2006) and Project Prism (in operation since 2003), serve as international communication platforms for the monitoring of chemical transactions and for launching targeted, time-bound intelligence-gathering operations. Participants in Project Prism and Project Cohesion continued to be alerted to suspicious shipments and actual and attempted diversions of precursors, as well as newly emerging precursors. At a meeting of the INCB Precursor Task Force of Project Prism and Project Cohesion held in Adelboden, Switzerland, in September 2013, the participants discussed the situation with regard to trafficking in acetic anhydride destined for Afghanistan and reviewed recent investigative information.

35. To address the prevailing modi operandi used by traffickers of acetic anhydride in recent years, the INCB Precursor Task Force initiated in 2013 an international operation called Eagle Eye focusing on verification of the legitimacy of domestic trade in and end use of acetic anhydride. The goals of the operation include a review of control measures to identify cross-border trafficking in the substance. Forty countries are participating in the operation. The results of the operation will be evaluated by the members of the Task Force and reflected in the Board's 2014 report on precursors. **The Board encourages Governments to actively participate in such intelligence-gathering operations under Project Prism and Project Cohesion.**

2. Other international initiatives focusing on precursor control

36. The World Customs Organization, in close cooperation with Chinese customs authorities, conducted an operation called SKY-NET from 10 September to 28 October 2012. Participants from 68 member States of the World Customs Organization, its regional intelligence liaison offices and the International Criminal Police Organization (INTERPOL) stopped more than 940 postal and express mail parcels containing several tons of drugs and 3 tons of precursors, including pseudoephedrine and ephedrine and the non-scheduled precursor APAAN.

37. In 2012, INTERPOL spearheaded Operation Icebreaker, targeting illicit methamphetamine manufacture and trafficking across the Americas. More than 360 tons of chemicals were seized, four clandestine laboratories were dismantled and 25 suspects were arrested in the participating countries during the multi-agency initiative, which ran from September to December 2012 and involved 11 countries,[13] in partnership with the World Customs Organization and the Board. The key objectives of the operation were to identify and seize shipments of precursor chemicals intended for use in the illicit manufacture of methamphetamine, to dismantle the organized criminal groups behind the smuggling of those chemicals and to locate and destroy clandestine laboratories involved in such illicit manufacture.

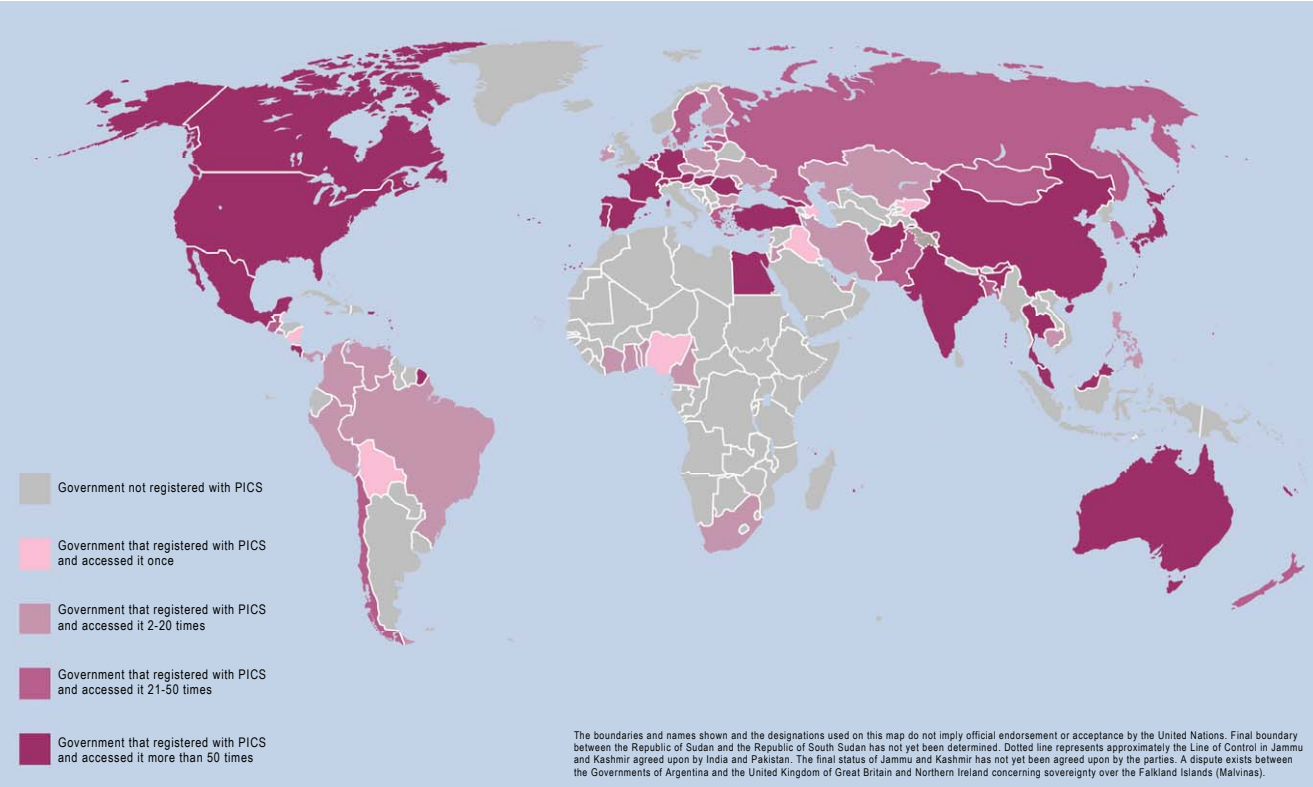
I. Precursors Incident Communication System

38. PICS was launched by the Board in March 2012. It has quickly become an indispensable tool for Governments, providing a secure communication platform for quickly sharing—among relevant national law enforcement and regulatory authorities—information about suspicious shipments, seizures, diversions and attempted diversions of precursors, shipments of precursors stopped in transit and seizures of clandestine laboratories and equipment. The system effectively facilitates real-time intelligence-sharing and enables bilateral and regional investigations to be launched without delay.

39. As at 1 November 2013, there were more than 350 registered users of PICS, from 80 Governments and 8 international and regional agencies (see map 2). PICS has been used to communicate more than 850 incidents involving 84 different countries and territories. **The Board encourages all Governments to register PICS focal points for their relevant national authorities involved in precursor control, such as national regulatory, law enforcement, customs and drug control agencies, and to actively use the system to communicate all incidents involving precursor chemicals with a view to enhancing intelligence-sharing.**

[13] Belize, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua and Panama.

Map 2. Governments registered with and using the Precursors Incident Communication System (PICS)
(As at 1 November 2013)



III. Extent of licit trade in precursors and the latest trends in precursor trafficking

40. Several of the substances in Table I and II of the 1988 Convention have widespread legitimate uses, and correspondingly large volumes of those substances are traded internationally (for a list of their common uses, see annex XI). The proportion of seized substances in Table I of the 1988 Convention is often small when compared with international trade in those substances as reported by Governments. For example, as stated in the Board's 2012 report on precursors,[14] seizures of acetic anhydride or potassium permanganate account for less than 1 per cent of the international trade in those substances reported by Governments. In the case of some substances, total seizures account for a larger proportion of international trade; for example, seizures of ephedrine, in bulk or in the form of pharmaceutical preparations, account for approximately 15 per cent of all reported trade in that substance. In contrast, there is almost no legitimate trade in 3,4-MDP-2-P; and total seizures of that substance are far in excess of the volume of licit trade in that substance.

A. Substances used in the illicit manufacture of amphetamine-type stimulants

Substances used in the illicit manufacture of amphetamines

41. There is significant international trade in many of the precursors used in the illicit manufacture of amphetamines, which include amphetamine and methamphetamine. Several precursors continue to be diverted from international trade for use in the illicit manufacture of drugs. During the reporting period, the authorities of 36 exporting countries used the PEN Online system to report over 5,300 transactions involving shipments of substances in Table I of the 1988 Convention that are precursors of ATS.

1. Ephedrine and pseudoephedrine

42. Ephedrine and pseudoephedrine are both used in illicit methamphetamine manufacture but are also among the most

[14] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012*, para. 40.

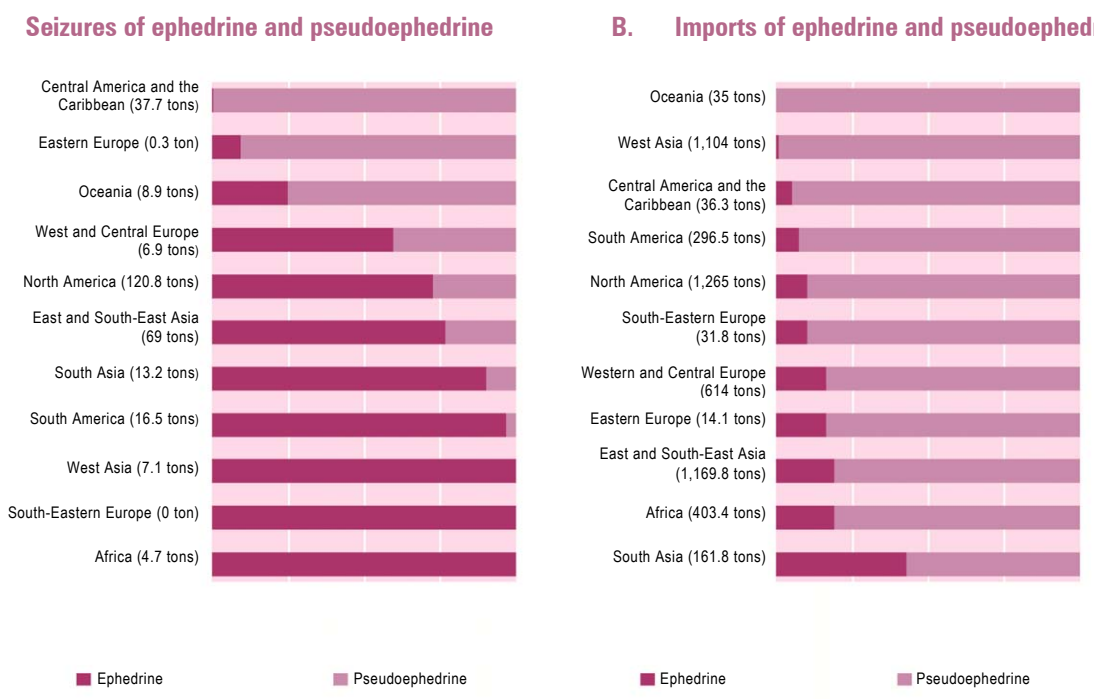
frequently traded substances in Table I of the 1988 Convention. Cases involving the diversion of ephedrines from international trade channels, often in the form of pharmaceutical preparations, continue to be reported, but in fewer numbers. While large amounts of ephedrines continue to be seized in regions with significant illicit methamphetamine manufacture, the reliance upon those precursor chemicals has decreased as alternative chemicals such as esters of phenylacetic acid are increasingly being used, particularly in North America. Countries in East and South-East Asia have reported significant seizures of ephedrine and pseudoephedrine, while communications via PICS point to domestic diversions of pharmaceutical preparations in manufacturing countries in East and South-East Asia and neighbouring South Asia. Several countries in West Asia have unusually high annual legitimate requirements for the import of ephedrines, and reports of seizures of those substances suggest that controls over the distribution and use of precursors in those countries need to be improved. The increasing number of dismantled clandestine methamphetamine laboratories in Africa suggests that diverted precursors are readily available throughout that region.

43. The type of seized ephedrines reported by Governments on form D varies greatly from region to region. For example, in Africa, South-East Europe, South Asia, West Asia and South America seizures of ephedrines consist almost entirely of ephedrine (see figure I), whereas in Central America and the Caribbean and Eastern Europe seizures of ephedrines consist almost entirely of pseudoephedrine. Also, global seizures of ephedrine exceeded those of pseudoephedrine, while legitimate trade in pseudoephedrine far exceeded legitimate trade in ephedrine. This information provides an important starting point for investigations into the sources, modi operandi and possible points of diversion of the seized substances. However, it could be that Governments of countries in regions reporting only seizures of ephedrine may not be able to correctly distinguish between ephedrine and pseudoephedrine or that Governments simply group both substances as ephedrine when reporting. **The Board urges Governments to accurately report on form D the specific type and form of ephedrines seized on their territory.**

Licit trade

44. Exporting countries provided 4,010 notifications through the PEN Online system for shipments of ephedrine and pseudoephedrine, in bulk and in the form of pharmaceutical preparations, during the reporting period. The shipment notifications for pseudoephedrine amounted to 1,202 tons. Shipments totalling 176 tons of ephedrine were notified via PEN Online. The shipments of ephedrine and pseudoephedrine originated in 35 exporting countries and territories and were destined for 144 importing countries and territories.

Figure I. Proportion of ephedrine and pseudoephedrine seizures and imports reported by Governments on form D, by region, 2008-2012



Ephedrine and pseudoephedrine: how much is for legitimate end use

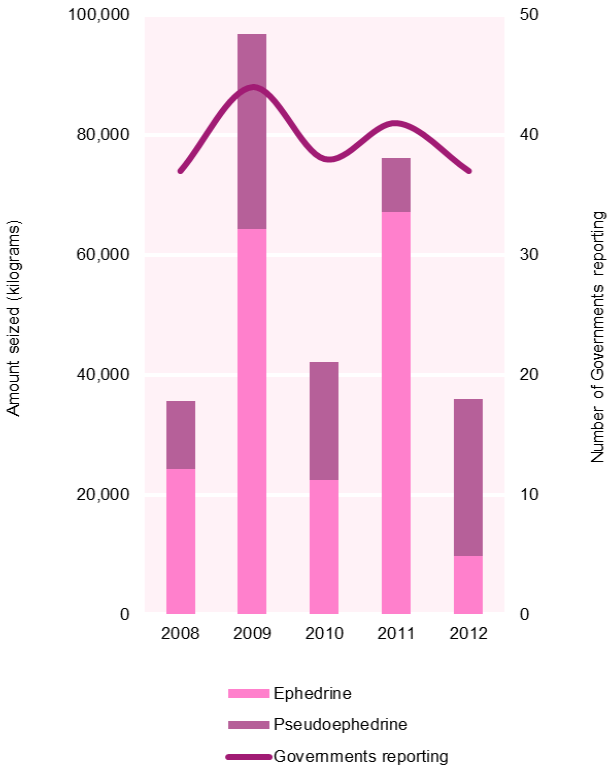
Ephedrines (ephedrine and pseudoephedrine) are widely traded internationally. They are also among the precursors most commonly used in illicit methamphetamine manufacture. As mentioned in the 2012 report of the Board on precursors, between 2007 and 2011 an average of 48.6 tons of ephedrines were seized each year.[a] According to data compiled by the United Nations Office on Drugs and Crime, global seizures of methamphetamine averaged 43 tons annually during that same period. Samples of seized precursors and information on clandestine manufacturing indicate that most of the methamphetamine was manufactured using ephedrines as a starting material, notwithstanding the significant increase in P-2-P-based methamphetamine manufacture since 2007 in Mexico (see figure III). To take into account that change, an average of 32 tons of methamphetamine was estimated to have been seized each year between 2007 and 2011, an amount which would require approximately 47 tons of ephedrines annually to manufacture (excluding a variety of other chemicals). Thus, each year a minimum of 96 tons of ephedrines are diverted for use worldwide in illicit methamphetamine manufacture.

[a] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012 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.13.XI.4), table 1.

Trafficking

45. Thirty-seven Governments reported on form D that they had seized a total of 36 tons of ephedrine and pseudoephedrine in bulk and in the form of pharmaceutical preparations; numerous Governments have reported international trafficking in those precursors since 2008 (see maps 3.A and 3.B). Figure II shows a decline in the total amount seized, due in part to changes in illicit methamphetamine manufacturing processes and to the fact that the following countries with a history of significant seizures of those substances failed to submit 2012 seizure data on form D: Guatemala, India and Iran (Islamic Republic of). Of the 36 tons seized, 7 tons (19 per cent) were ephedrine in bulk form; 2.7 tons were ephedrine in the form of pharmaceutical preparations; 24.8 tons (69 per cent) were pseudoephedrine in bulk form; and 1.3 tons were pseudoephedrine in the form of pharmaceutical preparations. In addition, 2.3 million tablets of preparations containing pseudoephedrine and 273,000 tablets containing ephedrine of unknown concentrations were also reported to have been seized.

Figure II. Seizures of ephedrine and pseudoephedrine reported by Governments on form D, 2008-2012

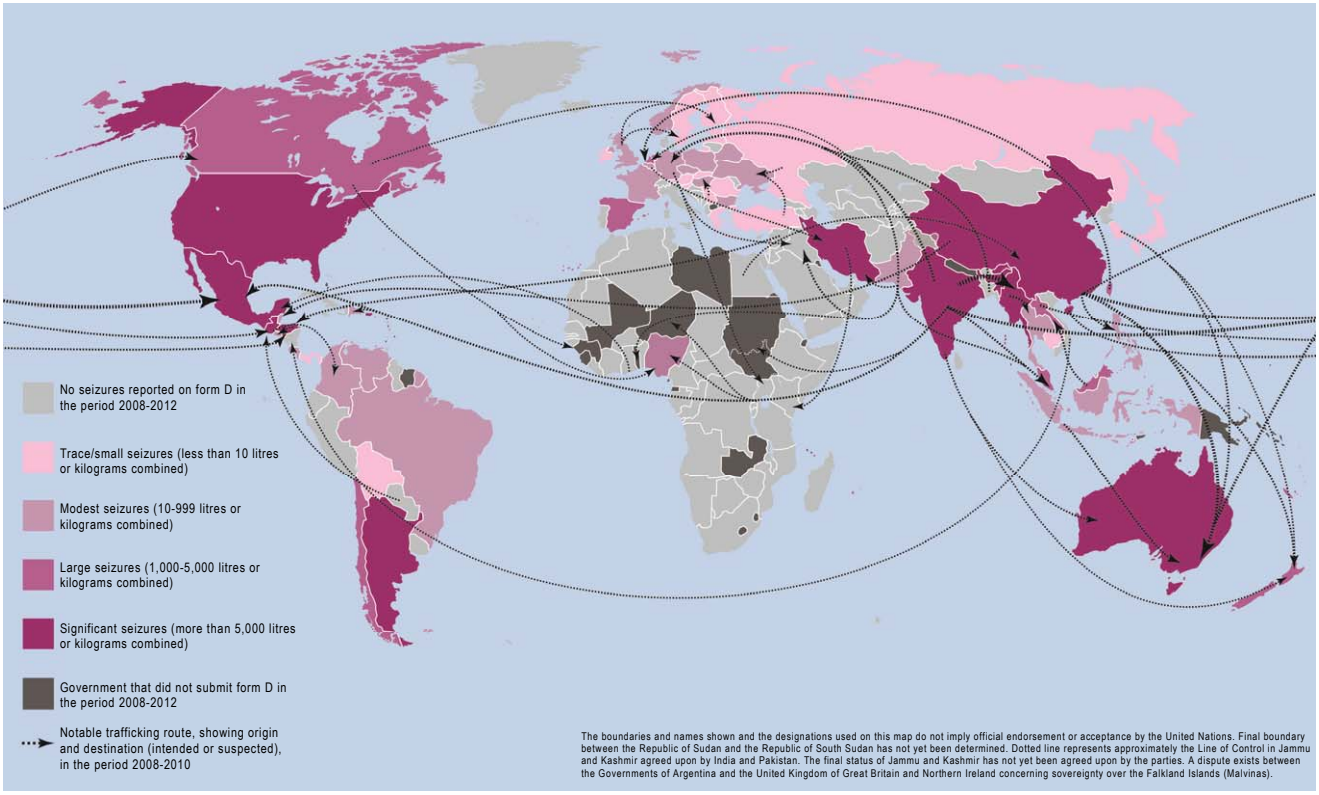


46. In 2012, the region accounting for the largest proportion of global seizures of ephedrines was Central America and the Caribbean (63 per cent), followed by East and South-East Asia (20 per cent) and Western and Central Europe (6 per cent). Seizures of ephedrines in North America totalled just 1,616 kg, the lowest amount ever reported to the Board from that region. Australia, Canada, China, Honduras and Spain each reported multi-ton seizures of ephedrines. Seizures of ephedrine were reported for the first time in Macao, China, and in Serbia; those seizures totalled 167 kg.

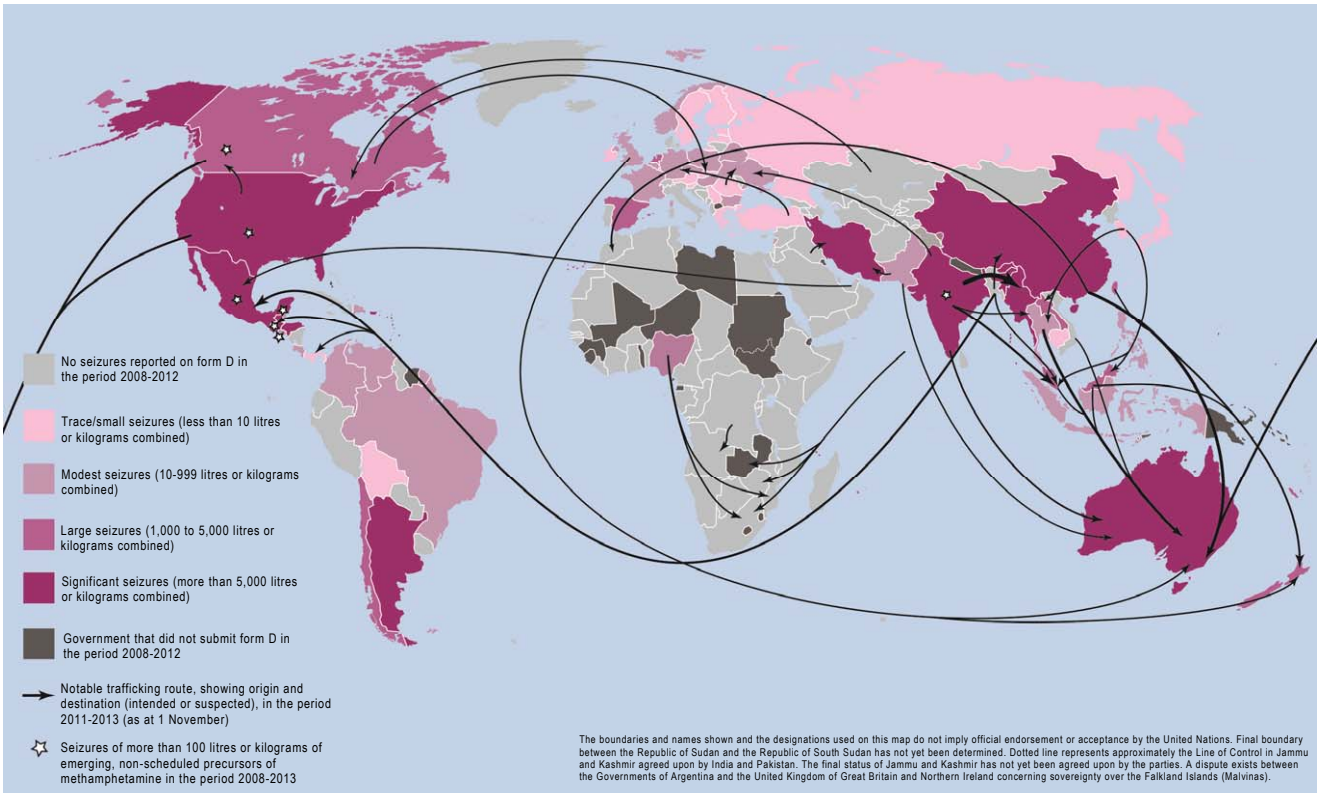
47. Map 3.A shows seizures of ephedrine and pseudoephedrine and recent trafficking routes used for those precursors. Map 3.B shows, in addition to the information provided in map 3.A, the locations of seizures of substitute chemicals used for the illicit manufacture of methamphetamine. The Board notes that incidents involving the smuggling of large amounts of ephedrines into Mexico and neighbouring countries have all but disappeared since 2010, as the illicit manufacture of methamphetamine no longer relies solely on those substances. Information is increasingly becoming available about the diversity of routes used for trafficking within, as well as through, Africa, with several more recent incidents involving the south-eastern part of that region. Trafficking routes leading through East and South-East Asia, as well as Oceania, have remained largely unchanged since 2008.

Map 3. Ephedrine and pseudoephedrine: seizures reported by Governments and notable trafficking routes

A. Ephedrine and pseudoephedrine: seizures, 2008-2012, and notable trafficking routes, 2008-2010



B. Ephedrine and pseudoephedrine: seizures, 2008-2012, and notable trafficking routes, 2011-2013



48. Authorities in China, a country that is one of the largest traders of ephedrines, identify significant diversion of those substances every year. In 2012, 6.5 tons of ephedrines were reported to have been seized in China, including its provinces and special administrative regions. The number of criminal cases involving the illicit manufacture of synthetic drugs has increased for the past three consecutive years. In China, a total of 326 clandestine laboratories for illicit drug manufacture, located in nearly every province, were dismantled in 2012, 228 of which were for illicit methamphetamine manufacture.[15] The amount of methamphetamine seized in the country increased to 16.2 tons in 2012, an increase of 13 per cent over the figure for 2011. The Government has estimated that 55 per cent of the precursors used in illicit methamphetamine manufacture in the country have been obtained from pharmaceutical preparations. The number of people listed on the registry of abusers of synthetic drugs reached 797,600 in 2012, an increase of 36 per cent over 2011. Eighty per cent of those registered had abused ATS, primarily methamphetamine.

49. The Governments of 18 European countries reported on form D seizures of ephedrines totalling 2.3 tons in 2012. The largest single seizure was effected in Spain: a consignment containing 1,500 kg of ephedrine that had originated in China and had been en route to Morocco. Authorities investigating inconsistencies in documents identified a shell company in Morocco that was importing significant amounts of ephedrine for subsequent smuggling into the Americas. Spain communicated the incident through PICS and, after receiving the alert, Canadian investigators contacted Spanish authorities via PICS to exchange information related to a similar ephedrine case that appeared to involve Canada. The Government of Luxembourg reported on form D having seized 300 kg of pseudoephedrine, the largest amount of that substance ever reported seized in that country.

50. Several West Asian countries that have unusually high annual legitimate requirements for ephedrine and pseudoephedrine continue to report significant seizures of those substances, as well as increased availability of methamphetamine. Those developments have been raised by the Board before, and they remain a source of serious concern. Forensic analysis of samples of methamphetamine seized by Iranian authorities in 2010 found that the purity of the methamphetamine hydrochloride in the samples was 33-95 per cent. There are indications that ephedrine or pseudoephedrine was used as the starting material; in 14 per cent of the samples examined, the precursor had been obtained from pharmaceutical preparations.[16] Iranian authorities also reported seizing 3.9 tons of methamphetamine in 2011; that was one of the highest amounts of methamphetamine reported seized in any country in the world—nearly 6 tons of ephedrine or pseudoephedrine, along with significant amounts of acids and solvents, would be required to synthesize that amount of methamphetamine.

51. Several countries in Africa reported the seizure of modest amounts of ephedrine during the reporting period. Nigeria reported seizing 461 kg of ephedrine in 2012. Illicit methamphetamine laboratories continue to be dismantled in Nigeria—five such clandestine operations (some of which involved foreign nationals) and one chemical warehouse have been dismantled since February 2012. Between November and December 2012, the seizure of three facilities associated with the medium- or large-scale manufacture of methamphetamine was communicated via PICS; trace amounts of ephedrine and red phosphorous, as well as other substances, were identified at the facilities. Although most of the clandestine laboratories have been found in or around Lagos, the discovery of a laboratory in the south central State of Anambra suggests that the illicit manufacture of methamphetamine is shifting to more remote areas, to avoid the increased scrutiny in the Lagos area, or that such illicit manufacture is far more widespread than previously suspected. In April 2013, authorities in Benin seized 226 kg of ephedrine; this represents the first seizure of that substance in Benin that is known to the Board.

52. During the 2013 mission of the Board to Kenya, the authorities reported the dismantling of a laboratory for the illicit manufacture of precursors located outside of Nairobi. The suspects claimed to have been setting up an ethanol manufacturing business; however, the combination of chemicals seized point to the possibility of illicit ephedrine manufacture. The suspects are being prosecuted under the environmental law as current drug control legislation is insufficient to charge the suspects intending to manufacture a controlled substance. More recently, Kenyan authorities also reported, for the first time, the dismantling of an illicit methamphetamine laboratory, the details of which were not available at the time that the present report was issued.

[15] China, National Narcotics Control Commission, *Annual Report on Drug Control in China 2013* (Beijing, Ministry of Public Security, 2013), p. 55.

[16] Ali Reza Khajeamiri and others, "Determination of impurities in illicit methamphetamine samples seized in Iran", *Forensic Science International*, vol. 217, Nos. 1-3 (April 2013), pp. 204-206.

53. During the reporting period, two confirmed incidents involving Zimbabwe and shipments of ephedrine totalling 40 kg were communicated through PICS. Numerous unconfirmed ephedrine trafficking incidents were also communicated via the system: those incidents involved Botswana, the Democratic Republic of the Congo, Namibia and Zimbabwe. **As those countries are currently not registered to use PICS, the Board encourages the Governments of those countries to register their relevant law enforcement and regulatory agencies with PICS and to provide confirmation of incidents occurring on their territory without delay.**

54. Domestic manufacture of methamphetamine in Canada and the United States is primarily the result of circumventing purchase limits on pharmaceutical preparations or dietary health products containing pseudoephedrine or ephedrine. Illicit methamphetamine manufacturers operating in Canada exploited a loophole in the natural health product regulations, which allowed the unlimited purchase of 50-tablet bottles of dietary health product containing a maximum of 8 mg of ephedrine per tablet (400 mg per bottle). In 2012, evidence of ephedrine obtained from dietary health product tablets was found in half of the 18 laboratories dismantled in Canada for illicitly manufacturing methamphetamine on a medium or larger scale.

55. While it is estimated that 80 per cent of the methamphetamine in the United States enters the country from Mexico,[17] the United States reports more incidents involving illicit methamphetamine manufacture on its territory than any other country in the world. In 2012, 13,767 incidents involving illicit drug laboratories were reported in the United States; those incidents included the seizure of small clandestine laboratories, chemicals, glassware and/or equipment associated with the illicit manufacture of drugs. However, a mere 511 kg of ephedrines were reported to have been seized in the country in 2012, one of the lowest total amounts ever reported for seizures of the substance. A recent study of the United States Government showed that states such as Oregon and Mississippi, which had implemented laws requiring patients to have prescriptions in order to obtain pharmaceutical preparations containing ephedrines, reported significant reductions in the number of incidents involving illicit methamphetamine laboratories.[18]

56. In Mexico, seizures of ephedrine and pseudoephedrine were almost non-existent in 2012, as the P-2-P-based manufacturing process has become the dominant method used by drug cartels. Mexico reported on form D that in 2012 it had seized just 62 kg of ephedrine and pseudoephedrine, the lowest total seizures of those precursors that it had ever reported to the Board. However, the seizure of 7 tons of pseudoephedrine in a warehouse in Sinaloa, a state in western Mexico, in July 2013 suggests that some stocks may still exist.

57. Honduras reported on form D that it had seized 22.6 tons of pseudoephedrine of unknown origin, an amount far exceeding the largest seizures ever reported by Mexico, the country that accounts for most of the volume of illicitly manufactured methamphetamine in the Americas. Given the size of the pseudoephedrine seizure reported by Honduras and the decreasing demand for ephedrines in that part of the world, it is likely that the amount of that seizure (22.6 tons) represents the gross weight of the seizure and not the amount of pure pseudoephedrine.

58. The illicit manufacture of methamphetamine in Oceania relies on smuggled ephedrine and pseudoephedrine in bulk form and in the form of pharmaceutical preparations. In 2012, Australia reported seizing 1.3 tons of ephedrines and New Zealand reported seizing 432 kg of those substances. In Australia and New Zealand, most seizures of ephedrines continue to occur at the border, where the ephedrines seized are often in the form of a distinct granular pseudoephedrine pharmaceutical formulation known as ContacNT. Australia reported having dismantled 809 clandestine drug manufacturing laboratories in the financial year 2011/12,[19] the highest number ever reported, the vast majority of which had been illicitly manufacturing methamphetamine.

59. In New Zealand, 123 illicit drug manufacturing laboratories were reported to have been dismantled in 2012, a decrease of 41 per cent compared with the figure for 2010. The price of ContacNT on the illicit market has declined by 33 per cent since 2009.

[17] United States of America, Department of Justice, National Drug Intelligence Center, *National Drug Threat Assessment 2011* (August 2011), figure 1.

[18] United States of America, Government Accountability Office, *Drug Control: State Approaches Taken to Control Access to Key Methamphetamine Ingredient Show Varied Impact on Domestic Drug Labs*, GAO-13-204 (Washington, D.C., January 2013).

[19] In Australia, the financial year begins on 1 July and ends the following year on 30 June.

The decrease in clandestine laboratories and prices may reflect decreasing illicit demand for methamphetamine among New Zealanders, as annual prevalence of methamphetamine abuse among the general population (ages 16-64) dropped from 2.2 per cent in 2008 to less than 1 per cent in 2011.

2. Norephedrine and ephedra

60. International trade in norephedrine, which can be used in the illicit manufacture of amphetamine, is low compared with trade in other precursors. The Board is aware that ephedrine alkaloids extracted from plants of the genus *Ephedra* have been used in the illicit manufacture of methamphetamine, but there is no requirement to report trade in ephedra or ephedra-based products. Although both norephedrine and ephedra have been found in illicit drug laboratories, such occurrences are unusual, accounting for a very small proportion of the substances found in such laboratories.

Licit trade

61. According to the PEN Online system, during the reporting period, 11 countries exported norephedrine to 20 countries: 126 transactions involving a total of 64 tons of norephedrine.

Trafficking

62. Seizures of norephedrine (mostly small amounts of the substance) were reported on form D for 2012 by the authorities of five countries: Australia, Greece, Indonesia, Philippines and Ukraine. The Board is also aware of such seizures occurring in Taiwan Province of China. The largest seizure was in the Philippines, where 273 kg of the substance were recovered in the metropolitan Manila area from a large laboratory used for the illicit manufacture of methamphetamine.

63. Seizures of ephedra totalling 28 tons were reported in 2011; however, there were no ephedra seizures reported on form D for 2012. Additionally, no PICS communications relating to ephedra occurred during the reporting period.

3. 1-Phenyl-2-propanone and phenylacetic acid

64. P-2-P can be used in the illicit manufacture of amphetamine or methamphetamine and can be synthesized from phenylacetic acid and its esters, as well as other "pre-precursors". International trade in P-2-P is limited in both the volume and the number of countries involved, while trade in phenylacetic acid is far more significant. P-2-P-based methods are used by criminal groups for the illicit manufacture of methamphetamine in Mexico and amphetamine in European countries.

Licit trade

65. Only 25 shipments of P-2-P, totalling 18,700 litres, were notified via the PEN Online system during the reporting period. Three quarters of Governments reported that they had no requirements for the substance or had prohibited its import. Seven Governments reported that their annual legitimate requirements for the import of the substance was greater than 1 kg per year. During the reporting period, 518 notifications of shipments of phenylacetic acid, amounting to 395 tons, were submitted through the PEN Online system. Phenylacetic acid is not one of the four precursors for which the Commission on Narcotic Drugs, in its resolution 49/3, requested Governments to provide to the Board their annual legitimate requirements for imports.

Trafficking

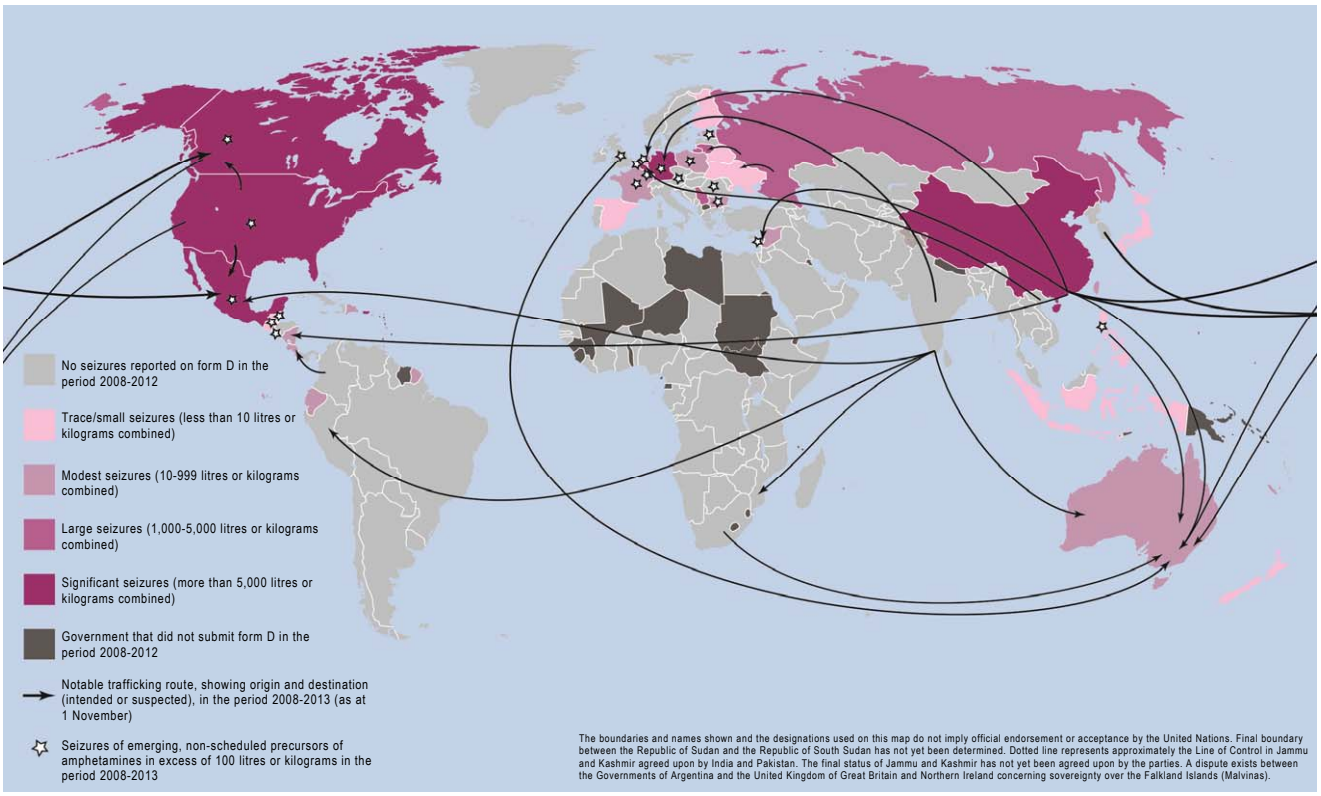
66. Thirteen Governments reported on form D the seizure of a total of 6,818 litres of P-2-P. The Governments of nine countries in Europe reported the seizure of a total of 836 kg (accounting for only 12 per cent of global seizures of the substance), as alternatives to P-2-P are increasingly being used as starting materials (see para. 82). In 2012, the Syrian Arab Republic reported for the first time seizures of P-2-P; those seizures totalled 498 litres (see map 4).

67. The year 2012 was the third consecutive year in which Mexico reported the world's largest seizures of P-2-P: 4,699 litres. However, that figure is not reflective of the extent in that country of the illicit methamphetamine manufacture using the P-2-P-based method, because the starting material used in that process is primarily "pre-precursors" of P-2-P, namely esters or derivatives of phenylacetic acid.

68. The Board was informed of the seizure of 5.8 tons of P-2-P as a result of cooperation between China and Belgium in 2012.[20] Three seizures of P-2-P were communicated via PICS during the reporting period: P-2-P was seized when clandestine amphetamine laboratories were dismantled in Germany (70 litres) and Poland (1,400 litres); and, for the first time, India reported the seizure of P-2-P (though it did not disclose the amount seized).

[20] China, National Narcotics Control Commission, *Annual Report on Drug Control in China 2013* (Beijing, Ministry of Public Security, 2013).

Map 4. 1-Phenyl-2-propanone and phenylacetic acid: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013

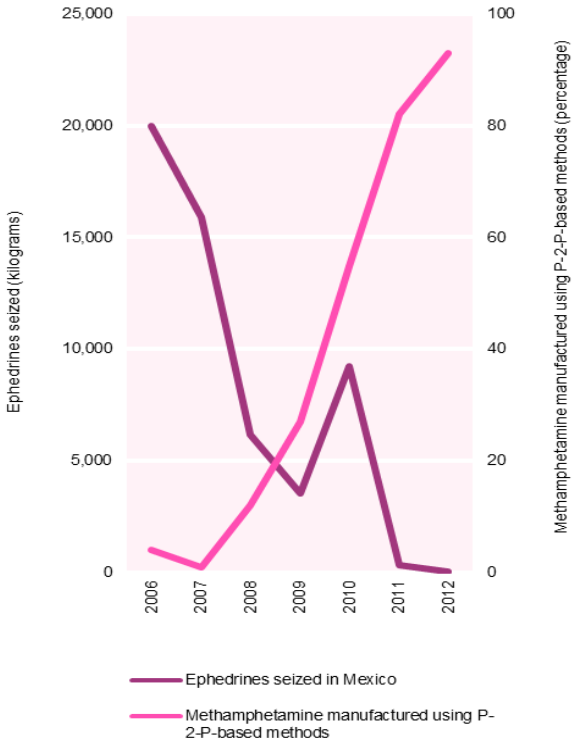


69. In 2012, seven Governments reported on form D seizures of phenylacetic acid totalling 1,700 kg. That was the lowest figure reported since 2010, reflecting large declines over the figures reported by China, Mexico and the United States in 2011. In 2012, Nicaragua reported for the first time seizures of phenylacetic acid totalling 54 kg.

70. In 2012, 16,000 kg of ethyl phenylacetate, a non-scheduled ester of phenylacetic acid, were seized in a warehouse in Guatemala. As in previous incidents, the substance originated in China. Guatemalan authorities have informed the Board that they lack the resources necessary to safely handle, store and dispose of seized chemicals.

71. Methamphetamine enters the United States largely from Mexico. Forensic profiling is regularly performed on samples of the methamphetamine seized in the United States. The profiling showed that after 2010, the majority of the seized methamphetamine has been manufactured using P-2-P-based methods; and that in mid-2013, more than 90 per cent of the seized methamphetamine had been manufactured using P-2-P. At the same time, seizures of ephedrine and pseudoephedrine—precursors used in the previously preferred method of illicit methamphetamine manufacture—declined precipitously in Mexico, as drug traffickers switched to P-2-P-based methods (see figure III).

Figure III. Analysis of seized methamphetamine in the United States, identifying methamphetamine manufactured with methods not based on the use of ephedrines; and seizures of ephedrines in Mexico, 2006-2012



Substances used in the illicit manufacture of 3,4-methylenedioxymethamphetamine and its analogues

1. 3,4-Methylenedioxyphenyl-2-propanone and piperonal

72. There is almost no legitimate industrial use for 3,4-MDP-2-P, and subsequently there is little international trade in the substance. The opposite is true for piperonal. Both 3,4-MDP-2-P and piperonal can be used in the illicit manufacture of 3,4-methylenedioxymethamphetamine (MDMA, commonly known as "ecstasy") and its analogues. Of those Governments that report a legitimate need for the import of 3,4-MDP-2-P, only five need more than 1 kg of the substance per year (see annex II), for use in limited research, educational and/or chemical analysis settings. Piperonal is not one of the four precursors for which the Commission on Narcotic Drugs, in its resolution 49/3, requested Governments to provide to the Board annual legitimate requirements for imports.

Licit trade

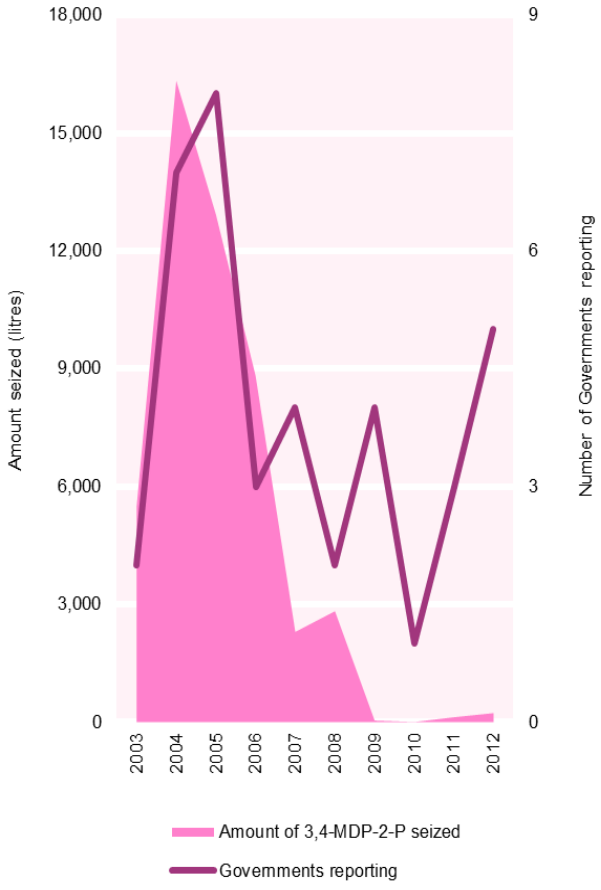
73. Only one shipment of 0.5 litre of 3,4-MDP-2-P and 590 shipments of piperonal, totalling 2,015 tons, were notified through the PEN Online system during the reporting period. Pursuant to Commission on Narcotic Drugs resolution 49/3, 12 Governments informed the Board of their annual legitimate requirements for the import of 3,4-MDP-2-P (totalling 131 kg annually), while 87 indicated that they had no legitimate need for the substance (see para. 24 above).

Trafficking

74. After a protracted lull in global seizures of 3,4-MDP-2-P in the period 2009-2011, during which only 166 litres of the substance were seized, there are indications that 3,4-MDP-2-P is becoming increasingly available to traffickers (see figure IV). In 2012, Australia, Ireland, Slovenia and, for the first time, both Nicaragua and the Philippines, reported on form D seizures of 3,4-MDP-2-P; those seizures totalled 229 litres. Six Governments reported for 2012 on form D seizures of piperonal totalling 336 kg; two of those Governments—the Philippines and Serbia—reported seizures of that substance for the first time (total: 1 kg).

75. Traffickers may be using India as a new source of 3,4-MDP-2-P, according to a number of incidents reported in 2012 and 2013. Nicaragua reported on form D for 2012 the seizure of 13.9 litres of 3,4-MDP-2-P, and India was identified as the source of the substance; that was a first for both countries. In India, two seizures of 3,4-MDP-2-P totalling 137 kg were communicated via PICS between April and May 2013. In the information provided on form D, Governments often identified China as the most common source of seized 3,4-MDP-2-P; however, it appears that in recent years, strengthened controls in China, together with decreased availability of the substance worldwide (as evidenced by reduced seizures of 3,4-MDP-2-P and its end product MDMA), have forced chemical trafficking organizations to turn to new sources of 3,4-MDP-2-P, as well as substitute chemicals (see map 5).

Figure IV. Seizures of 3,4-methylenedioxyphenyl-2-propanone reported by Governments on form D, 2003-2012



76. During the reporting period, other incidents involving 3,4-MDP-2-P were communicated via PICS. A single consignment of 1,000 litres of 3,4-MDP-2-P originating in China and destined for the Netherlands was seized while transiting Slovenia. The substance was

smuggled in a container mixed with piperonal and seized at the Slovenian seaport of Koper. Authorities in the Netherlands seized 100 litres of 3,4-MDP-2-P in a clandestine laboratory that had been used to convert the substance from piperonal and/or 3,4-MDP-2-P methyl glycidate. **The Board commends those Governments for communicating incidents via PICS and encourages authorities in the countries directly involved in those incidents to support backtracking investigations and controlled or monitored deliveries of shipments of precursors.**

2. Safrole, safrole-rich oils and isosafrole

Licit trade

77. During the reporting period, the Board was notified via PEN Online of 50 shipments of safrole, including in the form of safrole-rich oils, with a total volume of 5,767 litres. Only one shipment of 1 litre of isosafrole was notified via PEN Online. There were no suspended shipments of isosafrole communicated via the PEN Online system, again reflecting the limited international trade in the substance. Governments are not required to provide the Board with their annual legitimate requirements for the import of those substances.

78. One shipment of 210 kg of safrole in the form of sassafras oil—from the United States and destined for Malaysia—was stopped. The notification to stop was sent through the PEN Online system, informing authorities that the importer had failed to request an import authorization and that discrepancies in the address of the final consignee had been noted. Investigations have been launched by authorities in both countries.

Trafficking

79. Four Governments reported on form D for 2012 seizures of safrole, including in the form of safrole-rich oils, totalling 2,028 litres; and there are indications of a significant resurgence of seizures of safrole in 2013. Australia and the Netherlands also reported on form D for 2012 seizures of small amounts of isosafrole, totalling just 10 litres. Chinese authorities, in cooperation with Australian authorities, reportedly seized 3.35 tons of safrole in April 2012, after intercepting a shipment intended for Australia.[21]

80. Thirteen confirmed incidents involving seizures of safrole totalling 15,970 litres and 217 kg were communicated via PICS during the reporting period: Australia communicated three incidents, Canada and Indonesia each communicated one, the Netherlands three, and the United States five. The largest shipments of safrole were seized in or destined for Western Europe (see map 5). Authorities in the Netherlands made three seizures of safrole (the two larger seizures were made in the port of Rotterdam): 12,000 litres in a shipment mislabelled as palm oil and arriving from Thailand; 1,800 litres in a shipment from Cambodia; and 25 litres from Indonesia in a shipment sent via courier service. In addition, two industrial-scale illicit MDMA laboratories were dismantled in Belgium in 2013; however, the amounts of safrole seized have not yet been communicated. Such large seizures in Western Europe suggest that, while there are numerous reports of the emergence of new psychoactive substances, illicit demand for MDMA continues to be high.

Use of non-scheduled substances and other trends in the illicit manufacture of amphetamine-type stimulants

81. Decreases in seizures of internationally controlled precursors are the result of: (a) shipments of precursors being notified and subsequently halted through the PEN Online system before they can be diverted; (b) trafficking routes shifting to more vulnerable regions, with weak or non-existent precursor control mechanisms; (c) increased diversion of under-regulated pharmaceutical preparations; and (d) traffickers increasingly relying on a wider array of non-scheduled precursor chemicals.

1. *alpha*-Phenylacetoacetonitrile

82. In Europe, APAAN, a non-scheduled substance that can be easily converted into P-2-P at a ratio of about 1.4 to 1, continues to be the preferred substitute used in illicit amphetamine manufacture. In 2012, the Governments of six European countries reported on form D the seizure of shipments of APAAN totalling 17.5 tons. Those seizures included 7 tons in Belgium, 6.8 tons in the Netherlands and 3 tons in Hungary.

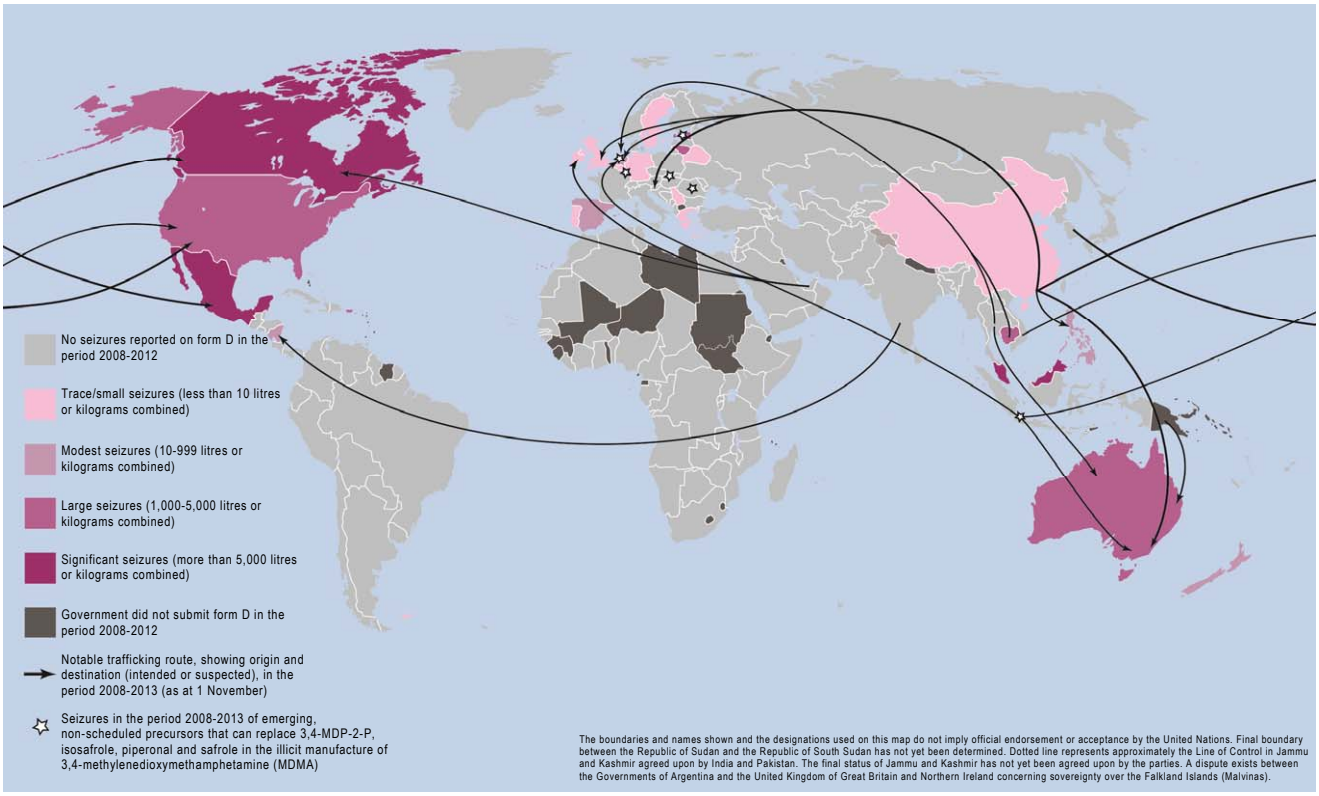
83. Since March 2012, when PICS was launched, there have been 57 communications via PICS involving APAAN, totalling 79.4 tons. Although incidents involving APAAN have been communicated primarily by European countries, Canada has also communicated several significant seizures of the substance. Incidents communicated via PICS have involved not only seizures but also suspicious shipments of non-scheduled precursor chemicals that were temporarily stopped but subsequently released because the countries in question did not have in place domestic legislation to enable the authorities to seize the chemicals. When substitute chemicals such as APAAN are stopped or seized in international trade, it is important for the authorities involved

[21] China, National Narcotics Control Commission, *Annual Report on Drug Control in China 2013* (Beijing, Ministry of Public Security, 2013), p. 55.

to widely communicate the reasons so that their counterparts are alerted and future shipments containing those chemicals and routed through different border crossings, ports or countries can be identified.

84. Shipments of APAAN typically originate in China and transit numerous European countries, the intended destination being the Netherlands. Authorities in China have been working to address the issue of exports of APAAN to Europe. The Board began the scheduling process for APAAN in February 2013, and the Commission on Narcotic Drugs is expected to take a decision on the matter at its fifty-seventh session, in March 2014 (see para. 9 above).

Map 5. 3,4-Methylenedioxyphenyl-2-propanone, isosafrole, piperonal, safrole and safrole-rich oils: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013

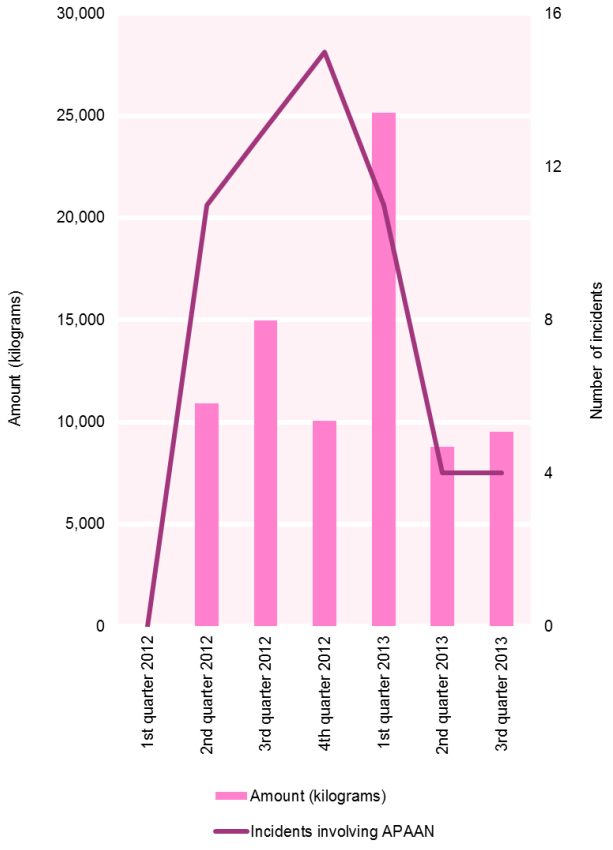


85. Although seizures of APAAN continue to be communicated via PICS, the frequency and total amounts declined somewhat after the first quarter of 2013 (see figure V). Since November 2012, 29 incidents involving APAAN were communicated via PICS by the Governments of the following countries: Austria, Belgium, Estonia, France, Germany, Latvia, Luxembourg and Netherlands (13 incidents). The misdeclaration and mislabelling of shipments have been identified as the main modi operandi used by traffickers of APAAN. Germany reported seizing the substance in a clandestine amphetamine laboratory. In the incident communicated by France, the shipment was destined for the Netherlands. In the incident involving Luxembourg, a company in Latvia was specified as the final destination; however, it is suspected that the intended destination was actually in the Netherlands. The Board is also aware of other incidents not communicated via PICS and involving shipments of APAAN that were later released because there was no national legislation enabling the seizure of such shipments. **While such incidents continue to occur, the Board would like to re-emphasize the importance of early communication of suspicions or concerns about a shipment, even if the shipment cannot be seized for lack of the relevant national legislation. Such communications alert the authorities of other countries about the modus operandi used, thus allowing a case to be built up and/or action to be taken against similar shipments in the future. In addition, early communication about a new substance not previously encountered in a jurisdiction may help to establish or**

confirm emerging trends and contribute to the development of countermeasures.

86. While APAAN is usually a white, off-white or light yellow crystalline powder, authorities have recently encountered the substance in liquid form or as a two-phase mixture consisting of undissolved APAAN crystals in ethanol or an ethanol-water mixture. One of the practical implications that this development may have for regulatory and law enforcement agencies is that liquid APAAN may not be identified using the more common, portable on-site testing equipment.

Figure V. Incidents involving *alpha*-phenylacetoacetonitrile communicated via the Precursors Incident Communication System (PICS), by quarter, 2012-2013



2. Sodium salts of P-2-P glycidic acid and of 3,4-MDP-2-P glycidic acid

87. In 2012, authorities in the United Kingdom of Great Britain and Northern Ireland dismantled a laboratory that had been illicitly manufacturing P-2-P using a previously unknown "pre-precursor", the sodium salt of P-2-P glycidic acid, which can be converted into P-2-P at a practical ratio of about 2 to 1. During the search of the laboratory, 100 kg of the substance, which had been imported from China, was recovered. Five persons, including two chemists from China, were arrested in connection with the laboratory, which would have ultimately been capable of illicitly manufacturing significant quantities of amphetamine. The leader of the group had travelled to China, where the two experienced chemists had given him a demonstration, and subsequently sponsored the chemists' visa applications, enabling them to go to the United Kingdom to supervise the setting up of the laboratory and the provision of training on how to convert the sodium salt of P-2-P glycidic acid to P-2-P, for use in the illicit manufacture of amphetamine.

88. The authorities of Luxembourg communicated via PICS seizures of a new "pre-precursor" of MDMA, the sodium salt of 3,4-MDP-2-P glycidic acid, which can be converted into 3,4-MDP-2-P at a practical ratio of about 2 to 1. A shipment containing 420 kg of the substance originating in China had arrived in Luxembourg by air from Hong Kong, China, and had been destined for the Netherlands. The contents of the shipment had been misdeclared as an organic surface active preparation. Additional incidents involving the substance were subsequently communicated by the authorities in Luxembourg; other incidents involving the substance were also reported to have occurred in Estonia and Romania. National authorities should be alerted to the fact that chemical analysis of the sodium salts of P-2-P glycidic acid and 3,4-MDP-2-P glycidic acid may pose challenges regarding identification, as it is possible that P-2-P and 3,4-MDP-2-P may be detected incorrectly as the main component.

3. 3,4-MDP-2-P methyl glycidate

89. The substance 3,4-MDP-2-P methyl glycidate, first described in the Board's 2010 report on precursors,[22] continues to be seized in Europe, albeit at much lower levels than previously reported. During the reporting period, authorities in the Netherlands communicated via PICS the seizure of only 690 grams of 3,4-MDP-2-P methyl glycidate. The substance had been seized at the international airport at Amsterdam, in a package sent

[22] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2010 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.11.XI.4), para. 62.

from China via courier services. The substance had been mislabelled and misdeclared as methyl cellulose.

4. Methylamine

90. Seizures of non-scheduled precursor chemicals continued to occur in the Americas, although the amounts reported in 2012 were smaller than in 2011. Methylamine, together with P-2-P, can be used in the illicit manufacture of methamphetamine; and, together with 3,4-MDP-2-P, methylamine can be used in the illicit manufacture of MDMA. In 2012, four Governments reported seizures of methylamine: Honduras, reporting such seizures for the first time (51,000 litres); Mexico (197 tons and 150,000 litres); Poland (403 litres); and United States (6,929 litres). Other incidents involving methylamine were communicated via PICS, including the seizure of 800 litres of the substance, together with other chemicals and laboratory equipment, in a truck in Mexico.

5. Esters of phenylacetic acid

91. Seizures of esters of phenylacetic acid continued through 2012. Authorities in Mexico—where the substances have been under national control since November 2009—reported on form D for 2012 the seizure of 72.8 tons and 46,000 litres of ethyl phenylacetate. The frequency and amount of seizures of esters of phenylacetic acid effected in Central American countries and Mexico have decreased since 2011, when record levels were reached. That may be attributed in part to increased efforts in cooperation with industry in source countries; that cooperation, while voluntary, is aimed at monitoring more closely, or restricting, the export of esters of phenylacetic acid to risk areas. However, considering the scale of trade in those substances and the ease with which they can be converted into phenylacetic acid, continued vigilance on the part of Governments and the industries concerned is warranted.

6. Other non-scheduled substances used in the illicit manufacture of amphetamine-type stimulants

92. Benzaldehyde and benzyl cyanide are two additional "pre-precursors" of P-2-P. Five Governments reported on form D the seizure of benzaldehyde in 2012: Estonia (11 kg), Germany (94 kg), Hungary (5 kg), Poland (15 litres) and Russian Federation (6 kg). The Philippines reported seizing 2,400 litres of benzyl cyanide while Serbia reported trace amounts of that substance. Authorities in Lebanon communicated via PICS several incidents involving attempts to smuggle into the country in 2012 substances and equipment used for illicit amphetamine manufacture, including 520 litres of benzyl cyanide.

93. Australian authorities reported on form D for 2012 the seizure of 11 tons of hypophosphorous acid, a substance that can be used in the illicit manufacture of methamphetamine. The single seizure occurred in New South Wales and was the largest amount of seized hypophosphorous acid ever reported to the Board, eclipsing the previous record amount of 1,941 litres, reported by Mexico in 2009.[23] Canada also reported significant seizures of hypophosphorous acid totalling 9.8 tons; 9.6 tons of the substances were found after being smuggled with other chemicals in a shipping container originating in China. While the United States reported the seizure of 1 litre of the substance.

B. Substances used in the illicit manufacture of cocaine

1. Potassium permanganate

94. Potassium permanganate is an oxidizer that is commonly used in the illicit manufacture of cocaine hydrochloride. It is also one of the most commonly traded licit substances in Table I of the 1988 Convention. Coca-producing countries engage in limited licit international trade in potassium permanganate; at the same time, however, those countries continue to account for the vast majority of reported seizures of that substance (see figure VI). Alternatives to potassium permanganate are increasingly being used in illicit cocaine manufacture. In addition, potassium permanganate is diverted from domestic distribution and subsequently smuggled into illicit channels; the substance is also illicitly manufactured, often at the same locations as cocaine-processing laboratories.

Licit trade

95. During the reporting period, 1,477 shipments of potassium permanganate, totalling 22,740 tons, were reported through the PEN Online system. Thirty-three countries exported potassium permanganate to 127 countries. The three coca-producing countries in South America—Bolivia (Plurinational State of), Colombia and Peru—continue to engage in little

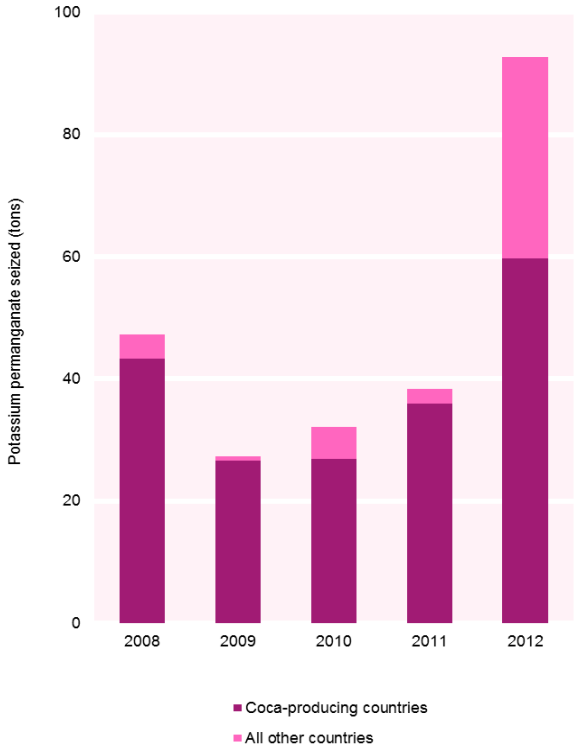
[23] Australian Crime Commission. *Illicit Drug Data Report 2011-12* (2012).

international trade in potassium permanganate, accounting for less than 1 per cent of global imports notified through the PEN Online system. However, according to estimates of cocaine manufacture, between 186 and 233 tons of potassium permanganate are used annually in coca-producing countries to illicitly manufacture cocaine.

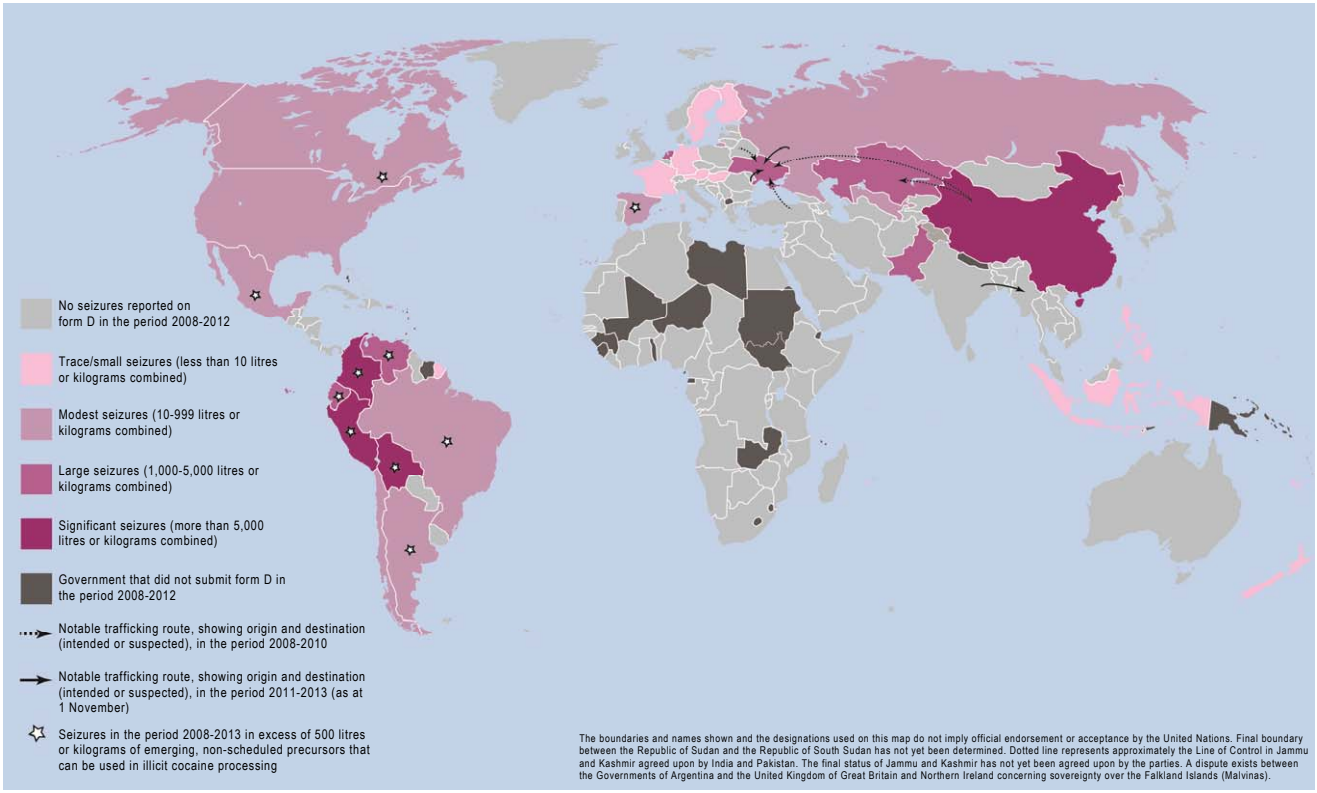
Trafficking

96. Fifteen Governments reported on form D for 2012 seizures of potassium permanganate totalling 92.7 tons, twice the average annual amount reported since 2008 (see figure VI). That increase was largely attributable to significant amounts reported seized by China (see map 6). Colombia again reported the largest amount of seized potassium permanganate (56 tons), accounting for 60 per cent of the global total; that was twice the amount that that country had reported seizing in the previous year. China seized 30 tons of the substance—the highest amount ever reported by a country outside the Americas—but provided no details relating to that unusual development. Bolivia (Plurinational State of) and Peru accounted for only 4 per cent of global seizures of potassium permanganate in 2012.

Figure VI. Seizures of potassium permanganate reported by Governments on form D, 2008-2012



Map 6. Potassium permanganate: seizures reported by Governments, 2008-2012, and notable trafficking routes, 2008-2013



97. Coca production occurs primarily in Bolivia (Plurinational State of), Colombia and Peru, which also account for the bulk of the world's dismantled illicit cocaine laboratories (see table 2). Between 2008 and 2012, the number of cocaine paste, base and crystallization laboratories reported to have been dismantled in Colombia remained relatively unchanged. It is estimated that between 60 and 80 per cent of the potassium permanganate used in Colombia is obtained through illicit manufacture using manganese dioxide as the starting material and is not diverted from international trade channels. The decline in the number of illicit cocaine-processing laboratories dismantled in the Plurinational State of Bolivia in 2012 is consistent with the decrease in coca bush cultivation in that year.

Table 2. Illicit cocaine-processing operations dismantled in coca-producing countries, by type of operation, 2008-2012

Country	*Type of operation*	*2008*	*2009*	*2010*	*2011*	*2012*
Bolivia (Plurinational State of)	Cocaine paste, base and crystallization	4 995	4 880	5 946	5 299	4 508
Colombia	Cocaine paste and base	3 147	2 670	2 334	2 200	2 110
	Cocaine crystallization	296	285	262	200	246
Peru	Cocaine paste and base	1 205	1 217	1 296	1 498	1 146
	Cocaine crystallization	19	25	21	19	26
Total	Cocaine paste, base and crystallization	9 662	9 077	9 859	9 216	8 036

Sources: United Nations Office on Drugs and Crime and Plurinational State of Bolivia, *Estado Plurinacional de Bolivia: Monitoreo de Cultivo de Coca 2012* (2013); United Nations Office on Drugs and Crime and the Government of Colombia, *Colombia: Censo de Cultivos de Coca 2012* (2013); United Nations Office on Drugs and Crime and Peru, *Peru: Monitoreo de Cultivos de Coca 2011* (2012); and Observatorio Peruano de Drogas (2013).

Note: Operations can vary significantly in size and sophistication, ranging from maceration pits to large-scale crystallization laboratories.

98. The Board is concerned about the growing threat of illicit cocaine manufacture spreading into Central America and other unsuspecting subregions outside of South America. As highlighted in the Board's 2012 report on precursors,[24] illicit cocaine-processing laboratories are increasingly being reported along established trafficking routes outside the traditional coca-producing countries. In 2013, the Governments of the Dominican Republic and Panama both reported the dismantling of illicit cocaine-processing laboratories, including the seizure of various precursors. Near an illicit cocaine base laboratory uncovered in a rural part of Panama, authorities also discovered a coca bush plantation; that was the first time that the Board had been informed that such a plantation had been found in that country. **The Board wishes to warn the authorities of countries in Central America and the Caribbean about the increasing number of incidents involving illicit cocaine manufacture in the region and the need to increase efforts to counter the illicit manufacture of that drug before it takes root.**

99. Clandestine potassium permanganate laboratories continue to be reported in Colombia. Eight of those laboratories were dismantled in 2012, a figure similar to the 2011 figure.[25] Sites used for the manufacture of potassium permanganate are often found close to (or at) laboratories where the cocaine base is reoxidized prior to being crystallized into cocaine hydrochloride. Having those sites close to or at the laboratories where the potassium permanganate is used in illicit cocaine manufacture virtually eliminates both the need to move the substances over great distances and the likelihood of it being seized.

2. Other substances used in the illicit manufacture of cocaine

100. The majority of the reported seizures of many acids and solvents in Table II of the 1988 Convention—required throughout the various stages of nearly all illicit drug manufacture—occur in the coca-producing countries in the Andean subregion. During the period 2008-2012, Bolivia (Plurinational State of), Colombia and Peru together accounted for on average 27-54 per cent of global seizures of ethyl ether, hydrochloric acid, methyl ethyl ketone, toluene and sulphuric acid. Nearly 90 per cent of global seizures of acetone are reported in coca-producing countries (see table 3 and annex VIII).

[24] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012*, para. 104.

[25] United Nations Office on Drugs and Crime and the Government of Colombia, *Colombia: Censo de Cultivos de Coca 2012* (2013).

Table 3. Acids and solvents in Table II of the 1988 Convention: percentage of global seizures reported by coca-producing countries, 2008-2012

Solvent or acid	*2008*	*2009*	*2010*	*2011*	*2012*	*Average for the period 2008-2012*
Acetone	93	90	85	79	88	87
Ethyl ether	83	15	13	8	53	35
Hydrochloric acid	47	57	45	37	34	44
Methyl ethyl ketone	68	53	51	7	19	39
Sulphuric acid	58	77	64	21	52	54
Toluene	12	6	52	35	32	27

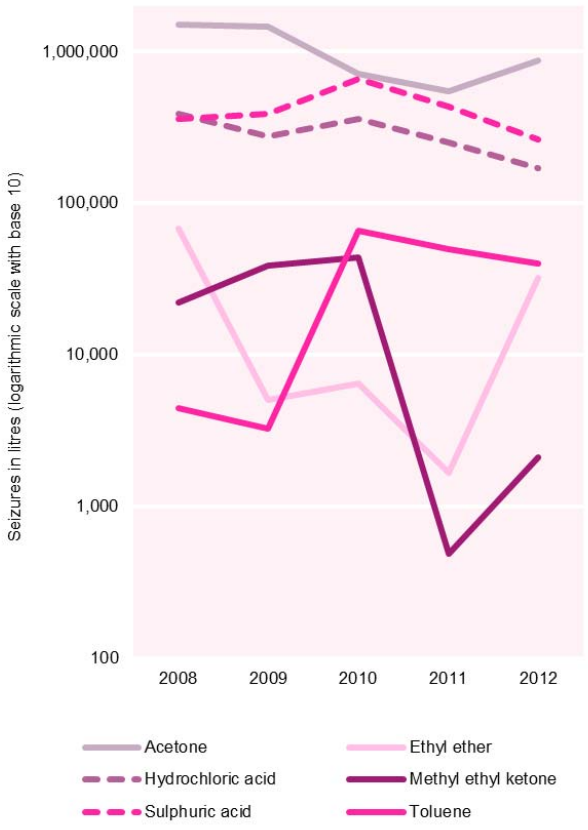
Sources: Form D and other Government sources.

101. Seizures reported by coca-producing countries of most of the acids and solvents in Table II of the 1988 Convention have been declining over the past several years. That is partly attributable to the fact that solvents are increasingly being recycled and reused several times. Additionally, non-scheduled solvents, such as ethyl and *n*-propyl acetate, methylene chloride and isopropyl alcohol, are increasingly being used instead of solvents in Table II for the illicit manufacture of cocaine (see figure VII), particularly in the last step of such manufacture, in which cocaine base is converted to cocaine hydrochloride. Forensic analysis of samples of cocaine originating in Colombia and seized in mid-2013 confirmed the use of acetate solvents to dissolve the cocaine base prior to crystallization in almost three quarters of the samples analysed.[26] In addition, the relative use and amounts of methyl ethyl ketone appear to be decreasing, and there is an apparent increase in the use of alcoholic hydrochloric acid versus concentrated hydrochloric acid.

102. Another non-scheduled precursor chemical that reflects changes in cocaine-processing practices, especially in Colombia, is sodium metabisulphite, a chemical anti-oxidant. Bolivia (Plurinational State of), Ecuador, Honduras, New Zealand and Venezuela (Bolivarian Republic of) reported on form D for 2012 seizures of the substance totalling 8.4 tons. During the reporting period, three incidents involving a total of 2.5 tons of the substance were communicated through PICS: two incidents occurred in Colombia and one occurred in Ecuador.

103. Incidents involving several other non-scheduled precursor chemicals have also been communicated through PICS. One of those incidents involved the first seizure of sodium permanganate, which may be used as a substitute for potassium permanganate in the illicit manufacture of cocaine. A total of 443 kg of the substance were seized in a clandestine laboratory that had been operating in Colombia.

Figure VII. Seizures of acids and solvents in Table II of the 1988 Convention reported by coca-producing countries, 2008-2012



[26] The analysis was conducted in the framework of the Cocaine Signature Programme of the United States.

C. Substances used in the illicit manufacture of heroin

1. Acetic anhydride

104. Acetic anhydride is one of the most frequently traded substances in Table I of the 1988 Convention. The substance is combined with morphine derived from opium poppy to make heroin. Acetic anhydride is also used in the illicit manufacture of P-2-P from phenylacetic acid, and P-2-P is used in the illicit manufacture of amphetamines. Most of the world's heroin is illicitly manufactured in Afghanistan, countries of the so-called Golden Triangle area of South-East Asia, Mexico and, to a lesser extent, Colombia. Each year, 600,000-1,500,000 litres of acetic anhydride are used to illicitly manufacture heroin, and the majority of the required acetic anhydride is obtained from domestic—not international—trade channels. Increased seizures of acetic anhydride in and around Mexico appear to be largely related to the increased use of P-2-P in the illicit manufacture of methamphetamine; however, the increased seizures of acetic anhydride may also be attributed to increased heroin manufacture, as levels of illicit opium poppy cultivation are increasing, and Mexico is currently the world's third largest net cultivator of opium poppy.[27] The Board has estimated that less than 17 per cent of the acetic anhydride diverted for use in illicit heroin manufacture is seized each year.[28]

Licit trade

105. During the reporting period, authorities of 24 exporting countries and territories used the PEN Online system to provide over 1,440 pre-export notifications for shipments of acetic anhydride. The shipments were destined for 86 importing countries and territories and involved a total of 266 million litres of acetic anhydride.

106. As emphasized in the Board's 2012 report on precursors, there is insufficient information on patterns of licit trade in acetic anhydride and the scope of domestic control of that substance;[29] and the limited information available is inconsistent. The Board believes that licit domestic trade in various countries is the primary source of the acetic anhydride that is diverted and subsequently smuggled into Afghanistan. To address that problem, the Board requested all Governments in 2013 to identify the locations and extent of acetic anhydride manufacture throughout the world. Of the 71 Governments that responded, 13 (Argentina, Canada, China, France, India, Japan, Mexico, Republic of Korea, Russian Federation, Switzerland, United Kingdom, United States and Uzbekistan) reported the existence of acetic anhydride manufacture on their territory. According to the limited data provided, the potential manufacture of acetic anhydride amounted to approximately 1.5 million tons annually.

107. In some cases, the responding Governments did not provide the extent of the manufacture of acetic anhydride on their territory. In other cases, the Governments reported the manufacture of acetic anhydride on their territory only if the manufactured substance was to be exported and not if the substance was subsequently used by the manufacturing company.

108. The Board is disappointed by the poor rate of return and by the fact that the Governments of some countries in which acetic anhydride is known to be manufactured or to have been manufactured in the past, such as Iran (Islamic Republic of) and Saudi Arabia, failed to respond to the Board's request. **The Board strongly encourages authorities to ensure that all companies manufacturing acetic anhydride on their territory are registered and included in the required reporting regardless of whether they manufacture the substance for their own use or for trade, because any level of manufacture, as well as any level of trade, constitutes a potential source of diversion. Governments of countries in which acetic anhydride and other scheduled substances are manufactured should report accurate, complete and up-to-date details of such manufacture through the established communication channels.**[30]

Trafficking

109. Seventeen Governments used form D to report seizures of acetic anhydride for 2012; those seizures totalled 88,530 litres, less than half of the total seizures reported for 2011. Only five Governments reported for 2012 seizures of the substance in excess of 1,000 litres: Afghanistan (31,451 litres); Brazil (1,878 litres); China (17,131 litres); Mexico (35,040 litres); and Poland (1,755 litres). According to information provided to the Board, the acetic anhydride seized in countries other than Afghanistan continues to be diverted primarily from domestic—not international—distribution channels.

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[27] *World Drug Report 2013* (United Nations publication, Sales No. E.13.XI.6), annex II.

[28] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012*, para. 106.

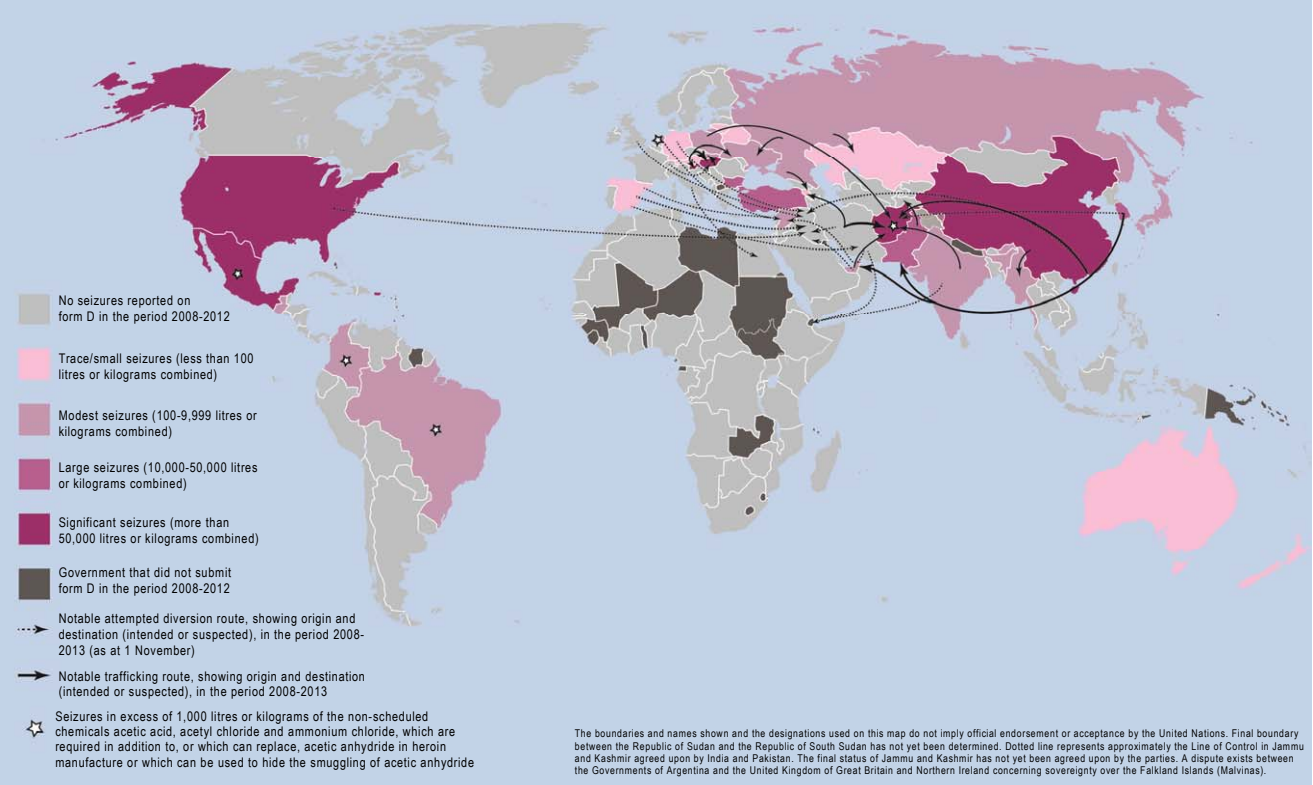
[29] Ibid., para. 109.

[30] Annual report questionnaire. Available from www.unodc.org/unodc/en/commissions/CND/10-GlobalData.html.

110. Iraq continues to be targeted by traffickers diverting acetic anhydride from international trade, even though the Government of that country has not reported to the Board any seizures of the substance (see map 7). Since January 2012, companies purportedly located in Iraq placed orders for shipments of acetic anhydride, amounting to a total of 35,000 litres, from companies in China. Since the legitimate need for the substance by the importing companies could not be substantiated, the shipments were suspended in the exporting country. The Board commends this practice and reiterates its request to all Governments to prevent the export of acetic anhydride to companies in Iraq unless the export has been duly authorized by the competent national authorities.

111. Twenty-five confirmed incidents relating to acetic anhydride, totalling 33 tons and 15,000 litres, were communicated via PICS during the reporting period. The incidents occurred in Afghanistan, India, Iran (Islamic Republic of), Mexico and Pakistan. Authorities in Afghanistan reported seizing a total of 13,300 litres of acetic anhydride, often entering that country from the Islamic Republic of Iran. In June 2013, Iranian authorities seized 17.8 tons of acetic anhydride that had been smuggled in a container from China and destined for Afghanistan. In 2013, the Anti-Narcotics Force of Pakistan reported the seizure of a shipment containing over 103 tons of acetic anhydride and hydrochloric acid, which could be one of the largest single seizures of acetic anhydride ever reported; however, the amount of acetic anhydride in that seizure was not reported. The authorities of Pakistan also reported the seizure of 15 tons of acetic anhydride in mid-2013.

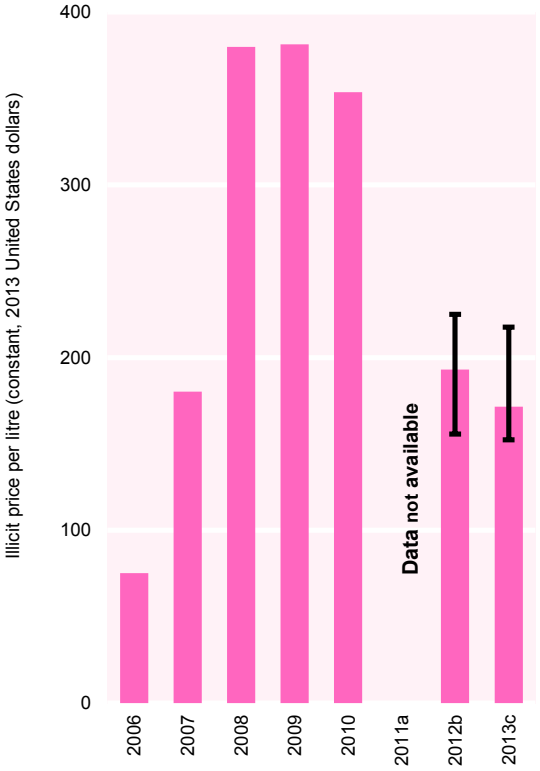
Map 7. Acetic anhydride: seizures reported by Governments, 2008-2012, and notable transit routes, 2008-2013



112. Afghanistan systematically monitors black market prices of acetic anhydride, which among other things, provide an indication of the availability of that key precursor in the country.[31] Those prices continued to decline to between 114 and 224 United States dollars per litre in October 2013, that price being estimated on the basis of the perceived quality of the substance (see figure VIII). Acetic anhydride obtained from legitimate wholesale sources costs roughly US$ 1.5 per litre. The continued decline in the price of acetic anhydride indicates that supplies of, or access to, the substance may have increased in Afghanistan. The illicit manufacture of heroin, which takes place primarily in Afghanistan, has followed a pattern similar to that of the price of acetic anhydride on the black market in that country, increasing sharply between 2006 and 2008 and then declining.

[31] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012*, box 2.

Figure VIII. Price of acetic anhydride on the black market in Afghanistan, 2006-2013



Sources: Ministry of Counter Narcotics of Afghanistan and the United Nations Office on Dr

ugs and Crime.

Note: Error bars represent the average illicit price range based on the perceived quality of the acetic anhydride, which were reported beginning in March 2012. Values represent the unweighted average of all samples.

[a] Data for 2011 are not available.

[b] Data for 2012 are for the period from March to December.

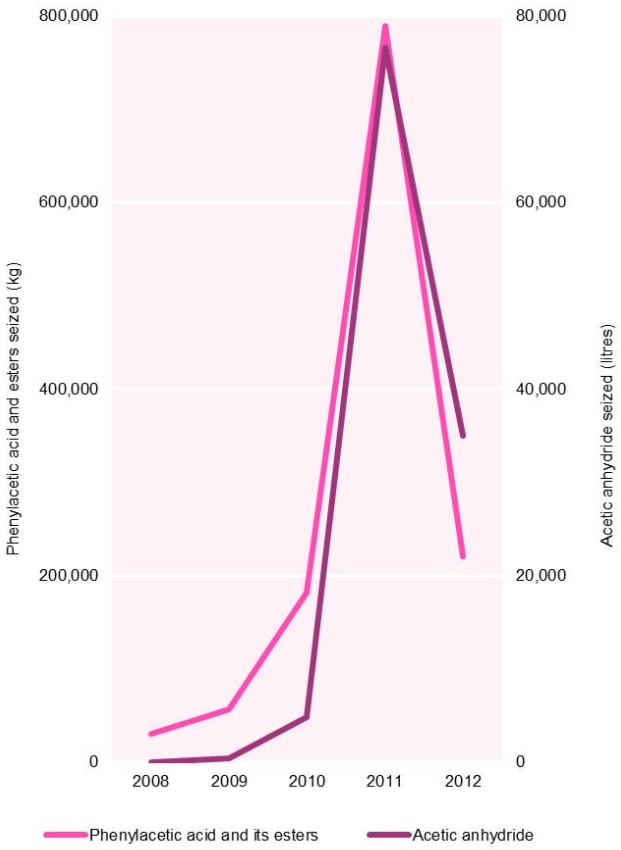
[c] Data for 2013 are for the period from January to October.

113. Reported seizures of acetic anhydride in Mexico increased significantly between 2008 and 2012, from 4 to 35,000 litres. According to figures made available by the United Nations Office on Drugs and Crime, illicit opium poppy cultivation in Mexico has increased to such an extent that the country now ranks third in the world—the total area in that country in which opium poppy is illicitly cultivated was estimated at 12,000 hectares in 2011.[32] However, there is a very high correlation between seizures of acetic anhydride in Mexico and seizures in that country of phenylacetic acid and its esters, substances that require acetic anhydride in the illicit manufacture of P-2-P and subsequently methamphetamine (see figure IX).

[32] *World Drug Report 2013* (United Nations publication, Sales No. E.13.XI.6), annex II.

114. Although seizures are an important indicator of drug trafficking activity, another indicator of such activity—one that is perhaps more important but arguably more difficult to ascertain—are assessments of attempted diversions (diversions that were prevented). As noted in the Board's 2012 report on precursors,[33] the amount of acetic anhydride in shipments that were either stopped or suspended or identified as suspicious through the PEN Online system was nearly double the amount actually seized by law enforcement authorities. That is, the amount of acetic anhydride that the PEN Online system prevented from being diverted was far greater than the amount of acetic anhydride seized by law enforcement authorities after the substance had been diverted from legitimate channels.

Figure IX. Seizures of acetic anhydride and phenylacetic acid (including its esters) reported by Mexico on form D, 2008-2012



[33] *Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances: Report of the International Narcotics Control Board for 2012*, para. 115.

2. Use of non-scheduled substances and other trends in the illicit manufacture of heroin

115. Ammonium chloride is a non-scheduled substance commonly used as part of the extraction of morphine from opium. Governments, particularly Governments of countries in which illicit heroin manufacture is known to take place, are reporting increasingly large seizures of ammonium chloride. Between 2008 and 2012, nearly 94 tons of the substance were reported seized, the largest seizures being reported in Afghanistan and, in recent years, Mexico (see table 4). During the reporting period, the Government of Afghanistan communicated seven incidents involving ammonium chloride, seizing nearly 1.8 tons. The largest of those seven seizures, effected in a warehouse in Badakhshan province, amounted to 1,057 kg of ammonium chloride that had originated in Pakistan. **In view of recent developments, the Board encourages the Government of Afghanistan: to assess its legitimate requirements for ammonium chloride and other substances not under international control that can be used in the illicit manufacture of heroin; and, pursuant to article 24 of the 1988 Convention, to monitor its trade in those substances.**

Table 4. Seizures of ammonium chloride reported by Governments on form D, 2008-2012
(Kilograms)

Government	*2008*	*2009*	*2010*	*2011*	*2012*	*Total*
Afghanistan	10 188	348	32 663	13 154	32 453	88 806
Hungary	0	0	0	1	0	1
Mexico	8	0	0	1 418	3 034	4 459
Spain	0	250	0	0	0	250
Total	10 196	598	32 663	14 572	87 553	93 516

D. Substances used in the illicit manufacture of other narcotic drugs and psychotropic substances

1. Ergot alkaloids and lysergic acid

Licit trade

116. Ergot alkaloids (ergometrine and ergotamine and their salts) are used in the treatment of migraines and as an oxytocic in obstetrics, but there is comparatively limited international trade in those substances. During the reporting period, 337 shipments of ergot alkaloids, totalling 145 kg, were reported; 17 countries exported ergot alkaloids to 53 countries. In addition, there were three shipments of lysergic acid, totalling 0.5 kg, during the reporting period.

Trafficking

117. The Governments of five countries—Australia, Canada, Mexico, the United States and Ukraine—used form D to report seizures of ergot alkaloids in 2012. The Government of Mexico reported the largest of those seizures—1.6 kg of ergotamine; that was the largest seizure of that substance reported since 2007 and the first time that that Government had informed the Board of a seizure of that substance. In April 2012, customs authorities at the international airport at Mexico City seized a can containing 1.63 kg of ergotamine; no information was provided about the origin of the seized substance. In 2012, Australia informed the Board of seizures of lysergic acid totalling 0.69 kg—the largest seizures of that substance ever reported to the Board.

2. *N*-Acetylanthranilic acid and anthranilic acid

Licit trade

118. *N*-Acetylanthranilic acid and anthranilic acid are used in the illicit manufacture of methaqualone, a sedative-hypnotic whose illicit use is particularly common in parts of Africa. During the reporting period, two shipments of *N*-acetylanthranilic acid, totalling slightly more than 1 kg, were reported; two countries exported the substance to two importing countries. In addition, there were 277 shipments of anthranilic acid totalling 1,120 tons during the reporting period.

Trafficking

119. Seizures of either *N*-acetylanthranilic acid or anthranilic acid are uncommon. In 2012, only one seizure of *N*-acetylanthranilic acid was reported to have been made; that seizure, totalling 1 kg, was reported by the United Kingdom. There were no communications via PICS relating to *N*-acetylanthranilic acid or anthranilic acid. Until recently, reports of the illicit manufacture of methaqualone on a large scale came from South Africa,

where tablets containing methaqualone are commonly referred to as Mandrax (the brand name of a pharmaceutical product banned in the 1970s); unfortunately, the Government of South Africa has not provided any information to the Board on any seizures of precursor chemicals since 2008.

E. Substances used in the manufacture of non-scheduled substances of abuse

120. There are a variety of other substances for which Governments use form D to provide information on seizures and/or illicit manufacture. Over the last couple of years, more and more information has been provided about emerging, non-scheduled substances of abuse, commonly referred to by the umbrella term "new psychoactive substances". Such substances are sometimes also referred to as "designer drugs", "herbal highs" or "research chemicals". As new psychoactive substances are non-scheduled substances, they are often manufactured in industrial settings on demand, traded in bulk and then processed into their final form in clandestine laboratories that are reported to the Board. During that process, scheduled and non-scheduled solvents are required.

121. The Government of Romania reported on form D the dismantling in 2012 of two clandestine laboratories—one in Bucharest and the other in Buzău county—used for processing (i.e. refining, tableting, cutting and packaging) new psychoactive substances. At those laboratories, plant components had been mixed with new psychoactive substances and packaged for distribution. Numerous non-scheduled substances were seized at both laboratories.

122. *gamma*-Butyrolactone (GBL), one of several substances sometimes referred to as "date-rape" drugs, is also used in the illicit manufacture of *gamma*-hydroxybutyric acid. In 2012, there was a significant increase in the amount of GBL seized by Governments: the Governments of 10 countries, mostly in Europe, reported on form D the seizure of a total of 47,394 litres (or kilograms)—nearly 10 times the previous record amount (4,924 litres, reported to the Board in 2008). The Netherlands reported seizing 43,000 litres of GBL, most of which was discovered in a warehouse after having arrived from China. Canada reported seizing 3,157 litres of the substance that had been smuggled in a shipping container originating in China.

123. The abuse of ketamine, an anaesthetic not under international control, is common throughout East and South-East Asia, but its abuse is also being reported in countries in other regions, such as Europe. China reported that in 2012, 4.7 tons of ketamine had been seized and nearly 8 per cent of the registered drug abusers in the country had been abusing ketamine. "Hydroxylimine" is the common name for an immediate precursor of ketamine. The Government of China reported on form D that 6.8 tons of "hydroxylimine" had been seized in 2012, a decline over the amount reported for 2011. Canada reported seizing 50 kg of the substance in 2012. **Governments are reminded that it is important to communicate via PICS incidents involving chemicals that are not currently under international control and to use form D each year to provide aggregated data on seizures of precursor chemicals.**

IV. Action to enhance international precursor control

124. The Board's 2011 report on precursors focused on achievements and progress in terms of implementing the framework requirements established under the 1988 Convention and related resolutions; and the Board's 2012 report on precursors focused on challenges in international precursor control. In those reports, the Board noted that the basic tools for countering diversion were not being utilized by all countries, the greatest gaps being among lower-income countries; in some cases, entire regions were lagging behind. The Board also drew attention to new challenges that had emerged and had not been comprehensively addressed within the existing legal framework or that were becoming increasingly more important.

125. Those new challenges include (a) the rapid adaptation by chemical trafficking organizations to changes in regulatory systems and successful law enforcement; (b) the increasing sophistication in the illicit manufacture of drugs and their precursors; and (c) the diversity in the use of alternative chemicals for illicit drug manufacture.

126. The present chapter represents a continuation of the series of thematic chapters in the Board's report on precursors. Building on an analysis of the utilization of basic tools of international precursor control (see table 5) and the findings of previous reports, it outlines action to be given priority in different regions. Not every action identified applies to every country within the region to the same extent. In some instances, the action to be given priority in one region may be applicable to countries in other regions. However, as it is unrealistic to expect all actions to be addressed at the same time, the present chapter is intended to help the authorities in the regions concerned to focus their precursor control efforts (see table 6).

Table 5. Countries utilizing basic tools of international precursor control, by region, as at 1 November 2013
(Percentage and number of countries)

Region (number of countries)	*Invoking article 12, para. 10 (a), of the 1988 Convention*	*Registering to use PEN Online*	*Submitting form D for 2012*[a]	*Providing annual estimates of legitimate requirements for precursors*	*Registering to use PICS*
Africa (54 countries)	26% (14)	54% (29)	31% (17)	52% (28)	9% (5)
Central America and the Caribbean (20 countries)	50% (10)	85% (17)	45% (9)	70% (14)	40% (8)
North America (3 countries)	100% (3)	100% (3)	100% (3)	100% (3)	100% (3)
South America (12 countries)	75% (9)	92% (11)	75% (9)	92% (11)	58% (7)
East and South-East Asia and South Asia (22 countries)	50% (11)	77% (17)	82% (18)	86% (19)	50% (11)
West Asia (24 countries)	67% (16)	83% (20)	75% (18)	79% (19)	50% (12)
Eastern and South-Eastern Europe (12 countries)	50% (6)	83% (20)	92% (11)	92% (11)	42% (5)
Western and Central Europe (33 countries)	79% (26)	88% (29)	88% (29)	88% (29)	73% (24)
Oceania (16 countries)	13% (2)	31% (5)	19% (3)	31% (5)	19% (3)

Note: Adhering to the 1988 Convention is not included as a basic tool of international precursor control, as only nine States have yet to become parties to that Convention.

[a] For each region, the percentage (and number) of countries that submitted form D, regardless of the comprehensiveness or quality of the data provided on that form.

127. More general conclusions and recommendations are presented in chapter V below. The present chapter, together with chapter V, has been prepared with a view to providing input for the high-level review of the implementation of the 2009 Political Declaration and Plan of Action to be conducted by the Commission on Narcotic Drugs at its fifty-seventh session, in March 2014.

A. Regional precursor priorities: Africa

128. The paramount issue in countries in Africa, with few exceptions, is to increase the sharing of information at the national level (i.e. among all the regulatory and law enforcement agencies concerned), at the regional level and at the international level, in order to provide a better picture of the overall situation with regard to the diversion of precursors. More specifically, improved sharing of information is essential to ensuring that investigations into the sources of diverted precursors and the trafficking organizations behind such diversions can draw on all available pieces of evidence.

129. To facilitate the sharing of information worldwide, a number of basic tools are made available to Governments at no cost. Therefore, Governments of African countries that have not already done so should, without delay:

(a) Invoke article 12, paragraph 10 (a), of the 1988 Convention to create the conditions for being notified of exports of precursor chemicals (the list of Governments that have invoked article 12, paragraph 10 (a), and the respective scope, can be seen in annex X and is updated regularly on the Board's website; the forms for requesting notification are also available on that website);

(b) Register with—and utilize—the two systems available for the real-time sharing of information on precursor chemicals: the PEN Online system, for notification of shipments of precursor chemicals prior to their export (https://www.incb.org/pen); and PICS, for communicating incidents involving precursors, such as seizures, shipments stopped in transit, suspicious shipments and seizures of clandestine laboratories (https://pics.incb.org);

(c) Submit form D on time, providing for each year complete, aggregated information relating to seizures of substances in Tables I and II of the 1988 Convention, substances not included in Table I or II but identified as having been used in illicit drug manufacture, and methods of diversion and illicit manufacture, as well as information on stopped shipments and information on licit trade in, uses of and requirements for substances in Tables I and II (for the list of countries that have submitted form D and

the comprehensiveness of the information provided, see annexes VII and IX);

(d) Provide up-to-date estimates of annual legitimate requirements (based on legitimate end use) for certain precursors of ATS, pursuant to Commission on Narcotic Drugs resolution 49/3 (for the list of national estimates of those requirements, see annex II; for a regularly updated version of the list, see the Board's website).

B. Regional precursor priorities: Central America and the Caribbean

130. Several countries in Central America and the Caribbean[34] need to utilize some or most of the same basic tools of international precursor control as countries in Africa. Where the basic tools are being utilized, the countries need to review the adequacy of, and if necessary enhance, their import and export controls. Specifically, the Board—and thus the international community—is unaware of whether or not several countries in the region[35] apply any system of authorization to exports of substances in Table I and/or Table II of the 1988 Convention, pursuant to article 12 of the Convention.

131. Additionally, countries in Central America have previously been targeted by traffickers as transit countries and/or countries of destination for shipments of chemicals not included in the tables of the 1988 Convention. This includes pharmaceutical preparations containing ephedrine and pseudoephedrine and, more recently (after several countries had banned or more strictly controlled such preparations), esters and other derivatives of phenylacetic acid. Reports of trans-shipments and seizures of those chemicals in Central America decreased significantly in the period 2012-2013; however, as there are no signs of decreased availability of methamphetamine on the illicit market in North America, authorities of countries in Central America are reminded to continue their vigilance and share with the authorities of the countries involved any details that may be of value to investigations.

C. Regional precursor priorities: North America

132. In the three countries in North America, problems involving illicit drug manufacture are characterized by some shared similarities, such as the application of threshold quantities or purchase limits below which monitoring is not required. In Canada and the United States, the circumventing of purchase limits for pharmaceutical preparations or dietary health products containing pseudoephedrine or ephedrine continues to fuel the widespread domestic illicit manufacture of methamphetamine.

133. In Mexico, precursor control problems may also be partly linked to a threshold issue. In Mexico, where the threshold for monitoring imports and exports of acetic anhydride is 1,000 kg, the world's second largest amount of acetic anhydride was seized in the period 2008-2012 (only in Afghanistan was more of that substance seized). In addition, in Mexico there have been massive imports and diversions of non-scheduled derivatives of phenylacetic acid—used in conjunction with acetic anhydride—and other chemicals required for the manufacture of methamphetamine. The introduction of control measures for those substances in 2009 has brought to light the scale of such importation and illicit methamphetamine manufacture in the country: seizures of derivatives of phenylacetic acid reached unprecedented levels in the period 2010-2011; since then, however, there has been a discernible drop in the number of shipments seized and the amounts seized. The indicators for the illicit methamphetamine market in North America as a whole remain unaffected (see para. 131 above).

134. Improved domestic controls and/or cooperation with industry and retail suppliers to reduce the availability of the precursor chemicals concerned on the illicit market for methamphetamine is therefore one of the precursor control priorities for North America.

D. Regional precursor priorities: South America

135. Although there are indications of increasing availability and abuse of synthetic drugs, namely "ecstasy"-type substances, in countries in South America, the main concern (and focus) of Governments of countries in the region remains the processing and availability of cocaine. At the same time, there is often a lack of understanding of the sources or points of diversion of the chemicals used in illicit cocaine manufacture. While some of those chemicals are illicitly manufactured and some of those chemicals under international control are being replaced with non-scheduled chemicals, domestic diversion continues to provide a significant share of the required chemicals. The points of diversion and the dynamics of the illicit movement of those chemicals within the region remain largely unknown.

136. For the above-mentioned reasons, countries in South America need to step up their efforts to fully implement all

[34] Antigua and Barbuda, Bahamas, Dominica, Grenada, and Saint Kitts and Nevis.

[35] Antigua and Barbuda, Barbados, Belize, Grenada, Honduras, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago.

existing applicable legislation and to improve the sharing of cross-border operational information on incidents involving precursors (seizures, diversions, attempted diversions and stopped shipments) and the communication of actionable intelligence with all relevant agencies at the national, regional and international levels. One basic tool is the use of backtracking investigations, particularly in cooperation with Governments of countries neighbouring the three coca-producing countries. That includes the active engagement of and leadership by Colombia, the South American member of the INCB Precursor Task Force of Project Prism and Project Cohesion.

E. Regional precursor priorities: East and South-East Asia and South Asia

137. Countries in East and South-East Asia and in South Asia continue to be faced with major problems concerning the abuse of ATS, particularly methamphetamine. Several countries in those two regions are also known for illicit methamphetamine manufacture and/or seizures of ephedrine and pseudoephedrine (including in the form of pharmaceutical preparations). The number of seizures of ephedrine and pseudoephedrine of domestic origin appears to be increasing in countries such as China and India. In China, *Ephedra* plant products are also diverted for use in illicit drug manufacture.

138. At the same time, there is a lack of basic information about incidents involving precursors, particularly in East and South-East Asia; the extent and depth of investigations into such incidents in those countries with significant illicit methamphetamine manufacture remain unclear. To address the situation, the authorities of the countries and territories concerned need to do more to increase cooperation and share pertinent information at the national, regional and international levels with a view to supporting investigations of incidents involving precursor chemicals and to preventing diversions of such chemicals. Some countries in those two regions also need to strengthen the cooperation of relevant industries and increase the vigilance of their authorities to ensure that informed decisions are made when authorizing imports and exports rather than merely following administrative procedures.

F. Regional precursor priorities: West Asia

139. The majority of countries in West Asia still need to implement the basic tools of precursor control and improve communication and cooperation between their national authorities, as well as between those authorities and their counterparts at the regional and international levels. Specifically, there is a need to enhance the investigative follow-up of suspicious shipments and attempted diversions, with a view to identifying those behind the placing of the orders and to preventing future diversions. Despite some recent successes, the amount of acetic anhydride seized in countries in the region, particularly in countries neighbouring Afghanistan, remains low considering the amount of heroin illicitly manufactured in the region, and that indicates that there is a need for further investments to increase the capacity for border interdiction.

140. It is important for several countries in West Asia to improve their methodology for estimating their annual legitimate requirements for certain precursors. Countries in that region are among those with the highest annual legitimate requirements for ephedrine and/or pseudoephedrine. In general, it appears that in many countries in West Asia, there is a need for a better understanding of the domestic markets for precursor chemicals, including the manufacturing companies involved, their capacities, end users and legitimate end uses.

G. Regional precursor priorities: Europe

141. Some countries in Eastern Europe and South-Eastern Europe[36] still have not made use of a basic tool of international precursor control that is a provision of the 1988 Convention: invoking article 12, paragraph 10 (a), which makes the sending of pre-export notifications mandatory. Not doing so allows a large gap to remain in the international precursor control system.

142. The key precursor issue in many parts of Europe is the emergence of non-scheduled substances used in the illicit manufacture of ATS. The early and systematic sharing of available operational information, including through PICS, and practical cooperation among countries in the region have prevented significant amounts of such substances from reaching clandestine laboratories. Over the past few years, Europe, especially Western and Central Europe, has been one of the regions with the largest number and most diverse types of emerging precursors; it also has the capabilities necessary to identify new substances and build up cases involving non-scheduled substances. Thus, authorities in European countries have the potential to improve cooperation and the sharing of knowledge with their counterparts in other regions. Member States of the European Union should also ensure that detailed information on seizures of substances used in the illicit manufacture of drugs continues to be provided to

[36] Albania, Bosnia and Herzegovina, Montenegro, Serbia, the former Yugoslav Republic of Macedonia and Ukraine.

the Board, in accordance with their treaty obligations. In addition, authorities of member States of the European Union should adequately monitor the movement of relevant precursors within the Union borders to ensure the legitimate end use of those precursors.

H. Regional precursor priorities: Oceania

143. There are two priorities for Oceania. One priority is utilizing the basic tools of precursor control in all the small Pacific island States. Of the nine States that have yet to become parties to the 1988 Convention, five are Pacific island States;[37] Tonga is the only Pacific island State that has invoked article 12, paragraph 10 (a), of the Convention; only three Pacific island States have registered to use the PEN Online system; and only one (Samoa) has registered to use PICS.

144. The second priority in Oceania is the further enhancement of cooperation, at the national and international levels, in Australia and New Zealand. It is particularly important for countries used as sources of precursor chemicals to address, through global initiatives such as Project Prism, the problem of precursors of methamphetamine being smuggled into Australia and New Zealand.

I. Global precursor priority

145. In addition to the identified regional precursor priorities and in the spirit of shared responsibility, countries that are in a position to do so are encouraged to support other countries in their efforts to address weaknesses in precursor control and to implement the action outlined in the present chapter.

Table 6. Action to enhance international precursor control: regional priorities

Region	*Invoking article 12, para. 10 (a), of the 1988 Convention*	*Registering to use PEN Online*	*Submitting form D on a regular basis*	*Providing annual estimates of legitimate requirements for precursors*	*Registering to use PICS*	*International cooperation, including activities of Project Prism and Project Cohesion*
Africa	X	X	X	X	X	X
Central America and the Caribbean	X		X	X	X	X
North America						X
South America					X	X
East and South-East Asia and South Asia	X				X	X
West Asia	X		X	X	X	X
Eastern and South-Eastern Europe	X				X	X
Western and Central Europe					X	X
Oceania	X	X[a]	X[a]	X[a]	X[a]	X[a]

[a] Mainly among small Pacific island States.

V. Conclusions and recommendations

146. The present chapter contains broad conclusions and recommendations to fill existing gaps in the control system that have implications at the global level; to address current challenges; and to make the system of international precursor control more fit for the future.

147. The 1988 Convention and subsequent resolutions provide a comprehensive framework for international cooperation in preventing the diversion of precursor chemicals. In addition, a number of the legal and practical tools available to States provide the basis for the international monitoring of precursor chemicals. However, those tools are not utilized to the same extent in all countries or regions (see tables 5 and 6), and that provides opportunities for chemical trafficking organizations to circumvent existing legislation and hampers the efforts of other members of the international community. If the available tools were fully and systematically used by

[37] Kiribati, Palau, Papua New Guinea, Solomon Islands and Tuvalu.

Governments, that would significantly reduce the chances of traffickers meeting the illicit demand for those chemicals.

148. Despite the fact that the 1988 Convention entered into force more than 20 years ago, the Governments of a number of countries have still not made use of the basic tools of international precursor control. In fact, a number of States parties to the Convention[38] have not utilized a single one of the basic tools. A second group of Governments are using the tools but still need to strengthen their domestic control system, taking into account their legitimate requirements for those precursor chemicals, and to take steps to facilitate their control over the imports and exports of those chemicals. A third group of Governments have made use of all the tools but still need to increase their cooperation efforts in support of regional and/or international investigations. **The Board therefore encourages Governments to identify where weaknesses exist and take remedial action to comply with their treaty obligations and responsibility vis-à-vis other members of the international community, in order to prevent substances from reaching illicit markets.**

149. Diversions of precursor chemicals from legitimate international trade are encountered far less frequently than in the past, trafficking patterns are more complex and licit chemical markets are becoming increasingly more diverse; the investigative potential of monitoring and/or following the distribution of certain substances not under international control that (in addition to internationally controlled substances) are required in the illicit drug manufacture has not yet been fully explored. There is also a need to share information with a level of detail that is far greater than in the past. The present report has illustrated the discrepancy between reported seizures of ephedrines in certain regions and the predominant substance traded in the same regions. **The Board therefore encourages authorities to be cognizant of the investigative value of information about non-scheduled chemicals, details such as the specific type and form of ephedrines (and other chemicals) seized, details regarding labels on containers found in clandestine laboratories or used in intercepted shipments, and details about methods of diversion, and to share such details with their counterparts in the countries concerned.**

[38] In Africa: Angola, Burundi, Central African Republic, Comoros, Djibouti, Equatorial Guinea, Gabon, Lesotho, Mauritania, Niger, Rwanda, Somalia, South Sudan and Swaziland; in Central America and the Caribbean: Dominica, and Saint Kitts and Nevis; in East and South-East Asia: Timor-Leste; in West Asia: Kuwait; in South-Eastern Europe: the former Yugoslav Republic of Macedonia; and in Oceania: Fiji, Kiribati, Nauru, Niue, Palau, Tuvalu and Vanuatu.

150. The less frequent diversion of chemicals from legitimate international trade means that greater emphasis needs to be placed on understanding the domestic market of controlled chemicals and strengthening measures at the national level. One area that appears to be the least regulated in many countries is the verification of end users. In some regions, there is a need to focus more on understanding, regulating and reporting on the licit manufacture of controlled substances. The Board is concerned that in many regions, there are significant weaknesses in controls at the national level; the Board has therefore launched an operation called Eagle Eye, among other things, to shed light on priority areas requiring improvement in each of the participating countries. **The Board encourages Governments to make every effort to participate in this and other time-bound operations under Project Prism and Project Cohesion aimed at improving the understanding of the licit and illicit markets for precursors at the national and international levels, and to support backtracking investigations and controlled (or monitored) deliveries of shipments of precursors, as a means of identifying the trafficking organizations involved.**

151. One of the key challenges for international precursor control is the emergence of non-scheduled substances used in the illicit manufacture of drugs, particularly ATS. Until an international legal framework is in place to deal with such non-scheduled substances, the early and systematic sharing of all available operational information will be instrumental in building up cases and, more importantly, alerting authorities in other countries about the modi operandi used and new trends. PICS provides a means of sharing in real time such information; however, it is still not used enough for sharing such information about non-scheduled chemicals, as authorities appear to be uncomfortable about sharing incomplete information or information about shipments that were temporarily stopped but later released. **The Board wishes to remind Governments that communicating incidents involving new substances that have not previously been encountered in a given jurisdiction may help to establish or confirm new trends and may contribute to the development of countermeasures. Early communication of information about a suspicious shipment or of concerns about a shipment is critical in that it alerts the relevant authorities at the national and international levels so that similar shipments routed through different border crossings, ports or countries can be identified.**

152. If long-term solutions are to be identified, addressing current challenges and preparing the international precursor control system for the future, there is a need for a strategic discussion aimed at establishing the necessary

framework and commitment to enable national authorities to cooperate with one another so that they can effectively address the challenges of emerging and other non-scheduled substances used in illicit drug manufacture. The Board is willing to support such a process in the hope that Governments will use the high-level segment of the Commission on Narcotic Drugs at its fifty-seventh session, in March 2014, as an opportunity to lay the groundwork for this and other discussions in preparation of the special session of the General Assembly to be held in 2016. At the same time, the Board remains committed to assisting Governments in utilizing the basic tools of international precursor control detailed in the present report.

Glossary

In the present report, the following terms and definitions have been used:

diversion:	transfer of substances from licit to illicit channels
industrial-scale illicit laboratory:	laboratory manufacturing amphetamine-type stimulants that uses oversized equipment and/or glassware that is either custom-made or purchased from industrial processing sources and that produces significant amounts of drugs in very short periods of time, the amount being limited only by the need for access to precursors and other essential chemicals in adequate quantities and for the logistics and manpower to handle large amounts of drugs and chemicals; a typical manufacture cycle for amphetamine-type stimulants would yield 50 kg or more of the substance
monitored delivery:	technique that is similar to controlled delivery except that it can be used in countries where no national legislation exists for controlled deliveries, where the substance is not internationally controlled or in cases where agreement to take part in a controlled delivery could not be reached by all the competent national authorities involved within the time frame allotted
pharmaceutical formulation:	mixture, typically a solid prior to its formulation into a finished dosage form, that contains precursors present in such a way that they can be used or recovered by readily applicable means
pharmaceutical preparation:	preparation for therapeutic (human or veterinary) use in its finished dosage form that contains precursors present in such a way that they can be used or recovered by readily applicable means; may be presented in their retail packaging or in bulk
seizure:	prohibiting the transfer, conversion, disposition or movement of property or assuming custody or control of property on the basis of an order issued by a court or a competent authority; may be temporary or permanent (i.e. confiscation); different national legal systems may use different terms
stopped shipment:	shipment permanently withheld because reasonable grounds exist to believe that it may constitute an attempted diversion, as a result of administrative problems or because of other grounds for concern or suspicion
suspended shipment:	shipment temporarily withheld because of administrative inconsistencies or other grounds for concern or suspicion, for which clarification of the veracity of the order and resolution of technical issues are required before the shipment may be released
suspicious order (or suspicious transaction):	order (or transaction) of questionable, dishonest or unusual character or condition, for which there is reason to believe that a substance in Table I or II of the 1988 Convention, which is being imported or exported or is transiting, is destined for the illicit manufacture of narcotic drugs or psychotropic substances

Annexes*

*The annexes are not included in the printed version of the present report but they are available in the CD-ROM version and in the version on the website of the International Narcotics Control Board (www.incb.org).

Annex I

Parties and non-parties to the 1988 Convention, by region, as at 1 November 2013

Note: The date on which the instrument of ratification or accession was deposited is indicated in parentheses.

Region	*Party to the 1988 Convention*		*Non-party to the 1988 Convention*
Africa	Algeria (9 May 1995)	Eritrea (30 January 2002)	Equatorial Guinea
	Angola (26 October 2005)	Ethiopia (11 October 1994)	Somalia
	Benin (23 May 1997)	Gabon (10 July 2006)	South Sudan
	Botswana (13 August 1996)	Gambia (23 April 1996)	
	Burkina Faso (2 June 1992)	Ghana (10 April 1990)	
	Burundi (18 February 1993)	Guinea (27 December 1990)	
	Cabo Verde[a] (8 May 1995)	Guinea-Bissau (27 October 1995)	
	Cameroon (28 October 1991)	Kenya (19 October 1992)	
	Central African Republic (15 October 2001)	Lesotho (28 March 1995)	
	Chad (9 June 1995)	Liberia (16 September 2005)	
	Comoros (1 March 2000)	Libya (22 July 1996)	
	Congo (3 March 2004)	Madagascar (12 March 1991)	
	Côte d'Ivoire (25 November 1991)	Malawi (12 October 1995)	
	Democratic Republic of the Congo (28 October 2005)	Mali (31 October 1995)	
	Djibouti (22 February 2001)	Mauritania (1 July 1993)	
	Egypt (15 March 1991)	Mauritius (6 March 2001)	

Region	*Party to the 1988 Convention*	*Non-party to the 1988 Convention*
	Morocco (28 October 1992)	South Africa (14 December 1998)
	Mozambique (8 June 1998)	Sudan (19 November 1993)
	Namibia (6 March 2009)	Swaziland (8 October 1995)
	Niger (10 November 1992)	Togo (1 August 1990)
	Nigeria (1 November 1989)	Tunisia (20 September 1990)
	Rwanda (13 May 2002)	Uganda (20 August 1990)
	Sao Tome and Principe (20 June 1996)	United Republic of Tanzania (17 April 1996)
	Senegal (27 November 1989)	Zambia (28 May 1993)
	Seychelles (27 February 1992)	Zimbabwe (30 July 1993)
	Sierra Leone (6 June 1994)	
Regional total **54**	**51**	**3**
Americas	Antigua and Barbuda (5 April 1993)	Chile (13 March 1990)
	Argentina (10 June 1993)	Colombia (10 June 1994)
	Bahamas (30 January 1989)	Costa Rica (8 February 1991)
	Barbados (15 October 1992)	Cuba (12 June 1996)
	Belize (24 July 1996)	Dominica (30 June 1993)
	Bolivia (Plurinational State of) (20 August 1990)	Dominican Republic (21 September 1993)
	Brazil (17 July 1991)	Ecuador (23 March 1990)
	Canada (5 July 1990)	El Salvador (21 May 1993)

Region	*Party to the 1988 Convention*		*Non-party to the 1988 Convention*
	Grenada (10 December 1990)	Peru (16 January 1992)	
	Guatemala (28 February 1991)	Saint Kitts and Nevis (19 April 1995)	
	Guyana (19 March 1993)	Saint Lucia (21 August 1995)	
	Haiti (18 September 1995)	Saint Vincent and the Grenadines (17 May 1994)	
	Honduras (11 December 1991)	Suriname (28 October 1992)	
	Jamaica (29 December 1995)	Trinidad and Tobago (17 February 1995)	
	Mexico (11 April 1990)	United States of America (20 February 1990)	
	Nicaragua (4 May 1990)	Uruguay (10 March 1995)	
	Panama (13 January 1994)	Venezuela (Bolivarian Republic of) (16 July 1991)	
	Paraguay (23 August 1990)		
Regional total			
35	**35**		**0**
Asia	Afghanistan (14 February 1992)	Democratic People's Republic of Korea (19 March 2007)	State of Palestine
	Armenia (13 September 1993)	Georgia (8 January 1998)	Timor-Leste
	Azerbaijan (22 September 1993)	India (27 March 1990)	
	Bahrain (7 February 1990)	Indonesia (23 February 1999)	
	Bangladesh (11 October 1990)	Iran (Islamic Republic of) (7 December 1992)	
	Bhutan (27 August 1990)	Iraq (22 July 1998)	
	Brunei Darussalam (12 November 1993)	Israel (20 March 2002)	
	Cambodia (2 April 2005)	Japan (12 June 1992)	
	China (25 October 1989)		

Region	*Party to the 1988 Convention*	*Non-party to the 1988 Convention*
	Jordan (16 April 1990)	Qatar (4 May 1990)
	Kazakhstan (29 April 1997)	Republic of Korea (28 December 1998)
	Kuwait (3 November 2000)	Saudi Arabia (9 January 1992)
	Kyrgyzstan (7 October 1994)	Singapore (23 October 1997)
	Lao People's Democratic Republic (1 October 2004)	Sri Lanka (6 June 1991)
	Lebanon (11 March 1996)	Syrian Arab Republic (3 September 1991)
	Malaysia (11 May 1993)	Tajikistan (6 May 1996)
	Maldives (7 September 2000)	Thailand (3 May 2002)
	Mongolia (25 June 2003)	Turkey (2 April 1996)
	Myanmar (11 June 1991)	Turkmenistan (21 February 1996)
	Nepal (24 July 1991)	United Arab Emirates (12 April 1990)
	Oman (15 March 1991)	Uzbekistan (24 August 1995)
	Pakistan (25 October 1991)	Viet Nam (4 November 1997)
	Philippines (7 June 1996)	Yemen (25 March 1996)
Regional total		
47	**45**	**2**
Europe	Albania (27 July 2001)	Bosnia and Herzegovina (1 September 1993)
	Andorra (23 July 1999)	Bulgaria[b] (24 September 1992)
	Austria[b] (11 July 1997)	Croatia[b] (26 July 1993)
	Belarus (15 October 1990)	Cyprus[b] (25 May 1990)
	Belgium[b] (25 October 1995)	

Region	*Party to the 1988 Convention*	*Non-party to the 1988 Convention*
	Czech Republic[b] (30 December 1993)	Netherlands[b] (8 September 1993)
	Denmark[b] (19 December 1991)	Norway (14 November 1994)
	Estonia[b] (12 July 2000)	Poland[b] (26 May 1994)
	Finland[b] (15 February 1994)	Portugal[b] (3 December 1991)
	France[b] (31 December 1990)	Republic of Moldova (15 February 1995)
	Germany[b] (30 November 1993)	Romania[b] (21 January 1993)
	Greece[b] (28 January 1992)	Russian Federation (17 December 1990)
	Holy See (25 January 2012)	San Marino (10 October 2000)
	Hungary[b] (15 November 1996)	Serbia (3 January 1991)
	Iceland (2 September 1997)	Slovakia[b] (28 May 1993)
	Ireland[b] (3 September 1996)	Slovenia[b] (6 July 1992)
	Italy[b] (31 December 1990)	Spain[b] (13 August 1990)
	Latvia[b] (25 February 1994)	Sweden[b] (22 July 1991)
	Liechtenstein (9 March 2007)	Switzerland (14 September 2005)
	Lithuania[b] (8 June 1998)	The former Yugoslav Republic of Macedonia (13 October 1993)
	Luxembourg[b] (29 April 1992)	Ukraine (28 August 1991)
	Malta[b] (28 February 1996)	United Kingdom of Great Britain and Northern Ireland[b] (28 June 1991)
	Monaco (23 April 1991)	
	Montenegro (3 June 2006)	European Union[c] (31 December 1990)
Regional total		
46	**46**	**0**

Region	*Party to the 1988 Convention*		*Non-party to the 1988 Convention*
Oceania	Australia (16 November 1992)	New Zealand (16 December 1998)	Kiribati
			Palau
	Cook Islands (22 February 2005)	Niue (16 July 2012)	Papua New Guinea
	Fiji (25 March 1993)	Samoa (19 August 2005)	Solomon Islands
			Tuvalu
	Marshall Islands (5 November 2010)	Tonga (29 April 1996)	
	Micronesia (Federated States of) (6 July 2004)	Vanuatu (26 January 2006)	
	Nauru (12 July 2012)		
Regional total			
16	**11**		**5**
World total			
198	**188**		**10**

[a] Since 25 October 2013, "Cabo Verde" has replaced "Cape Verde" as the short name used in the United Nations.
[b] State member of the European Union.
[c] Extent of competence: article 12.

Annex II

Annual legitimate requirements for ephedrine, pseudoephedrine, 3,4-methylenedioxyphenyl-2-propanone and 1-phenyl-2-propanone, substances frequently used in the manufacture of amphetamine-type stimulants

1. In its resolution 49/3, entitled "Strengthening systems for the control of precursor chemicals used in the manufacture of synthetic drugs", the Commission on Narcotic Drugs:

(a) Requested Member States to provide to the International Narcotics Control Board annual estimates of their legitimate requirements for 3,4-methylenedioxyphenyl-2-propanone (3,4-MDP-2-P), pseudoephedrine, ephedrine and 1-phenyl-2-propanone (P-2-P) and, to the extent possible, estimated requirements for imports of preparations containing those substances that could be easily used or recovered by readily applicable means;

(b) Requested the Board to provide those estimates to Member States in such a manner as to ensure that such information was used only for drug control purposes;

(c) Invited Member States to report to the Board on the feasibility and usefulness of preparing, reporting and using estimates of legitimate requirements for the precursor chemicals and preparations referred to above in preventing diversion.

2. Pursuant to that resolution, the Board formally invited Governments to prepare estimates of their legitimate requirements for those substances. Those estimates, as reported by Governments, were published, for the first time, in March 2007.

3. The table below reflects the latest data reported by Governments on those four precursor chemicals (and their preparations, as relevant). It is expected that those data will provide the competent authorities of exporting countries with at least an indication of the legitimate requirements of importing countries, thus preventing diversion attempts. Governments are invited to review their requirements as published, amend them as necessary and inform the Board of any required change. The data are current as at 1 November 2013; for updates, see www.incb.org/documents/PRECURSORS/ANNUAL-LICIT-REQUIREMENTS/INCB_ALR_WEB.pdf.

Annual legitimate requirements as reported by Governments for imports of ephedrine, pseudoephedrine, 3,4-methylenedioxyphenyl-2-propanone, 1-phenyl-2-propanone and their preparations, as at 1 November 2013

(Kilograms)

Country or territory	*Ephedrine*	*Ephedrine preparations*	*Pseudoephedrine*	*Pseudoephedrine preparations*	*3,4-MDP-2-P*[a]	*P-2-P*[b]
Afghanistan	100	0	6 000	0	0	0
Albania	3	0	0	0	0	0
Algeria	1		17 000		0	0
Argentina	23		11 356		0	0
Armenia	0	0	0	0	0	0
Ascension Island	0	0	0	0	0	0
Australia	5	10	6 000	1 450	1	1
Austria	126	214	2	1	1	1
Azerbaijan	20		10		0	0
Bahrain	0	0			0	
Bangladesh	200		49 021		0[c]	
Barbados	250		160		0[c]	
Belarus	0	25	25	20	0	0
Belgium	300	200	11 000	8 000	5	1
Belize			P	P	0[c]	
Benin	2		8	10	0[c]	
Bhutan	0	0	0	0	0	0
Bolivia (Plurinational State of)	41	1	3 316	2 983	0	0
Bosnia and Herzegovina	11	0	1 001	0	0	0
Botswana	300				0[c]	
Brazil	700[d]		20 000[d]		0	1
Brunei Darussalam	0	2	0	181	0	0
Bulgaria	0	400	0	0	0	0
Cambodia	200	50	300	900	0[c]	
Cameroon	25				0[c]	
Canada	3 300	5	42 000		0	0
Chile	63	200	8 500	950	0	0
China	110 000		270 000		0[c]	
Hong Kong SAR of China	5 500	0	17 480	0	0	1
Macao SAR of China	1	10	1	159	0	0
Christmas Island	0	0	0	1	0	0
Cocos (Keeling) Islands	0	0	0	0	0	0
Colombia	0[e]	0[f]	3 194[e]	P	0	0
Cook Islands	0	0	0	1	0	0
Costa Rica	0	0	523	39	0	0
Côte d'Ivoire	30	1	25	250	0	0
Croatia	2		1		0	1
Cuba	200			6	0[c]	
Curaçao	0		0		0	0

Country or territory	*Ephedrine*	*Ephedrine preparations*	*Pseudoephedrine*	*Pseudoephedrine preparations*	*3,4-MDP-2-P*[a]	*P-2-P*[b]
Cyprus		0	500		0[c]	
Czech Republic	600	10	1 600	800	0	1
Democratic People's Republic of Korea	1 500	0	0	0	5	0
Democratic Republic of the Congo	300	10	720	900	0[c]	
Denmark					0	0
Dominican Republic	75	5	230	250	0	0
Ecuador	25	5	1 000	3 000	0	0
Egypt	6 000	0	60 000	2 500	0	0
El Salvador	P(6)[g]	P(2)[g]	P	P	0	0
Eritrea	0	0	0	0	0	0
Estonia	4	1		350	0[c]	
Falkland Islands (Malvinas)		1		1	0[c]	
Faroe Islands	0	0	0	0	0	0
Finland	6	100		1 000	0[c]	1
France	5 000	10	20 000	500	0	0
Gambia	0	0	0	0	0	0
Georgia	3	25	2	30	0[c]	
Germany	1 000		8 000		1	8
Ghana	4 500	300	3 000	200	0	0
Greece	25		1 450		0	0
Greenland	0	0	0	0	0	0
Guatemala	0		P	P	0	0
Guinea	36				0[c]	
Guinea-Bissau	0	0	0	0	0	0
Guyana	120	50	120	30	0	0
Haiti	200	1	350		0	0
Honduras	P	P(1)[f]	P	P	0	0
Hungary	650		1		0	800
Iceland	1		1		0[c]	
India	1 023	87 467	300 507	383	0	0
Indonesia	8 500		50 000	805	0[c]	
Iran (Islamic Republic of)	50	1	55 000	10	6	51
Iraq	3 000	100	14 000	10 000	0	P[h]
Ireland	1	2	1	656	0	0
Israel	1	28	1	2 505	0[c]	
Italy	600	0	1 000	0	0	300
Jamaica			300	300	0	0
Japan	1 000		12 000		0[c]	
Jordan	200		15 000		0[c]	P
Kazakhstan	0		0		0	0
Kenya	2 500		3 000		0[c]	
Kyrgyzstan	0		20	50	0	0

Country or territory	*Ephedrine*	*Ephedrine preparations*	*Pseudoephedrine*	*Pseudoephedrine preparations*	*3,4-MDP-2-P*[a]	*P-2-P*[b]
Lao People's Democratic Republic	0	0	220	50	0	0
Latvia	25	27	41	383	0	0
Lebanon	0	4	220	300	0	0
Lithuania	1	2	1	600	1	1
Luxembourg	1	0	0	0	0	0
Madagascar	702	180	150		0[c]	
Malawi	1 000				0[c]	
Malaysia	211	21	8 000	6 000	0	0
Maldives	0	0	0	0	0	0
Malta		220	220		0	0
Mauritius	0	0	0	0	0	0
Mexico	P(38)[g]	P[g]	P	P	0	0
Monaco	0	0	0	0	0	0
Mongolia	3				0[c]	
Montenegro	0	2	0	50	0	0
Montserrat	0	1	0	1	0	0
Morocco	41	0	2 245	0	0	0
Mozambique	3				0[c]	
Myanmar	2	0	0	0	0	0
Namibia	0	0	0	0	0	0
Netherlands		0		0	0	0
New Zealand	50		800		0	3
Nicaragua	P[i]	P[i]	P	P	0[c]	
Nigeria	9 650	2 000	5 823	15 000	0	
Norfolk Island	0	0	0	0	0	0
Norway	225	0	1	0	0	0
Pakistan	22 000		48 000		0[c]	
Panama	5	2	400	600	0[c]	
Papua New Guinea	1		200		0	0
Paraguay	0	0	2 500	0	0	0
Peru	54		2 409	1 192	0[c]	
Philippines	120	0	60	0	0	0
Poland	135	0	4 150	0	1	3
Portugal			15		0[c]	
Qatar	0	0	0	80	0	0
Republic of Korea	23 316		62 901		1	1
Republic of Moldova	0	5	0	250	0	0
Romania	466		6 350		0	0
Russian Federation	1 500				0[c]	
Saint Helena	0	1	0	1	0	0
Saint Lucia	0	0	0	0	0	0
Sao Tome and Principe	0	0	0	0	0	0

Country or territory	*Ephedrine*	*Ephedrine preparations*	*Pseudoephedrine*	*Pseudoephedrine preparations*	*3,4-MDP-2-P*[a]	*P-2-P*[b]
Senegal	0	0	0	0	0	0
Serbia	26		1 265	0	0	1
Singapore	11 176	1	50 022	2 937	0	0
Slovakia	8	1	1	0	0	0
Slovenia	22		250		0	0
Solomon Islands	0	1	0	1	0	0
South Africa	15 000	0	10 444	0	0	0
Spain	255		6		0	98
Sri Lanka		0		0	0	0
Sweden	188	215	1	30	0	24
Switzerland	2 400		70 000		100	20
Syrian Arab Republic	1 000		50 000		0[c]	
Tajikistan	38				0[c]	
Thailand	53		101	0	0[c]	
Trinidad and Tobago					0[c]	0
Tristan da Cunha	0	0	0	0	0	0
Tunisia	1	25	3 500	0	0	0
Turkey	200	0	45 000	1 350	1	1
Uganda	150	35	2 500	400	0	0
Ukraine	235	109	0	1 408	0	0
United Arab Emirates	0		3 000	2 499	0	0
United Kingdom	64 448	1 011	25 460	1 683	8	1
United Republic of Tanzania	200	800	2 000	500	0[c]	
United States of America	16 300		278 000		0	62 769
Uruguay	1	0	100	10	0	0
Uzbekistan	1		15		0[c]	
Venezuela (Bolivarian Republic of)	1 000		3 000		0[c]	
Yemen	150		5 000		0[c]	
Zambia	5		10		0[c]	
Zimbabwe	100	1	150	0	0	0

Notes: The names of territories, special administrative regions etc. are in italics.

A blank field signifies that no requirement was indicated or that data were not submitted for the substance in question.

A zero (0) signifies that the country or territory currently has no licit requirement for the substance.

The letter "P" signifies that importation of the substance is prohibited.

Reported quantities of less than 1 kg have been rounded up and are reflected as 1 kg.

[a] 3,4-Methylenedioxyphenyl-2-propanone.

[b] 1-Phenyl-2-propanone.

[c] The Board is currently unaware of any legitimate need for the importation of this substance into the country.

[d] Including the licit requirements for pharmaceutical preparations containing the substance.

[e] The required amount of ephedrine is to be used for the manufacture of injectable ephedrine sulphate solution. The required amount of pseudoephedrine is to be used exclusively for the manufacture of medicines for export.

[f] In the form of injectable ephedrine sulphate solution.

[g] Imports of the substance and preparations containing the substance are prohibited, with the exception of the imports of injectable ephedrine preparations and ephedrine as a prime raw material for the manufacture of such ephedrine preparations. Pre-export notification is required for each individual import.

[h] Including products containing P-2-P.

[i] Imports of the substance and preparations containing the substance are prohibited, with the exception of the imports of injectable ephedrine preparations and ephedrine as a prime raw material for the manufacture of such ephedrine preparations. Such export requires an import permit.

Annex III

Substances in Table I and Table II of the 1988 Convention

Table I	*Table II*
Acetic anhydride	Acetone
N-Acetylanthranilic acid	Anthranilic acid
Ephedrine	Ethyl ether
Ergometrine	Hydrochloric acid[a]
Ergotamine	Methyl ethyl ketone
Isosafrole	Piperidine
Lysergic acid	Sulphuric acid[a]
3,4-Methylenedioxyphenyl-2-propanone	Toluene
Norephedrine	
Phenylacetic acid[b]	
1-Phenyl-2-propanone	
Piperonal	
Potassium permanganate	
Pseudoephedrine	
Safrole	
The salts of the substances listed in this Table whenever the existence of such salts is possible.	The salts of the substances listed in this Table whenever the existence of such salts is possible.

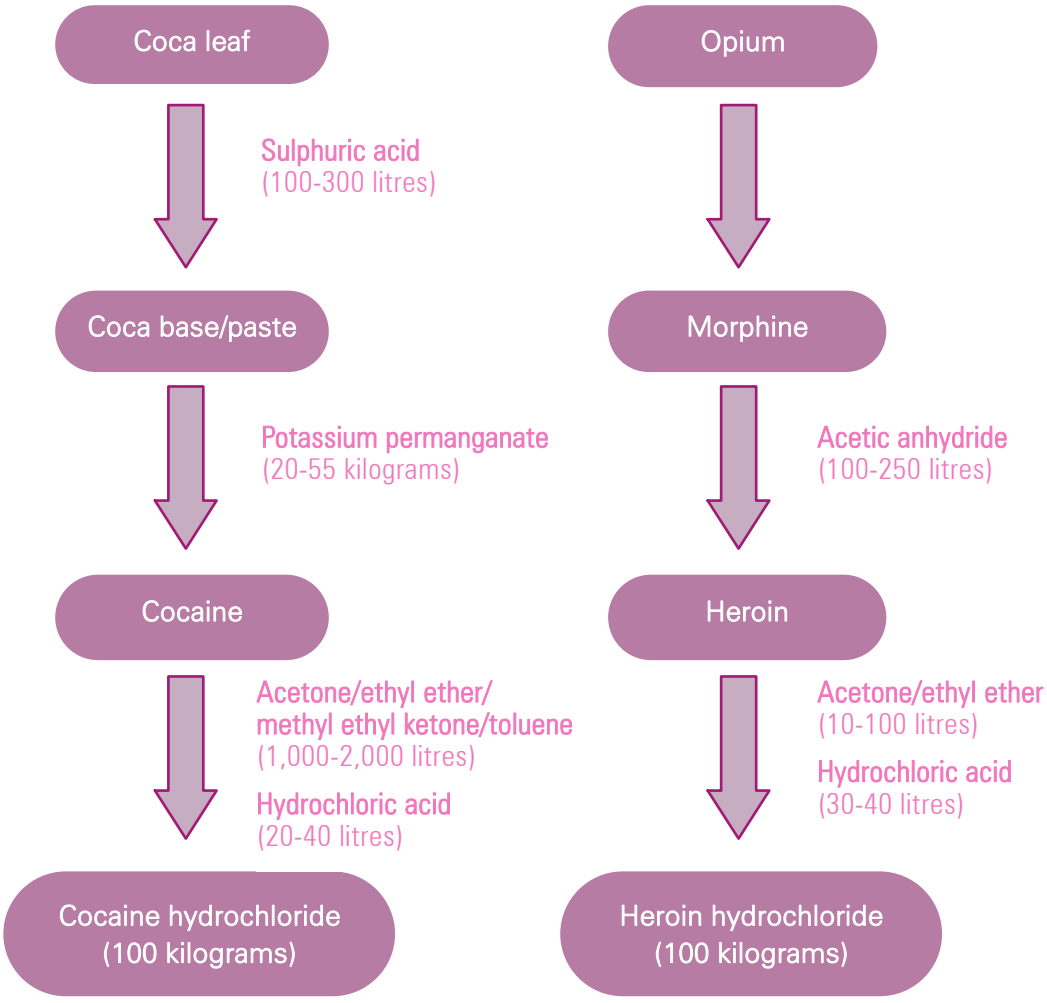
[a] The salts of hydrochloric acid and sulphuric acid are specifically excluded from Table II.
[b] Transferred from Table II to Table I, effective 17 January 2011.

Annex IV

Use of scheduled substances in the illicit manufacture of narcotic drugs and psychotropic substances

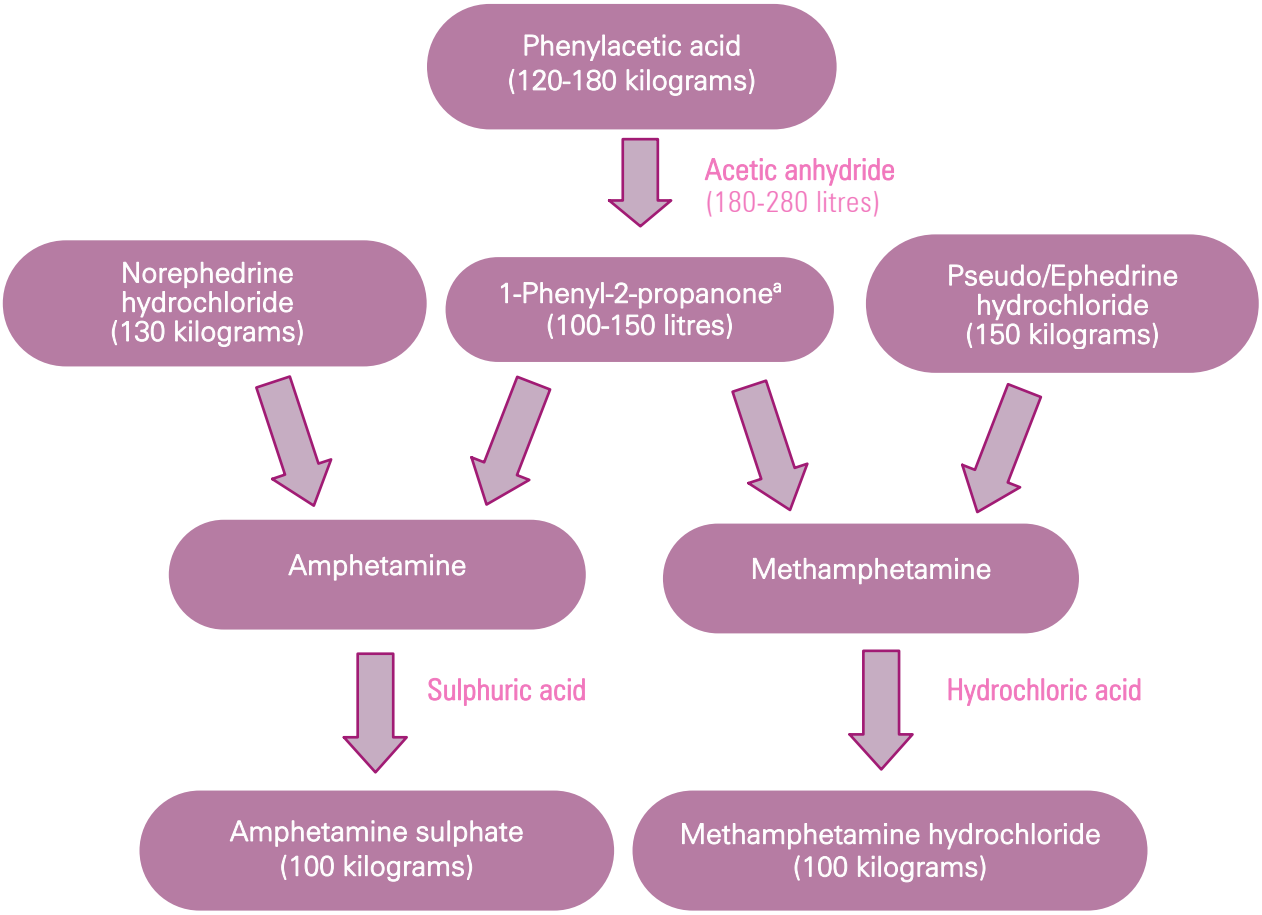
Figures A.I-A.IV below depict the use of scheduled substances in the illicit manufacture of narcotic drugs and psychotropic substances. The approximate quantities provided are based on common manufacturing methods. Other manufacturing methods using scheduled substances — or even non-scheduled substances instead of or in addition to scheduled substances — may also be encountered, depending on the geographical location.

Figure A.I. Illicit manufacture of cocaine and heroin: scheduled substances and the approximate quantities thereof required for the illicit manufacture of 100 kilograms of cocaine or heroin hydrochloride



Note: The extraction of cocaine from coca leaf and the purification of coca paste and the crude base products of cocaine and heroin require solvents, acids and bases. A wide range of such chemicals have been used at all stages of drug manufacture.

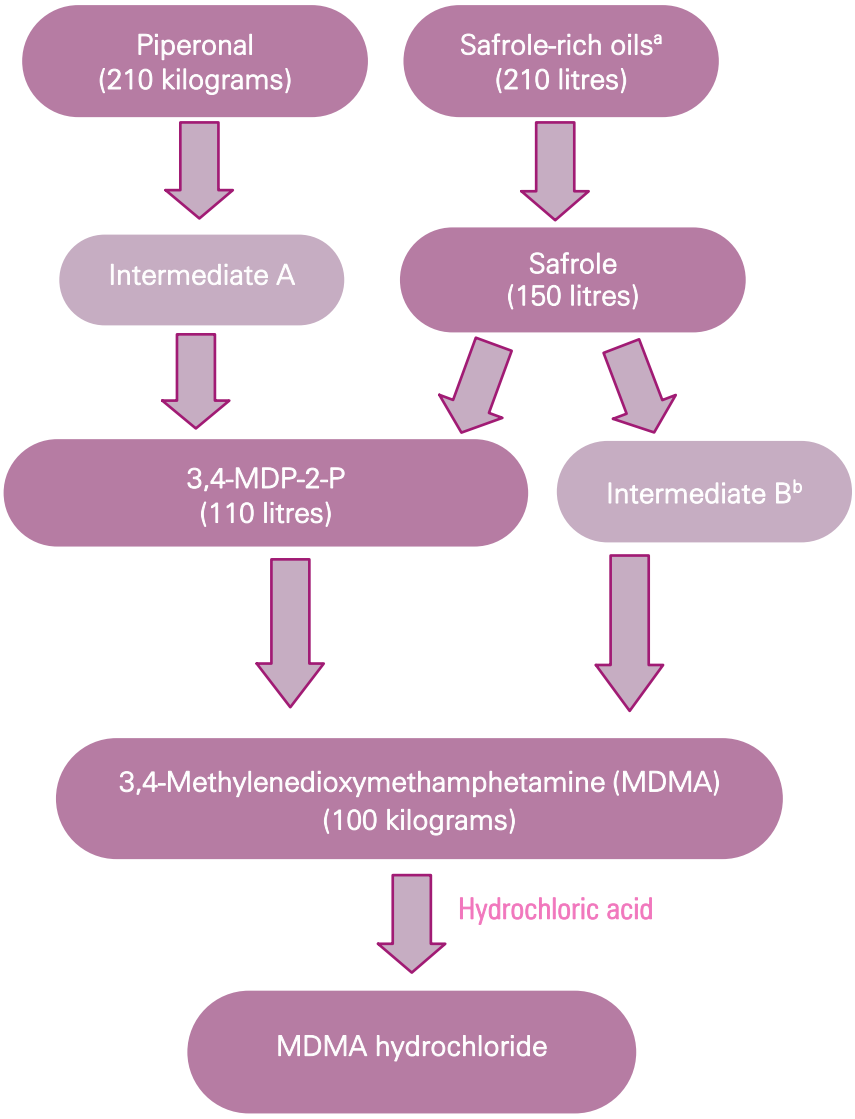
Figure A.II. Illicit manufacture of amphetamine and methamphetamine: scheduled substances and the approximate quantities thereof required for the illicit manufacture of 100 kilograms of amphetamine sulphate and methamphetamine hydrochloride



Note: Methcathinone, a less commonly encountered amphetamine-type stimulant, can be manufactured from pseudo/ephedrine hydrochloride, requiring the same approximate quantities as methamphetamine to yield 100 kilograms of hydrochloride salt.

[a] Methods based on 1-phenyl-2-propanone result in racemic *d,l*-meth/amphetamine while methods based on ephedrine, pseudoephedrine or norephedrine result in *d*-meth/amphetamine.

Figure A.III. Illicit manufacture of 3,4-methylenedioxymethamphetamine (MDMA) and related drugs: scheduled substances and the approximate quantities thereof required for the illicit manufacture of 100 kilograms of MDMA

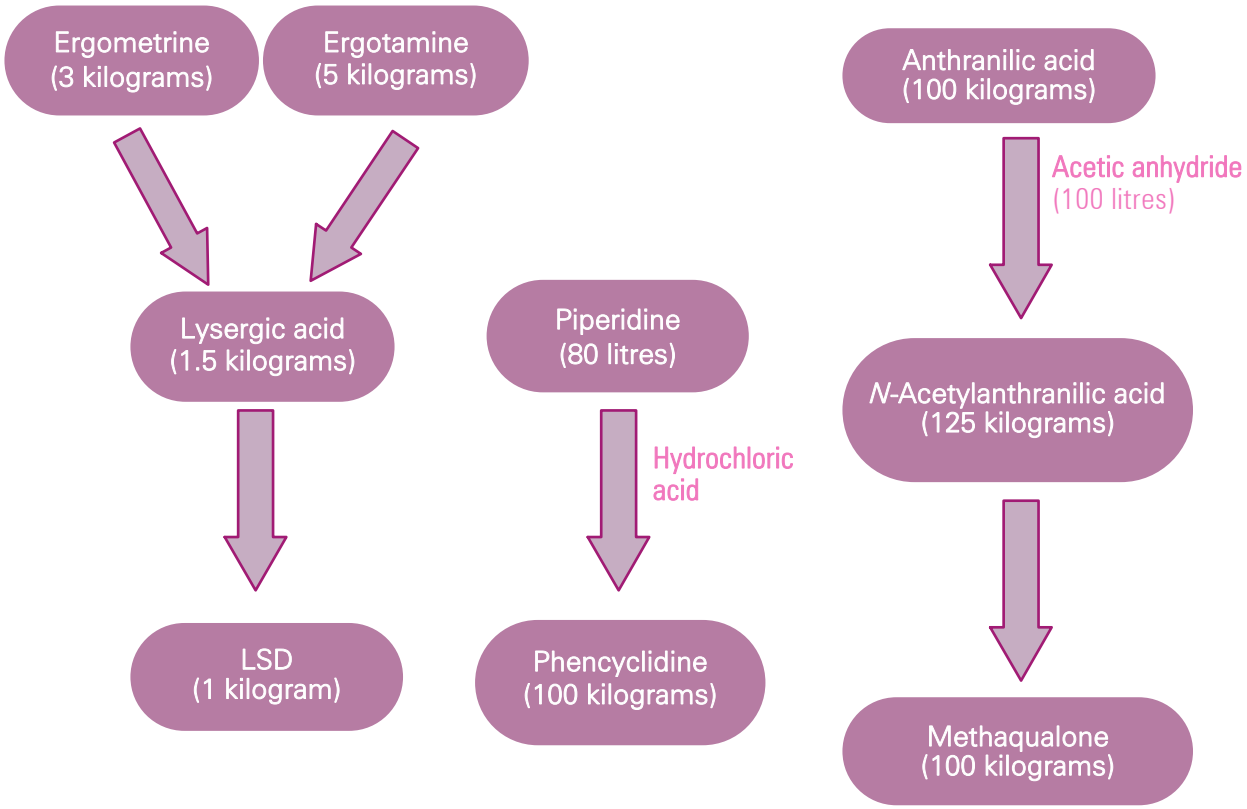


Note: Isosafrole, another precursor of MDMA under international control, is not included in this scheme, as it is not commonly encountered as a starting material; it is an intermediate in a modification of methods for manufacturing MDMA from safrole, requiring approximately 300 litres of safrole to manufacture 100 kilograms of MDMA.

[a] Assuming the safrole-rich oils have a safrole content of 75 per cent or higher.

[b] The manufacture of 100 kilograms of MDMA via intermediate B would require 200 litres of safrole.

Figure A.IV. Illicit manufacture of lysergic acid diethylamide (LSD), methaqualone and phencyclidine: scheduled substances and the approximate quantities thereof required for the illicit manufacture of 1 kilogram of LSD and 100 kilograms of methaqualone and phencyclidine



Annex V

Treaty provisions for the control of substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances

1. Article 2, paragraph 8, of the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol[a] provides as follows:

> The Parties shall use their best endeavours to apply to substances which do not fall under this Convention, but which may be used in the illicit manufacture of drugs, such measures of supervision as may be practicable.

2. Article 2, paragraph 9, of the Convention on Psychotropic Substances of 1971[b] provides as follows:

> The Parties shall use their best endeavours to apply to substances which do not fall under this Convention, but which may be used in the illicit manufacture of psychotropic substances, such measures of supervision as may be practicable.

3. Article 12 of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988[c] contains provisions for the following:

(a) General obligation for parties to take measures to prevent diversion of the substances in Table I and Table II of the 1988 Convention and to cooperate with each other to that end (para. 1);

(b) Mechanism for amending the scope of control (paras. 2-7);

(c) Requirement to take appropriate measures to monitor manufacture and distribution, to which end parties may control persons and enterprises, control establishments and premises under licence, require permits for such operations and prevent accumulation of substances in Tables I and II (para. 8);

(d) Obligation to monitor international trade in order to identify suspicious transactions, to provide for seizures, to notify the authorities of the parties concerned in case of suspicious transactions, to require proper labelling and documentation and to ensure maintenance of such documents for at least two years (para. 9);

(e) Mechanism for advance notice of exports of substances in Table I, upon request (para. 10);

(f) Confidentiality of information (para. 11);

(g) Reporting by parties to the International Narcotics Control Board (para. 12);

(h) Report of the Board to the Commission on Narcotic Drugs (para. 13);

(i) Non-applicability of the provisions of article 12 to certain preparations (para. 14).

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[a] United Nations, *Treaty Series*, vol. 976, No. 14152.
[b] Ibid., vol. 1019, No. 14956.
[c] Ibid., vol. 1582, No. 27627.

Annex VI

Regional groupings

Reference is made throughout the present report to various geographical regions, which are defined as follows:

Africa: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde,[a] Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia and Zimbabwe;

Central America and the Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Trinidad and Tobago;

North America: Canada, Mexico and United States of America;

South America: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela (Bolivarian Republic of);

East and South-East Asia: Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste and Viet Nam;

South Asia: Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka;

West Asia: Afghanistan, Armenia, Azerbaijan, Bahrain, Georgia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan and Yemen;

Eastern Europe: Belarus, Republic of Moldova, Russian Federation and Ukraine;

South-Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Romania, Serbia and the former Yugoslav Republic of Macedonia;

Western and Central Europe: Andorra, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Holy See, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom of Great Britain and Northern Ireland;

Oceania: Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

[a] Since 25 October 2013, "Cabo Verde" has replaced "Cape Verde" as the short name used in the United Nations.

Annex VII

Submission of information by Governments pursuant to article 12 of the 1988 Convention (form D) for the years 2008-2012

Notes: The names of non-metropolitan territories and special administrative regions are in italics.

A blank signifies that form D was not received.

X signifies that a completed form D (or equivalent report) was submitted, including nil returns.

Entries for parties to the 1988 Convention (and for the years that they have been parties) are shaded.

Country or territory	*2008*	*2009*	*2010*	*2011*	*2012*
Afghanistan	X	X	X	X	X
Albania	X	X	X	X	X
Algeria	X	X	X	X	X
Andorra	X	X	X	X	X
Angola	X				
Anguilla[a]					
Antigua and Barbuda					
Argentina	X	X	X	X	X
Armenia	X	X	X	X	X
Aruba[a]					
Ascension Island	X	X	X	X	X
Australia	X	X	X	X	X
Austria[b]	X	X	X	X	X
Azerbaijan	X	X	X	X	X
Bahamas					
Bahrain		X	X		
Bangladesh	X	X	X	X	
Barbados					
Belarus	X	X	X	X	X
Belgium[b]	X	X	X	X	X
Belize	X	X			
Benin	X	X	X	X	X
Bermuda[a]	X				
Bhutan			X	X	X
Bolivia (Plurinational State of)	X	X	X	X	X
Bosnia and Herzegovina	X	X	X	X	X
Botswana	X				
Brazil	X	X	X	X	X
British Virgin Islands[a]					
Brunei Darussalam	X	X	X	X	X
Bulgaria	X	X	X	X	X
Burkina Faso				X	
Burundi					
Cambodia		X	X	X	X
Cameroon	X	X	X	X	X
Canada	X	X	X	X	X
Cape Verde	X				
Cayman Islands[a]					X
Central African Republic	X	X			
Chad		X			

Country or territory	*2008*	*2009*	*2010*	*2011*	*2012*
Chile	X	X	X	X	X
China	X	X	X	X	X
Hong Kong SAR of China	X	X	X		X
Macao SAR of China	X	X	X		X
Christmas Island[a]	X	X	X	X	
Cocos (Keeling) Islands[a]	X	X	X	X	
Colombia	X	X	X	X	X
Comoros					
Congo	X				
Cook Islands	X		X	X	
Costa Rica	X	X	X	X	X
Côte d'Ivoire	X	X	X	X	X
Croatia[b]	X	X	X	X	X
Cuba	X	X	X	X	
Curaçao[c]			X	X	X
Cyprus[b]	X	X	X	X	X
Czech Republic[b]	X	X	X	X	X
Democratic People's Republic of Korea	X	X	X	X	X
Democratic Republic of the Congo	X	X	X	X	X
Denmark[b]	X	X	X	X	X
Djibouti					
Dominica					
Dominican Republic	X	X	X		
Ecuador	X	X	X	X	X
Egypt	X	X	X	X	X
El Salvador	X	X	X	X	X
Equatorial Guinea					
Eritrea		X	X	X	X
Estonia[b]	X	X	X	X	X
Ethiopia	X	X		X	X
Falkland Islands (Malvinas)	X				
Fiji				X	X
Finland[b]	X	X	X	X	X
France[b]	X	X	X	X	X
French Polynesia[a]					
Gabon					
Gambia			X	X	
Georgia	X	X	X	X	X
Germany[b]	X	X	X	X	X
Ghana		X	X	X	X
Gibraltar					
Greece[b]	X	X	X	X	X
Grenada					
Guatemala	X	X	X	X	X
Guinea					
Guinea-Bissau	X				
Guyana	X	X	X		
Haiti	X	X	X	X	
Holy See					
Honduras				X	X

Country or territory	*2008*	*2009*	*2010*	*2011*	*2012*
Hungary[b]	X	X	X	X	X
Iceland	X	X	X	X	X
India	X	X	X	X	
Indonesia	X		X	X	X
Iran (Islamic Republic of)	X	X	X		
Iraq	X	X	X	X	
Ireland[b]	X	X	X	X	X
Israel	X	X	X	X	X
Italy[b]	X	X	X	X	X
Jamaica	X	X	X		
Japan	X	X	X	X	X
Jordan	X	X	X	X	X
Kazakhstan		X	X	X	X
Kenya	X	X	X		
Kiribati					
Kuwait					
Kyrgyzstan	X	X	X	X	X
Lao People's Democratic Republic		X	X	X	X
Latvia[b]	X	X	X	X	X
Lebanon	X	X	X	X	X
Lesotho					
Liberia					
Libya					
Liechtenstein					
Lithuania[b]	X	X	X	X	X
Luxembourg[b]	X	X	X	X	X
Madagascar	X	X	X		
Malawi	X	X			
Malaysia	X	X	X	X	X
Maldives	X	X	X	X	X
Mali					
Malta[b]	X	X	X	X	X
Marshall Islands					
Mauritania	X	X			
Mauritius	X		X	X	X
Mexico	X	X	X	X	X
Micronesia (Federated States of)					
Monaco					
Mongolia					X
Montenegro	X	X	X	X	X
Montserrat[a]			X		X
Morocco	X	X	X	X	X
Mozambique	X		X		
Myanmar	X	X	X	X	X
Namibia			X		
Nauru					
Nepal					
Netherlands[b]	X	X	X	X	X
New Caledonia[a]		X	X	X	X
New Zealand	X	X	X	X	X

Country or territory	*2008*	*2009*	*2010*	*2011*	*2012*
Nicaragua	X	X	X	X	X
Niger					
Nigeria				X	X
Niue					
Norfolk Island[a,d]	X	X	X	X	
Norway	X	X	X		X
Oman	X	X			
Pakistan	X	X	X	X	X
Palau					
Panama	X	X	X	X	X
Papua New Guinea					
Paraguay	X	X	X	X	
Peru	X	X	X	X	X
Philippines	X	X	X	X	X
Poland[b]	X	X	X	X	X
Portugal[b]	X	X	X	X	X
Qatar				X	
Republic of Korea	X	X	X	X	X
Republic of Moldova	X	X	X	X	X
Romania[b]	X	X	X	X	X
Russian Federation	X	X	X	X	X
Rwanda	X				
Saint Helena	X	X		X	
Saint Kitts and Nevis					
Saint Lucia	X	X	X	X	X
Saint Vincent and the Grenadines					X
Samoa	X	X	X	X	X
San Marino					
Sao Tome and Principe	X	X		X	
Saudi Arabia	X	X	X	X	X
Senegal	X	X	X		
Serbia	X	X	X	X	X
Seychelles	X			X	X
Sierra Leone					
Singapore	X	X	X	X	X
Sint Maarten[c]					
Slovakia[b]	X	X	X	X	X
Slovenia[b]	X	X	X	X	X
Solomon Islands					
Somalia					
South Africa	X	X			
South Sudan[e]					
Spain[b]	X	X	X	X	X
Sri Lanka	X	X	X	X	X
Sudan					
Suriname					
Swaziland					
Sweden[b]	X	X	X	X	X
Switzerland	X	X	X	X	X
Syrian Arab Republic	X	X	X		X

Country or territory	*2008*	*2009*	*2010*	*2011*	*2012*
Tajikistan		X	X	X	X
Thailand	X	X	X	X	X
The former Yugoslav Republic of Macedonia			X		
Timor-Leste					
Togo					X
Tonga					
Trinidad and Tobago	X	X	X	X	X
Tristan da Cunha	X				
Tunisia	X	X	X	X	X
Turkey	X	X	X	X	X
Turkmenistan	X	X		X	X
Turks and Caicos Islands[a]					
Tuvalu				X	
Uganda	X	X	X	X	X
Ukraine	X	X	X	X	X
United Arab Emirates	X	X	X	X	X
United Kingdom[b]	X	X	X	X	X
United Republic of Tanzania		X	X		X
United States of America	X	X	X	X	X
Uruguay	X	X	X	X	X
Uzbekistan	X	X	X	X	X
Vanuatu				X	
Venezuela (Bolivarian Republic of)	X	X	X	X	X
Viet Nam	X	X	X	X	
Wallis and Futuna Islands[a]					
Yemen	X	X	X	X	X
Zambia					
Zimbabwe		X	X		
Total number of Governments that submitted form D[f]	**142**	**139**	**138**	**133**	**123**
Total number of Governments requested to provide information	**213**	**213**	**213**	**213**	**213**

[a] Territorial application of the 1988 Convention has been confirmed by the authorities concerned.
[b] State member of the European Union.
[c] The Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent entities, Curaçao and Sint Maarten. The authorities of Curaçao submitted form D for 2010 for the former Netherlands Antilles.
[d] Information was provided by Australia.
[e] By its resolution 65/308 of 14 July 2011, the General Assembly decided to admit South Sudan to membership in the United Nations.
[f] In addition, the European Commission submitted form D for the years 2008-2012.

Annex VIII

Seizures of substances in Table I and Table II of the 1988 Convention, as reported to the International Narcotics Control Board, 2008-2012

1. Tables A.1 and A.2 below show information on seizures of the substances included in Tables I and II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, furnished to the International Narcotics Control Board by Governments in accordance with article 12, paragraph 12, of the Convention.

2. The tables include data on domestic seizures and on seizures effected at points of entry or exit. They do not include reported seizures of substances where it is known that the substances were not intended for the illicit manufacture of drugs (for example, seizures effected on administrative grounds or seizures of ephedrine/pseudoephedrine preparations to be used as stimulants). Stopped shipments are also not included. The information may include data submitted by Governments through means other than form D; in such cases, the sources are duly noted.

Units of measure and conversion factors

3. Units of measure are indicated for every substance. As fractions of full units are not listed in the tables, figures are rounded as necessary.

4. For a variety of reasons, individual quantities of some substances seized are reported to the Board using different units; for instance, one country may report seizures of acetic anhydride in litres, another in kilograms.

5. To enable a proper comparison of collected information, it is important that all data be collated in a standard format. To simplify the necessary standardization process, figures are given in grams or kilograms where the substance is a solid and in litres where the substance (or its most common form) is a liquid.

6. Seizures of solids reported to the Board in litres have not been converted into kilograms and are not included in the tables, as the actual quantity of substance in solution is not known.

7. For seizures of liquids, quantities reported in kilograms have been converted into litres using the following factors:

Substance	*Conversion factor (kilograms to litres)*[a]
Acetic anhydride	0.926
Acetone	1.269
Ethyl ether	1.408
Hydrochloric acid (39.1% solution)	0.833
Isosafrole	0.892
3,4-Methylenedioxyphenyl-2-propanone	0.833
Methyl ethyl ketone	1.242
1-Phenyl-2-propanone	0.985
Piperidine	1.160
Safrole	0.912
Sulphuric acid (concentrated solution)	0.543
Toluene	1.155

[a] Derived from density (*The Merck Index* (Rahway, New Jersey, Merck, 1989)).

8. As an example, to convert 1,000 kilograms of methyl ethyl ketone into litres, multiply by 1.242, i.e. 1,000 × 1.242 = 1,242 litres.

9. For the conversion of gallons to litres it has been assumed that in Colombia the United States gallon is used, with 3.785 litres to the gallon, and in Myanmar the imperial gallon is used, with 4.546 litres to the gallon.

10. If reported quantities have been converted, the converted figures are listed in the tables in italics.

11. The names of territories appear in italics.

12. A dash (–) signifies that the report did not include data on seizures of the particular substance in the reporting year.

13. A degree symbol (°) signifies less than the smallest unit of measurement shown for that substance (for example, less than 1 kilogram).

14. Discrepancies may exist between the regional total seizure figures and the world total figures because the actual quantities seized were rounded to whole numbers.

Table A.1. Seizures of substances in Table I of the 1988 Convention, as reported to the International Narcotics Control Board, 2008-2012

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Africa																	
Côte d'Ivoire																	
2008	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	[a]	–
2012	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
Nigeria																	
2009	–	–	4 200	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	56	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	461	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Regional total																	
2008	**0**	**0**	**0**	[a]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009	**0**	**0**	**4 200**	[a]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2011	**0**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	[a]	**0**
2012	**0**	**0**	**461**	[a]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Central America and the Caribbean																	
Belize																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	601	–
Costa Rica																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–
2009	–	–	–	–	–	–	–	–	–	–	30	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Dominican Republic																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14	49[a]	–
2009	–	–	–	–	–	–	–	–	–	–	–	250	–	–	4	238[a]	–
El Salvador																	
2008	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–	15	–
2010	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	[o]	–
Guatemala																	
2009	–	–	7	–	–	–	–	–	–	–	–	–	–	–	12 946	[a]	–
2010	–	–	15	–	–	–	–	–	–	–	–	–	–	–	989	[a]	–
2011	512	–	100	–	–	–	–	–	–	–	–	1	–	–	95	–	–
Honduras																	
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	41	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	–	22 565	–	–
Nicaragua																	
2012	–	–	–	–	–	–	–	–	13	–	–	52	–	–	–	–	–
Panama																	
2009	–	–	[o]	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Regional total																	
2008	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**665**	**0**
2009	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**250**	**0**	**0**	**12 950**	**238**	**0**
2010	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1 003**	**0**	**0**
2011	**512**	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**95**	**42**	**0**
2012	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**52**	**0**	**0**	**22 565**	**0**	**0**

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
North America																	
Canada																	
2008	–	–	110	2[a]	[o]	300	–	3	2 823	–	230	–	–	–	14	41	21
2009	–	–	357	–	–	–	–	–	–	–	–	–	–	–	154	–	80
2010	–	–	676	–	–	–	–	–	–	5 924	–	–	–	16	[o]	–	–
2011	–	–	13	–	–	–	–	7	122	–	–	–	–	1	11	–	65
2012	–	–	686	–	–	20	–	1	–	526	[o]	–	–	5	309	–	2 025
Mexico																	
2008	4	–	3 293	–	–	–	–	–	–	–	–	–	–	–	2 874	[a]	–
2009	440	–	879	–	–	–	–	–	–	119	–	30 654	4 289	–	2 681	–	–
2010	4 821	–	5 337	–	2 000	–	–	–	–	14 203	25	56 080	–	–	3 912	–	–
2011	76 625	–	2	–	–	–	–	–	–	2 184	–	14 370	[o]	–	313	–	2 371
2012	35 040	–	–	–	–	–	1 630	–	–	4 699	–	1 188	3	35	62	–	–
United States of America																	
2008	39	5	5 163	[a]	–	–	–	–	–	3	[c]	1	–	20	3 033	[a]	[c]
2009	5	–	14 107	[a]	–	–	–	110	–	38	1	[c]	–	13	6 209	[a]	20
2010	61 647	–	6 450	[a]	–	620	[c]	–	–	114	23	173 578	–	24	11 011	[a]	1
2011	24 713	–	17 520[g]	33 566[g]	–	820	–	3	–	200	[c]	997 330	–	224	2 502	[a]	2 281
2012	859	–	270	–	–	–	–	3	–	–	–	314	–	152	241	–	1
Regional total																	
2008	**43**	**5**	**8 566**	**2**	**0**	**300**	**0**	**3**	**2 823**	**3**	**230**	**1**	**0**	**20**	**5 921**	**41**	**21**
2009	**445**	**0**	**15 342**	**0**	**0**	**0**	**0**	**110**	**0**	**157**	**1**	**30 654**	**4 289**	**13**	**9 044**	[a]	**100**
2010	**66 468**	**0**	**12 464**	**0**	**2 000**	**620**	**0**	**0**	**0**	**20 241**	**48**	**229 658**	**0**	**40**	**14 923**	[a]	**1**
2011	**101 339**	**0**	**17 535**	**33 566**	**0**	**820**	**0**	**9**	**122**	**2 384**	**0**	**1 011 700**	**0**	**225**	**2 827**	[a]	**4 717**
2012	**35 900**	**0**	**956**	**0**	**0**	**1 650**	**0**	**3**	**0**	**5 225**	**0**	**1 502**	**3**	**192**	**612**	**0**	**2 026**

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
South America																	
Argentina																	
2008	–	–	4 316	26[a]	–	–	–	–	–	–	–	–	–	132	–	–	–
2009	–	–	10 440	–	–	–	–	–	–	–	–	–	–	52	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	12	250	–	–
2012	–	–	9	–	–	–	–	–	–	–	–	–	–	2	–	–	–
Bolivia (Plurinational State of)																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	1 228[c]	–	–	–
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	2 097[c]	–	–	–
2011	–	–	°	–	–	–	–	–	–	–	–	–	–	9 914	°	°	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	964	–	–	–
Brazil																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	206	–	–	–
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	4	47	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	217	–	–	–
2011	53	–	–	–	–	–	–	–	–	–	–	–	–	232	–	41	–
2012	1 878	–	–	–	–	–	–	–	–	–	–	–	–	278	–	–	–
Chile																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	12	–	–	–
2009	–	–	1 187	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Colombia																	
2008	30	–	–	–	–	–	–	–	–	–	–	–	–	41 630	–	–	–
2009	8	–	1	–	–	–	–	–	–	–	–	–	–	22 793	220	–	–
2010	1 006	–	–	–	–	–	–	–	–	–	–	–	–	26 442	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	24 044	–	–	–
2012	11	–	–	–	–	–	–	–	–	–	–	–	–	55 677	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Ecuador																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	775	–	–	–
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	480	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	589	–	–	–
2011	–	–	–	–	–	–	–	–	–	220	–	–	–	233	–	–	–
Peru																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	516	–	–	–
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	1 774	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	517	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	1 997	–	–	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	3 093	–	–	–
Venezuela (Bolivarian Republic of)																	
2009	–	–	336	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	–	–	–	78 360	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	–	16	–	–	–	–	–	–	–	–	–	100	–	3	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	2 447	–	–	–
Regional total																	
2008	**30**	**0**	**4 316**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**44 499**	**0**	**0**	**0**
2009	**8**	**0**	**11 963**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27 199**	**267**	**0**	**0**
2010	**1 006**	**0**	**0**	**0**	**0**	**78 360**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27 766**	**0**	**0**	**0**
2011	**53**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**220**	**0**	**0**	**0**	**36 562**	**250**	**44**	**0**
2012	**1 890**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**62 462**	**0**	**0**	**0**
East and South-East Asia																	
Cambodia																	
2011	–	–	3	–	–	–	–	–	–	–	–	–	–	–	6	–	2 058

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
China[d]																	
2008	5 186	–	6 700	–	–	–	–	–	–	2 857	–	–	–	–	1 100	–	–
2009	926	–	28 120	–	–	–	–	–	–	2 275	–	8 570	10	55	380	–	–
2010	16 346	–	4 310	–	–	–	–	–	–	–	–	4 670	–	–	1 270	–	–
2011	16 946	–	4 210	–	–	–	–	–	–	–	–	4 520	–	–	1 170	–	–
2012	17 131	–	3 210	2 428	–	–	–	–	–	259	–	30	–	29 927	–	902	–
Hong Kong SAR of China																	
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	7	–
2010	–	–	–	–	–	–	–	–	–	660	–	–	–	–	°	–	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	–	33	[a]	–
Macao SAR of China																	
2012	–	–	–	167	–	–	–	–	–	–	–	–	–	–	–	–	–
Indonesia																	
2008	–	–	111	°	–	–	–	–	–	–	–	–	–	2	–	–	–
2011	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	40	–
2012	–	–	4	[a]	–	–	–	–	–	–	4	–	–	–	–	–	–
Japan																	
2009	8 424	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Lao People's Democratic Republic																	
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4 665[a]	–
Malaysia																	
2010	–	13	–	–	–	–	–	–	–	–	–	–	–	–	5	–	–
2011	–	–	109	–	–	–	–	–	–	–	–	–	–	–	903	–	7 675
2012	–	–	–	91	–	–	–	–	–	–	–	–	–	–	5	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Myanmar																	
2008	1 142	–	751	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	700	–	–	1 646	–	–	–	–	–	–	–	–	–	–	3 272	–	–
2010	14	–	–	33	–	–	–	–	–	–	–	–	–	–	–	766	–
Philippines																	
2008	–	–	204	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	–	–	9	–	–	–	–	–	–	1	–	–	–	8	°	–	–
2010	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	106	–	–	–	–	–	–	–	–	–	–	–	°	–	–
2012	–	–	378	–	–	–	–	–	212	–	273	–	1	–	3	–	–
Republic of Korea																	
2008	14 800	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	13	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Singapore																	
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	155	–
Thailand																	
2008	–	–	4	–	–	–	–	–	–	–	–	–	–	–	–	192[a]	–
2009	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–	[a]	–
2011	–	–	3	°	–	–	–	–	–	–	–	–	–	–	–	1[a]	–
2012	–	–	17	–	–	–	–	–	–	–	–	–	–	–	–	[a]	–
Regional total																	
2008	**21 128**	**0**	**7 770**	**0**	**0**	**0**	**0**	**0**	**0**	**2 857**	**0**	**0**	**0**	**2**	**1 100**	**192**	**0**
2009	**10 062**	**0**	**28 129**	**1 646**	**0**	**0**	**0**	**0**	**0**	**2 277**	**0**	**8 570**	**10**	**63**	**3 655**	**4 672**	**0**
2010	**16 360**	**13**	**4 313**	**33**	**0**	**0**	**0**	**0**	**0**	**660**	**2**	**4 670**	**0**	**0**	**1 275**	**766**	**0**
2011	**16 946**	**0**	**4 431**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4 520**	**0**	**0**	**2 079**	**196**	**9 734**
2012	**17 131**	**0**	**3 608**	**0**	**0**	**0**	**0**	**0**	**212**	**259**	**276**	**30**	**1**	**29 927**	**40**	[a]	**0**

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
South Asia																	
India																	
2008	2 754	1	1 284	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	1 038	–	1 064	1 244	–	–	–	–	–	–	–	–	–	–	180	–	–
2010	81	–	1 848	–	–	–	–	–	–	–	–	–	–	–	359	–	–
2011	–	–	6 308	104	–	–	–	62	–	–	–	–	–	–	118	676	–
Regional total																	
2008	**2 754**	**1**	**1 284**	**°**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009	**1 038**	**0**	**1 064**	**1 244**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**180**	**0**	**0**
2010	**81**	**0**	**1 848**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**359**	**0**	**0**
2011	**0**	**0**	**6 308**	**104**	**0**	**0**	**0**	**62**	**0**	**0**	**0**	**0**	**0**	**0**	**118**	**676**	**0**
West Asia																	
Afghanistan																	
2008	12 275	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	36 618	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	23 260	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	68 245	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	31 451	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Armenia																	
2008	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	17	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	°	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Iran (Islamic Republic of)																	
2010	–	–	2 738[e]	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	3 809[e]	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Kazakhstan																	
2009	2	–	–	–	–	–	–	–	–	–	–	–	–	5	–	–	–
2010	1	–	–	–	–	–	–	–	–	–	–	–	–	3 285	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	°	–	–	–
Lebanon																	
2009	–	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	6	20	–	–	–	–	–	–	–	–	–	–	–	–	–
Pakistan																	
2008	15 239	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	4 405	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	16 178	–	265	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	43	–	295	–	–	–	–	–	–	–	–	–	–	1 250	–	–	–
2012	81	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syrian Arab Republic																	
2008	390	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	–	–	–	–	–	–	–	498	–	–	–	–	–	–	–
Turkey																	
2008	10 553	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	13 000[f]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	11 104[f]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	3 706	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	177	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
United Arab Emirates																	
2009	4 000	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Uzbekistan																	
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	°	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	626	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	3	–	–	–
Regional total																	
2008	**38 458**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009	**58 028**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**
2010	**50 560**	**0**	**3 003**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3 911**	**0**	**0**	**0**
2011	**71 995**	**0**	**4 104**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1 253**	**0**	**0**	**0**
2012	**31 709**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**498**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Europe																	
States not members of the European Union																	
Belarus																	
2008	°	–	–	–	–	–	–	–	–	–	–	–	–	–	–	118	–
2009	–	–	1	–	–	–	–	–	–	1	–	–	–	–	–	2	–
2010	–	–	–	°	–	–	–	–	2	–	1	–	–	–	16	°	–
2011	°	–	–	°	–	–	–	–	–	–	–	–	–	–	–	°	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	°	–
Croatia																	
2009	–	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	°	°	–	–	–	–	–	–	–	–	–	–	–	–	–
Norway																	
2008	–	–	°	3	–	–	–	–	–	–	–	–	–	–	–	1	–
2009	–	–	°	2	–	–	–	–	–	–	–	–	–	–	–	–	–

Country or territory, by region Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
2010	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Russian Federation																	
2008	25	–	3	–	–	–	–	120	–	2 128	–	–	–	10	°	–	–
2009	32	–	2	–	–	–	–	1	–	1 731	–	–	–	4	°	–	–
2010	15	–	°	–	–	–	–	102	–	–	–	–	–	°	–	–	–
2011	820	–	°	–	–	–	–	–	–	1 060	–	–	–	–	3	–	–
2012	5	–	°	–	–	–	–	–	–	4	–	–	–	–	–	–	–
Serbia																	
2009	–	–	–	–	–	–	–	–	–	–	–	1 900	–	–	–	–	–
2012	–	–	°	–	–	–	–	–	–	–	–	–	°	–	–	–	–
Ukraine																	
2008	400	–	°	1	–	–	–	–	–	–	–	–	–	846	–	74	–
2009	19	–	°	1	°	–	–	–	–	–	–	4	–	41	1	1	–
2010	43	–	8	°	–	–	–	–	–	°	–	–	–	386	17	3	–
2011	31	–	4	5	–	–	–	–	–	5	°	–	–	396	2	2	–
2012	52	–	–	°	–	°	–	–	–	°	°	–	–	101	°	–	–
States members of the European Union																	
Austria																	
2008	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
2009	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–
Belgium																	
2008	–	–	–	810	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	–	–	–	–	–	–	–	–	–	120	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	5 050	–	–	–	–	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
2012	–	–	–	–	–	–	–	–	–	503	–	–	–	–	–	–	–
Bulgaria																	
2008	–	–	43	[a]	–	–	–	–	–	–	–	153	–	–	–	–	–
2009	–	–	–	–	–	–	–	–	–	40	–	–	–	–	–	–	–
2010	21 111	–	–	[a]	–	–	–	–	–	20	–	–	–	–	–	–	–
2011	20	–	–	–	–	–	–	–	–	545	–	–	–	–	–	–	–
2012	42	–	°	[a]	–	–	–	–	–	2	–	–	–	–	–	[a]	–
Czech Republic																	
2008	–	–	2	1	–	–	–	–	–	–	–	–	–	–	1	15	–
2009	–	–	6	–	–	–	–	–	–	–	–	–	–	–	–	°	–
2010	–	–	7	°	–	–	–	–	–	–	–	–	–	–	2	°	–
2011	–	–	4	[a]	–	–	–	–	–	–	–	–	–	–	6	[a]	–
2012	–	–	3	–	–	–	–	–	–	–	–	–	–	–	2	16	–
Estonia																	
2008	–	–	–	°	–	–	–	–	–	22	–	–	–	–	–	–	1 841
2009	–	–	–	–	–	–	–	–	–	49	–	–	–	–	°	–	–
2010	–	–	–	°	–	–	–	–	–	29	–	–	–	–	–	–	–
2011	–	–	–	–	–	–	–	–	–	10	–	–	–	–	–	–	–
Finland																	
2008	–	–	°	°	–	–	–	–	–	–	–	–	–	2	–	°	–
2009	–	–	–	[a]	–	–	–	–	–	–	–	–	–	°	–	–	–
2010	–	–	–	°[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	–	°[a]	–	–	–	–	–	3	–	–	–	–	–	–	–
2012	–	–	–	[a]	–	–	–	–	–	°	–	–	–	–	–	°	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
France																	
2008	–	–	6	–	–	–	–	–	–	–	–	–	–	–	502	–	–
2009	–	–	263	–	–	–	–	–	–	–	–	250	–	–	40	–	–
2010	–	–	°	–	–	–	–	–	–	–	–	–	–	1	°	–	–
2011	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–
Germany																	
2008	2	–	55	°	–	–	–	–	–	1	–	°	°	–	–	567	–
2009	56	–	212	–	–	–	–	–	–	100	–	26	–	1	–	78	–
2010	12	–	46	[a]	–	–	°	–	–	–	°	2	–	°	°	°[a]	°
2011	3	–	20	–	–	–	–	–	–	24	°	6 000	–	–	3	°[a]	–
2012	–	–	°	–	–	–	–	–	–	38	–	–	–	°	–	–	–
Greece																	
2008	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	°
2010	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hungary																	
2008	63 616	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	–	–	2	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	°	1	–	–	–	–	–	–	–	–	–	°	–	7	–
2011	–	–	–	1	–	–	–	–	–	–	–	–	–	°	–	–	–
2012	33	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
Ireland																	
2008	–	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
2009	–	–	–	–	–	–	–	300	–	–	–	–	–	–	–	–	–
2010	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
2011	–	–	–	3	–	–	–	449	–	–	–	–	–	–	–	–	–
2012	–	–	–	–	–	–	–	–	3	–	–	–	–	–	–	–	–
Latvia																	
2011	–	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	–
Lithuania																	
2008	°	–	–	–	–	–	–	–	–	567	–	–	–	–	–	–	–
2009	–	–	–	–	–	–	–	–	–	116	–	–	–	–	–	–	929
2011	–	–	–	–	–	–	–	–	1	600	–	–	°	–	–	–	–
2012	–	–	–	–	–	–	–	–	–	17	–	–	332	–	–	–	–
Luxembourg																	
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	77	–
2012	–	–	–	–	–	–	–	–	–	–	–	–	–	–	300	–	–
Netherlands																	
2008	900	–	135	–	–	–	–	–	–	–	–	–	–	1 975	–	[a]	60
2009	–	–	40	–	–	–	–	–	40	207	165	–	–	–	25	304	20
2010	–	–	500	–	–	–	–	–	–	334	–	–	–	–	–	8	85
2011	–	–	–	–	–	–	–	–	–	111	–	–	–	–	–	–	105
2012	–	–	–	–	–	–	10	–	–	123	–	–	–	–	500	–	–
Poland																	
2008	160	–	°	–	–	–	–	–	–	39	–	–	–	–	–	–	–
2009	–	–	–	–	–	–	–	–	–	119	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	60	–	–	–	–	–	–	–
2011	1	–	–	–	–	–	–	–	–	350	–	–	–	–	290	–	–
2012	1 755	–	–	–	–	–	–	–	–	149	–	116	–	–	–	–	–

Country or territory, by region Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
Portugal																	
2009	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
Romania																	
2008	–	–	°	–	–	–	–	–	–	–	–	–	–	–	–	[a]	–
2009	–	–	–	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
Slovakia																	
2008	–	–	1	[a]	–	–	–	–	–	–	–	–	–	–	–	°	–
2009	800	–	°	–	–	–	–	–	–	–	–	–	–	–	1	[a]	–
2010	–	–	°	–	–	–	–	–	–	–	–	–	–	–	°	[a]	–
2011	6 020	–	°	–	–	–	–	–	–	–	–	–	–	–	°	[a]	–
2012	–	–	°	–	–	–	–	–	–	–	–	–	–	–	°	–	–
Slovenia																	
2008	86 118	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	°	–	–	–	–	–	°	–	–	–	–	–	–	–	–
Spain																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
2009	5	–	–	–	–	–	–	–	–	–	–	1	–	°	–	–	–
2010	–	–	°	–	–	–	–	–	–	–	–	–	–	2	–	–	–
2011	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
2012	–	–	1 500	°	–	–	–	–	–	–	–	–	50	19	–	–	–
Sweden																	
2009	–	–	°	9	–	–	–	–	–	–	–	–	–	–	–	–	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–
2011	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–
2012	–	–	°	1[a]	–	–	–	–	–	–	–	–	°	–	–	–	–

Country or territory, by region / Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
United Kingdom																	
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	54	5
2010	–	–	1	[a]	–	–	–	–	–	–	–	–	–	–	–	–	–
2011	–	–	500	°	–	–	–	–	–	–	–	–	10	–	–	–	–
2012	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Regional total																	
2008	**151 223**	**0**	**245**	**815**	**0**	**0**	**0**	**120**	**0**	**2 757**	**0**	**153**	**0**	**2 835**	**503**	**775**	**1 901**
2009	**912**	**0**	**527**	**12**	**0**	**0**	**0**	**301**	**40**	**2 483**	**165**	**277**	**0**	**46**	**67**	**439**	**954**
2010	**21 181**	**0**	**563**	**2**	**0**	**0**	**0**	**102**	**2**	**5 493**	**1**	**2**	**0**	**390**	**36**	**94**	**85**
2011	**6 894**	**0**	**530**	**11**	**0**	**0**	**0**	**449**	**1**	**2 708**	**1**	**6 000**	**10**	**396**	**304**	**2**	**106**
2012	**1 888**	**1**	**1 504**	**1**	**0**	**0**	**10**	**0**	**3**	**836**	**0**	**116**	**332**	**121**	**804**	**0**	**0**
Oceania																	
Australia																	
2008	–	–	1 103	28	59	–	1	–	–	3	°	1	–	–	37	1 528	–
2009	1	–	77	6	–	–	5	°	°	6	–	°	–	–	417	388	14
2010	–	–	46	51	–	100	1	4	°	9	11	–	°	–	303	366	47
2011	6	–	261	5	–	4	°	–	1	–	1	10	°	–	724	723	2 565
2012	2	–	520	–	–	–	°	691	°	–	2	°	°	–	770	2	1
Fiji																	
2008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	17	–
2009	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	107	–
2010	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	18	–
New Zealand																	
2008	2	–	15	°	–	–	–	–	–	–	–	–	–	°	–	°[a]	–
2009	7	–	–	43	–	–	–	–	–	–	–	–	–	–	–	3	–
2010	°	–	–	24	–	–	–	–	–	–	–	–	–	1	–	925	35

Country or territory, by region Year	Acetic anhydride (litres)	N-Acetylanthranilic acid (kilograms)	Ephedrine (kilograms)	Ephedrine preparations[a] (kilograms)	Ergometrine (grams)	Ergotamine (grams)	Isosafrole (litres)	Lysergic acid (grams)	3,4-Methylenedioxyphenyl-2-propanone (litres)	1-Phenyl-2-propanone (litres)	Norephedrine (phenylpropanolamine) (kilograms)	Phenylacetic acid[b] (kilograms)	Piperonal (kilograms)	Potassium permanganate (kilograms)	Pseudoephedrine (kilograms)	Pseudoephedrine preparations[a] (kilograms)	Safrole (litres)
2011	°	–	–	96[a]	–	–	–	–	–	–	–	–	–	°	–	608[a]	–
2012	°	–	–	5	–	–	–	–	–	–	–	–	–	°	–	426[a]	1
Regional total																	
2008	**2**	**0**	**1 117**	**28**	**59**	**0**	**1**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**37**	**1 545**	**0**
2009	**8**	**0**	**77**	**49**	**0**	**0**	**5**	**0**	**0**	**6**	**0**	**°**	**0**	**0**	**417**	**498**	**14**
2010	**0**	**0**	**46**	**75**	**0**	**100**	**1**	**4**	**°**	**9**	**11**	**0**	**°**	**1**	**303**	**1 309**	**35**
2011	**6**	**0**	**261**	**101**	**0**	**4**	**0**	**0**	**1**	**0**	**1**	**10**	**0**	**0**	**724**	**1 332**	**2 565**
2012	**2**	**0**	**520**	**5**	**0**	**0**	**0**	**691**	**0**	**0**	**2**	**0**	**0**	**0**	**770**	**428**	**2**
World total																	
2008	**213 637**	**6**	**23 302**	**873**	**59**	**300**	**1**	**123**	**2 823**	**5 620**	**230**	**155**	**0**	**47 356**	**7 578**	**3 218**	**1 922**
2009	**70 501**	**0**	**61 310**	**2 951**	**0**	**0**	**5**	**411**	**40**	**4 922**	**196**	**41 655**	**4 299**	**27 327**	**26 581**	**5 925**	**1 068**
2010	**171 935**	**13**	**22 260**	**110**	**2 000**	**79 080**	**1**	**106**	**2**	**26 403**	**62**	**234 330**	**0**	**32 107**	**17 899**	**2 170**	**168**
2011	**197 745**	**0**	**33 324**	**33 797**	**0**	**824**	**0**	**521**	**124**	**5 312**	**1**	**1 022 231**	**10**	**38 407**	**6 396**	**2 290**	**17 121**
2012	**88 528**	**1**	**7 065**	**2 713**	**0**	**1 650**	**10**	**694**	**228**	**6 818**	**279**	**1 700**	**336**	**92 701**	**24 791**	**1 346**	**2 028**

[a] Seizures of ephedrine and pseudoephedrine reported to the International Narcotics Control Board in units have not been converted into kilograms, as the actual quantity of ephedrine and pseudoephedrine is not known. The following countries have reported seizures of preparations containing ephedrine and/or pseudoephedrine:

	Year	Ephedrine preparations (units)	Pseudoephedrine preparations (units)
Argentina	2008	150	–
Austria	2009	400	–
Bulgaria	2008	47 423	–
	2010	4 252	–
	2012	50 000	3 600
Canada	2008	20 056	–
Côte d'Ivoire	2008	33 892	–
	2009	30 747	–
	2011	23 962	–
	2012	80 820	–
Czech Republic	2009	–	42 444
	2010	15 000	326 941
	2011	2 570	872 703
Dominican Republic	2008	–	819 500

	Year	*Ephedrine preparations (units)*	*Pseudoephedrine preparations (units)*
	2009	–	993 520
Finland	2008	33 405	–
	2009	4 058	–
	2010	10 075	–
	2011	6 107	–
	2012	6 359	–
Germany	2010	170	462
	2011	–	1 890
Greece	2008	250	–
	2010	2	–
	2011	8	–
Guatemala	2009	–	409 215
	2010	–	1 470 015
Indonesia	2011	3 000	–
	2012	53	–
Ireland	2010	2 200	–
Mexico	2008	–	28 000 000
Netherlands	2008	–	5 000 000
New Zealand	2008	–	5 759
	2011	123 431 (and 2,210 ml)	34 833
	2012	–	3 630
Romania	2008	–	20
	2009	120	–
Slovakia	2008	2 520	–
	2009	–	1 207
	2010	–	336
	2011	–	1 734
Sweden	2012	60 976	–
Thailand	2008	–	707 450
	2010	–	33 376 072
	2011	–	10 240 820
	2012	–	2 011 100
United Kingdom	2010	432 300	–
	2011	288 000	–
United States	2008	2 039	9 442 951
	2009	33 748	147 136
	2010	2 574	2 309 242
	2011	–	4 003 371

[b] Transferred to Table I of the 1988 Convention in January 2011.

[c] Organization of American States, Inter-American Drug Abuse Control Commission, *Bolivia: Evaluation of Progress in Drug Control, 2007-2009* (Washington, D.C., 2010).

[d] For statistical purposes, the data for China do not include those for the Hong Kong Special Administrative Region (SAR) of China and the Macao SAR of China.

[e] Islamic Republic of Iran, Drug Control Headquarters, *Drug Control in Iran 2011* (Tehran, March 2012).

[f] Turkish National Police, Anti-Smuggling and Organized Crime Department, *Turkish Report of Anti-Smuggling and Organized Crime: 2011* (Ankara, 2012).

[g] Figures reported from the United States for 2011 may inadvertently include sizeable seizures of Sida cordifolia and/or Ephedra plant extracts and are thus not comparable with figures for previous years.

Table A.2. Seizures of substances in Table II of the 1988 Convention, as reported to the International Narcotics Control Board, 2008-2012

Country or territory, by region / Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Africa								
Nigeria								
2011	400	–	–	–	–	–	25	200
South Africa								
2008	–	–	–	1 038	–	–	–	–
Regional total								
2008	**0**	**0**	**0**	**1 038**	**0**	**0**	**0**	**0**
2009	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2011	**400**	**0**	**0**	**0**	**0**	**0**	**25**	**200**
Central America and the Caribbean								
Guatemala								
2011	–	–	–	8 707	–	–	212	–
Honduras								
2011	–	–	–	[a]	–	–	[a]	–
Regional total								
2008	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2009	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2010	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2011	**0**	**0**	**0**	**8 707**	**0**	**0**	**212**	**0**

Country or territory, by region / *Year*	*Acetone (litres)*	*Anthranilic acid (kilograms)*	*Ethyl ether (litres)*	*Hydrochloric acid (litres)*	*Methyl ethyl ketone (litres)*	*Piperidine (litres)*	*Sulphuric acid (litres)*	*Toluene (litres)*
North America								
Canada								
2008	1 235	–	–	36	–	–	1	906
2009	1 023	–	–	175	–	–	4	1 024
2010	172	–	–	267	4	–	55	423
2011	371	–	49	274	4	°	201	1 825
2012	2 786	–	°	855	4	18	24	1 718
Mexico								
2008	8 674	–	447	14 102	1 002	–	6 004	425
2009	13 242	–	8	7 681	–	–	2 230	13 502
2010	7 776	–	47	10 244	370	–	2 927	21 451
2011	23 262	–	219	78 125	–	–	1 652	49 410
2012	10 669	–	14	29 310	64	–	3 171	26 243
United States of America								
2008	5 301	–	206	9 110	18	216	2 720	6 455
2009	7 060	–	205	8 152	14	39	7 087	6 432
2010	55 390	–	25 258	69 940	15	90	28 387	1 305
2011	7 142	–	115	109 602	29	11	1 231 111	262
2012	10 594	–	60	206	3	189	125	12
Regional total								
2008	**15 210**	**0**	**653**	**23 248**	**1 020**	**216**	**8 725**	**7 786**
2009	**21 325**	**0**	**213**	**16 008**	**14**	**39**	**9 321**	**20 958**
2010	**63 338**	**0**	**25 306**	**80 451**	**389**	**90**	**31 369**	**23 179**
2011	**94 775**	**0**	**384**	**188 001**	**32**	**12**	**1 232 965**	**51 497**
2012	**24 049**	**0**	**74**	**30 372**	**71**	**207**	**3 320**	**27 972**

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
South America									
Argentina									
	2008	719	–	290	204	–	–	659	–
	2009	504	–	271	589	12	–	442	–
	2010	214	–	237	163	–	–	17	1
	2011	245	–	182	96	2	–	16	–
	2012	311	–	131	52	53	–	26	–
Bolivia (Plurinational State of)									
	2008	5 472[b]	–	–	1 533[b]	684[b]	–	23 651[b]	1 105[b]
	2009	67 199[b]	–	–	11 008[b]	221[b]	–	62 276[b]	349[b]
	2011	51 663	–	87	9 307	176	–	201 621	5 590
	2012	59 711	–	7 120	5 873	680	–	72 034	6 349
Brazil									
	2008	44	–	17	1 357	225	–	220	66
	2009	84 520	–	1 336	17 797	30	4	1 947	185
	2010	956	–	–	22 381	6 714	–	1 834	6 748
	2011	954	–	128	7 211	96	–	4 747	49
	2012	1 606	–	466	91 697	3 308	–	28 271	3 742
Chile									
	2008	95	–	–	400	–	–	1 593	–
	2009	–	–	–	–	–	–	1 185	–
	2010	1 600	–	–	–	–	–	2 223	–
	2011	–	–	–	19	–	–	93	–
	2012	–	–	–	–	–	–	5	–
Colombia									
	2008	1 468 212	–	68 228	313 312	21 359	–	305 755	27

Country or territory, by region	*Year*	*Acetone (litres)*	*Anthranilic acid (kilograms)*	*Ethyl ether (litres)*	*Hydrochloric acid (litres)*	*Methyl ethyl ketone (litres)*	*Piperidine (litres)*	*Sulphuric acid (litres)*	*Toluene (litres)*
	2009	1 381 411	–	5 034	191 926	38 849	–	249 441	2 914
	2010	688 224	–	6 455	187 914	44 160	–	631 247	66 060
	2011	463 883	–	1 541	96 660	–	–	201 812	42 044
	2012	739 247	–	25 295	76 290	1 419	–	163 242	33 792
Ecuador									
	2008	–	–	60	423	6 927	–	143	449
	2009	2 285	–	–	3 984	15 356	–	1 378	–
	2010	4 320	–	–	2 286	10 774	–	1 473	–
	2011	–	–	–	931	2 400	–	3 954	–
	2012	–	–	–	–	–	–	771	–
Paraguay									
	2009	632	–	–	–	–	–	5 160	–
	2011	4 500	–	5	833	–	–	5 229	2 650
Peru									
	2008	29 864	–	150	75 963	–	–	30 776	3 318
	2009	18 580	–	–	72 601	–	–	77 257	–
	2010	31 139	–	–	172 807	–	–	31 367	–
	2011	32 456	–	45	145 850	310	–	28 505	1 919
	2012	70 024	–	–	87 695	–	–	29 777	100
Venezuela (Bolivarian Republic of)									
	2011	15 858	–	–	25 781	1 140	–	30 284	1 200
	2012	39 331	–	–	28 605	–	–	87 470	427
Regional total									
	2008	**1 504 406**	**0**	**68 745**	**393 191**	**29 195**	**0**	**362 798**	**4 966**
	2009	**1 555 131**	**0**	**6 641**	**297 906**	**54 468**	**4**	**399 086**	**3 448**
	2010	**726 452**	**0**	**6 693**	**385 550**	**61 648**	**0**	**668 162**	**72 809**

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
	2011	**569 558**	**0**	**1 987**	**286 687**	**4 123**	**0**	**476 260**	**53 452**
	2012	**910 230**	**0**	**33 012**	**290 212**	**5 460**	**0**	**381 596**	**44 411**
East and South-East Asia									
China[c]									
	2008	82 232	–	11 687	405 671	–	–	238 215	11 781
	2009	31 522	–	25 147	151 298	871	–	89 448	18 099
	2010	31 966	–	16 572	141 918	1 403	–	219 388	–
	2011	21 474	–	17 980	150 165	1 391	–	23 024	–
	2012	31 953	–	15 770	166 825	1 217	–	18 479	13 900
Hong Kong SAR of China									
	2010	–	–	–	570	–	–	–	–
Indonesia									
	2008	183	–	–	110	5	–	5	105
	2011	2	–	–	10	–	–	1	3
	2012	2	–	–	6	–	–	5	–
Malaysia									
	2010	130	–	–	120	–	–	5	725
	2011	800	–	45	800	–	–	–	950
	2012	460	–	–	300	–	–	100	150
Myanmar									
	2008	–	–	352	128	–	–	32	–
	2009	8 227	–	1 707	2 378	–	–	–	–
	2010	1 202	–	–	–	–	–	2 000	–

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Philippines									
	2008	902	–	–	385	–	–	–	–
	2009	132	–	7	39	–	–	–	3
	2010	55	–	–	105	–	–	–	300
	2011	21	–	0	11	–	–	1	31 313
	2012	6 436	–	5	1 646	25	–	3 080	17 941
Thailand									
	2011	1	–	–	0	–	–	163	1
	2012	300	–	–	–	–	–	–	450
Regional total									
	2008	**83 317**	**0**	**12 039**	**406 294**	**5**	**0**	**238 252**	**11 886**
	2009	**39 881**	**0**	**26 860**	**153 714**	**871**	**0**	**89 448**	**18 102**
	2010	**33 353**	**0**	**16 572**	**142 713**	**1 403**	**0**	**221 394**	**1 025**
	2011	**22 298**	**0**	**18 025**	**150 986**	**1 391**	**0**	**23 188**	**32 267**
	2012	**39 151**	**0**	**15 775**	**168 776**	**1 242**	**0**	**21 664**	**32 441**
South Asia									
Bangladesh									
	2009	–	–	–	–	17 624	–	–	7
	2010	120	–	–	–	22 767	–	–	6
India									
	2008	–	188	–	–	–	–	–	–
Maldives									
	2008	–	–	–	–	–	–	10 860	–
	2009	–	–	–	–	3	–	–	–
	2010	–	–	–	–	–	–	7 331[d]	–
	2011	–	–	–	14	–	–	5	–

Country or territory, by region / Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Regional total								
2008	**0**	**188**	**0**	**0**	**0**	**0**	**10 860**	**0**
2009	**0**	**0**	**0**	**0**	**17 627**	**0**	**0**	**7**
2010	**120**	**0**	**0**	**0**	**22 767**	**0**	**7 331**	**6**
2011	**0**	**0**	**0**	**14**	**0**	**0**	**5**	**0**
West Asia								
Afghanistan								
2008	–	–	–	718	–	–	–	–
2009	–	–	–	6 150	–	–	–	–
2010	–	–	–	5 286	–	–	–	–
2011	–	–	–	120	–	–	–	–
2012	–	–	–	–	–	–	3 764	–
Armenia								
2009	0	–	–	°	–	–	°	–
2011	0	–	–	°	–	–	°	–
2012	–	–	–	°	–	–	–	–
Kazakhstan								
2009	71	–	–	156	–	–	1 530	–
2010	245	–	–	51 794	–	–	–	–
2011	78	–	–	10 707	–	–	698	–
2012	1	–	–	1 600	–	–	913	–
Kyrgyzstan								
2008	–	–	–	–	–	–	2 983	–
2010	–	–	–	–	–	–	94	–
2012	–	–	–	98	–	–	3 703	–

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Lebanon									
	2008	1	–	1	–	–	–	–	–
	2009	2	–	3	–	–	–	–	–
	2010	–	–	°	°	–	–	–	–
	2011	–	–	°	–	–	–	–	–
	2012	13	–	2 358	–	–	–	–	–
Pakistan									
	2008	15	–	–	–	–	–	–	–
	2009	–	–	–	8 220	–	–	–	–
	2010	–	–	–	7 110	–	–	–	–
	2012	–	–	–	–	–	–	326	–
Tajikistan									
	2011	–	–	–	–	–	–	6 803	–
	2012	–	–	–	–	14	–	1	–
Turkey									
	2008	1	–	–	–	–	–	–	–
	2011	3	–	–	–	–	–	0	–
Uzbekistan									
	2009	–	–	–	–	–	–	300	–
	2011	274	–	–	40	–	–	2 540	–
Regional total									
	2008	**16**	**0**	**1**	**718**	**0**	**0**	**2 983**	**0**
	2009	**73**	**0**	**3**	**14 526**	**0**	**0**	**1 830**	**0**
	2010	**245**	**0**	**0**	**64 190**	**0**	**0**	**94**	**0**
	2011	**354**	**0**	**0**	**10 867**	**0**	**0**	**10 040**	**0**
	2012	**14**	**0**	**2 358**	**1 698**	**14**	**0**	**8 707**	**0**

Country or territory, by region / Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Europe								
States not members of the European Union								
Belarus								
2008	3	–	–	–	–	–	–	–
2009	17	–	3	1	1	–	5	1
2010	–	–	–	2	2	–	–	–
Bosnia and Herzegovina								
2010	–	–	–	–	–	–	550	–
Russian Federation								
2008	5 214	0	477	4 296	–	–	1 598	725
2009	1 252	–	109	1 088	–	–	247	239
2010	555	–	7	846	–	–	54	118
2011	–	–	–	48	–	–	66	–
2012	–	–	–	26	–	–	91 433	–
Serbia								
2012	–	–	–	–	–	–	–	20
Ukraine								
2008	–	–	–	–	–	–	–	10 314
2009	574	–	–	2 113	966	–	4 700	5 227
2010	20 726	–	°	111 221	131	–	112 410	26 235
2011	1 821	–	555	24 608	1 706	–	281 755	4 245
2012	10 324	–	9 216	2 211	720	–	3 302	20 089
States members of the European Union								
Austria								
2008	1	–	–	2	–	–	12	5
2009	–	–	–	1	–	–	–	3

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
	2010	–	–	–	1	–	–	–	16
	2011	°	–	1	°	–	–	2	–
	2012	–	–	–	–	18	–	–	1
Belgium									
	2008	1 510	–	–	1 850	–	–	–	–
	2009	1 165	–	–	50	–	–	–	–
	2010	–	–	–	1 016	–	–	100	–
	2011	602	–	–	839	–	–	3 733	–
	2012	52	–	–	735	–	–	30	–
Bulgaria									
	2008	–	–	–	–	–	–	–	–
	2010	–	–	–	8	–	–	–	–
	2011	–	–	3	34	–	–	20	–
Czech Republic									
	2008	–	–	–	–	–	–	–	17
	2009	–	–	–	–	–	–	–	17
Estonia									
	2008	–	–	–	°	–	–	°	–
	2009	°	–	2	–	–	–	7	–
	2010	8	–	–	°	–	–	7	8
	2011	–	–	–	–	–	–	3	10
	2012	–	–	5	–	–	–	27	–
Finland									
	2008	12	–	1	23	–	–	–	–
	2011	6	–	–	23	–	–	1	1
	2012	–	–	–	–	–	–	3	–

Country or territory, by region	*Year*	*Acetone (litres)*	*Anthranilic acid (kilograms)*	*Ethyl ether (litres)*	*Hydrochloric acid (litres)*	*Methyl ethyl ketone (litres)*	*Piperidine (litres)*	*Sulphuric acid (litres)*	*Toluene (litres)*
France									
	2009	–	–	–	–	–	–	–	4 656
	2012	–	–	1	–	3 019	–	1	1
Germany									
	2008	2	–	3	8	–	–	3	11
	2009	10	–	7	64	–	–	128	322
	2010	31	–	2	25	–	–	12	19
	2011	17	–	5	77	63	–	8	9
	2012	94	–	97	717	–	–	71	1 164
Hungary									
	2009	°	–	–	–	–	–	1	–
	2010	15	–	2	–	–	–	1	20
	2011	37	–	7	11	–	–	4	6
	2012	35	–	7	11	–	–	–	–
Latvia									
	2012	81	–	°	24	–	–	12	–
Lithuania									
	2008	10	–	–	20	–	–	20	–
	2009	7	–	–	–	–	–	–	–
Netherlands									
	2008	6 631	–	30	3 971	9	–	770	400
	2009	720	–	5	701	–	–	182	–
	2010	1 434	–	–	6 178	375	–	522	942
	2011	6 485	–	–	8 429	–	–	12 404	–
	2012	1 245	–	–	4 567	–	–	2 020	–

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Poland									
	2008	–	–	–	231	–	–	31	20
	2010	–	–	–	–	–	–	61	–
	2011	58	–	4	45	–	–	58	103
	2012	285	–	–	3 575	–	–	148	15
Portugal									
	2012	°	–	–	–	–	–	–	–
Romania									
	2012	3	–	–	–	–	–	–	–
Slovakia									
	2008	4	–	–	24	–	–	1	88
	2009	1	–	–	13	–	–	1	36
	2010	–	–	–	4	–	–	–	32
	2011	3	–	–	13	–	–	–	28
	2012	1	–	–	2	–	–	–	20
Spain									
	2008	862	–	104	77	2 083	–	106	1
	2009	3 705	–	74	207	256	–	93	42
	2010	442	–	66	55	43	–	35	4
	2011	1	–	°	1	1	–	1	0
	2012	425	–	287	990	123	–	30	33
Sweden									
	2011	–	0	–	–	–	–	–	–
United Kingdom									
	2010	–	–	–	1	–	–	–	–
	2012	–	–	21	–	385	–	–	–

Country or territory, by region / Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
Regional total								
2008	**14 249**	**0**	**615**	**10 502**	**2 092**	**0**	**2 540**	**11 581**
2009	**7 452**	**0**	**200**	**4 237**	**1 223**	**0**	**5 363**	**10 542**
2010	**23 211**	**0**	**77**	**119 357**	**552**	**0**	**113 752**	**27 394**
2011	**9 028**	**0**	**574**	**34 127**	**1 770**	**0**	**298 054**	**4 401**
2012	**12 549**	**0**	**9 635**	**12 859**	**4 266**	**0**	**97 087**	**21 343**
Oceania								
Australia								
2008	–	–	–	–	–	–	–	–
2009	2 027	–	–	40	–	–	43	–
2010	54	–	30	214	°	–	278	25
2011	51	–	1	88	–	–	9	14
2012	130	–	–	112	16	–	62	83
New Zealand								
2008	291	–	5	235	32	–	56	643
2009	172	–	3	232	–	–	83	321
2010	200	–	6	752	134	–	244	1 434
2011	203	–	–	308	26	–	28	476
2012	93	–	–	137	–	–	10	682
Regional total								
2008	**291**	**0**	**5**	**235**	**32**	**0**	**56**	**643**
2009	**2 199**	**0**	**3**	**272**	**0**	**0**	**125**	**321**
2010	**254**	**0**	**36**	**966**	**134**	**0**	**522**	**1 459**
2011	**254**	**0**	**1**	**396**	**26**	**0**	**37**	**490**
2012	**223**	**0**	**0**	**249**	**16**	**0**	**72**	**765**

Country or territory, by region	Year	Acetone (litres)	Anthranilic acid (kilograms)	Ethyl ether (litres)	Hydrochloric acid (litres)	Methyl ethyl ketone (litres)	Piperidine (litres)	Sulphuric acid (litres)	Toluene (litres)
World total									
	2008	**1 617 490**	**188**	**82 057**	**835 227**	**32 344**	**216**	**626 214**	**36 862**
	2009	**1 626 060**	**0**	**33 920**	**486 664**	**74 203**	**43**	**505 172**	**53 379**
	2010	**846 973**	**0**	**48 683**	**793 226**	**86 894**	**90**	**1 042 622**	**125 873**
	2011	**696 666**	**0**	**20 970**	**679 785**	**7 343**	**12**	**2 040 787**	**142 307**
	2012	**986 216**	**0**	**60 854**	**504 165**	**11 069**	**257**	**512 447**	**126 932**

[a] The exact quantity of the seizures was not specified.

[b] Organization of American States, Inter-American Drug Abuse Control Commission, *Bolivia: Evaluation of Progress in Drug Control, 2007-2009* (Washington, D.C., 2010).

[c] For statistical purposes, the data for China do not include those for the Hong Kong Special Administrative Region (SAR) of China and the Macao SAR of China.

[d] Reported on form B: Annual estimates of requirements of narcotic drugs, manufacture of synthetic drugs, opium production and cultivation of the opium poppy for purposes other than opium production.

Annex IX

Submission of information by Governments on licit trade in, uses of and requirements for substances in Table I and Table II of the 1988 Convention for the years 2008-2012

Governments of the countries and territories indicated have provided information on licit trade in, uses of and requirements for substances in Tables I and II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 on form D for the years 2007-2011. That information was requested in accordance with Economic and Social Council resolution 1995/20 of 24 July 1995. Details may be made available on a case-by-case basis, subject to confidentiality of data.

Notes: The names of non-metropolitan territories and special administrative regions are in italics.

X signifies that relevant information was submitted on form D.

	2008		*2009*		*2010*		*2011*		*2012*	
Country or territory	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*
Afghanistan	X	X	X	X						X
Albania		X	X	X	X	X	X	X	X	X
Algeria	X	X	X	X	X	X	X	X	X	X
Andorra									X	X
Angola	X	X								
Anguilla										
Antigua and Barbuda										
Argentina	X	X	X	X	X	X	X	X	X	X
Armenia	X	X	X	X	X	X	X	X	X	X
Aruba										
Ascension Island	X	X								
Australia	X	X	X	X	X	X	X	X	X	X
Austria[a]	X	X	X	X	X	X	X	X	X	X
Azerbaijan	X	X	X	X	X	X	X	X	X	X
Bahamas										
Bahrain				X	X					
Bangladesh	X	X	X	X	X	X	X	X		
Barbados										
Belarus	X	X	X	X	X	X	X	X	X	X
Belgium[a]	X	X	X	X	X	X	X	X	X	X
Belize			X							
Benin	X	X	X	X	X	X	X	X	X	X
Bermuda										
Bhutan					X	X	X	X	X	X
Bolivia (Plurinational State of)	X	X	X	X	X	X	X	X	X	X

Country or territory	2008		2009		2010		2011		2012	
	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments
Bosnia and Herzegovina	X	X	X	X			X	X	X	X
Botswana										
Brazil	X	X	X	X	X	X			X	X
British Virgin Islands										
Brunei Darussalam	X	X	X	X	X	X	X	X	X	X
Bulgaria[a]	X	X	X	X	X	X	X		X	X
Burkina Faso							X	X		
Burundi										
Cambodia			X	X	X	X			X	
Cameroon		X					X		X	X
Canada	X	X	X	X	X	X	X	X	X	X
Cape Verde	X	X								
Cayman Islands										
Central African Republic										
Chad										
Chile	X	X	X	X	X	X	X	X	X	X
China	X		X	X	X	X	X	X	X	X
Hong Kong SAR of China	X	X	X	X	X	X			X	X
Macao SAR of China	X	X	X	X	X	X			X	X
Christmas Island	X	X					X	X		
Cocos (Keeling) Islands										
Colombia	X	X	X	X	X	X	X	X	X	X
Comoros										
Congo	X	X								
Cook Islands	X	X					X	X		
Costa Rica	X	X	X	X	X	X	X	X	X	X
Côte d'Ivoire	X	X	X	X	X	X	X	X	X	X
Croatia[a]	X	X	X		X		X		X	X
Cuba	X	X	X	X	X	X	X	X		
Curaçao[b]					X	X	X	X	X	X
Cyprus[a]	X	X	X	X	X	X	X	X	X	X
Czech Republic[a]	X	X	X	X	X	X	X	X	X	X
Democratic People's Republic of Korea	X	X	X	X		X		X		X
Democratic Republic of the Congo	X	X	X	X	X		X	X	X	X
Denmark[a]	X	X	X		X		X		X	X
Djibouti										
Dominica										
Dominican Republic	X	X	X	X	X	X				

	2008		2009		2010		2011		2012	
Country or territory	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*
Ecuador	X	X	X	X	X	X	X	X	X	X
Egypt	X	X	X	X	X	X	X	X	X	X
El Salvador	X	X	X	X	X	X	X	X	X	X
Equatorial Guinea										
Eritrea			X	X	X	X	X	X	X	X
Estonia[a]	X	X	X	X	X	X	X	X		X
Ethiopia	X	X	X	X			X	X	X	X
Falkland Islands (Malvinas)	X	X								
Fiji							X	X		
Finland[a]	X	X	X	X	X	X	X	X	X	X
France[a]	X		X	X	X	X	X	X	X	X
French Polynesia										
Gabon										
Gambia										
Georgia	X	X	X	X	X	X	X	X	X	X
Germany[a]	X	X	X	X	X	X	X	X	X	X
Ghana			X	X	X	X	X	X	X	X
Gibraltar										
Greece[a]	X	X	X	X	X	X	X	X	X	X
Grenada										
Guatemala	X	X	X	X	X	X			X	X
Guinea										
Guinea-Bissau										
Guyana	X	X	X	X		X				
Haiti	X	X	X	X	X	X	X	X		
Holy See										
Honduras							X	X	X	X
Hungary[a]			X	X	X	X	X	X	X	X
Iceland	X	X	X	X	X	X	X	X	X	X
India	X	X	X	X	X	X	X	X		
Indonesia	X	X			X	X	X	X	X	X
Iran (Islamic Republic of)	X	X	X	X	X	X				
Iraq	X	X	X	X	X	X				
Ireland[a]	X	X	X	X	X	X	X	X	X	X
Israel	X	X	X	X	X	X	X	X	X	X
Italy[a]	X	X	X	X	X	X	X	X	X	X
Jamaica	X	X	X	X	X	X				
Japan	X	X	X	X	X	X	X	X	X	X
Jordan	X	X	X	X	X	X	X	X	X	X

Country or territory	2008		2009		2010		2011		2012	
	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments
Kazakhstan			X	X	X	X	X	X		
Kenya	X	X	X	X	X	X				
Kiribati										
Kuwait										
Kyrgyzstan	X	X	X	X	X	X	X	X	X	X
Lao People's Democratic Republic			X	X	X	X	X	X	X	X
Latvia[a]	X	X	X	X	X	X	X	X	X	X
Lebanon	X	X	X	X	X	X	X	X	X	X
Lesotho										
Liberia							X			
Libya										
Liechtenstein[c]	X	X	X	X	X	X	X	X	X	X
Lithuania[a]	X	X	X	X	X	X	X	X		X
Luxembourg[a]	X		X	X	X					
Madagascar	X	X	X	X	X	X				
Malawi										
Malaysia	X	X	X	X	X	X	X	X	X	X
Maldives					X	X	X	X	X	X
Mali										
Malta[a]	X	X	X	X	X	X	X	X		X
Marshall Islands										
Mauritania										
Mauritius	X	X			X	X	X	X	X	X
Mexico	X	X	X	X	X	X	X	X	X	X
Micronesia (Federated States of)										
Monaco										
Mongolia			X		X	X	X		X	X
Montenegro	X	X	X	X	X	X	X	X	X	X
Montserrat						X			X	X
Morocco	X	X	X	X	X	X	X	X	X	X
Mozambique					X	X				
Myanmar	X	X	X	X	X	X	X	X		
Namibia										
Nauru										
Nepal										
Netherlands[a]	X	X	X	X	X	X	X	X		
New Caledonia										
New Zealand	X	X	X	X	X	X	X	X	X	X

Country or territory	2008		2009		2010		2011		2012	
	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments
Nicaragua	X	X	X	X	X	X	X	X	X	X
Niger										
Nigeria							X	X	X	X
Niue										
Norfolk Island										
Norway	X	X	X	X	X	X			X	X
Oman	X		X							
Pakistan	X	X	X	X	X	X	X	X	X	X
Palau										
Panama	X	X	X	X	X	X	X	X	X	X
Papua New Guinea										
Paraguay	X	X	X	X	X		X	X		
Peru	X	X	X	X	X	X	X	X	X	X
Philippines	X	X	X	X	X	X	X	X	X	X
Poland[a]	X	X	X	X	X	X	X	X	X	X
Portugal[a]	X		X	X	X		X		X	
Qatar							X	X		
Republic of Korea	X	X	X	X	X	X	X	X	X	X
Republic of Moldova	X	X	X	X	X	X	X	X	X	X
Romania[a]	X	X	X	X	X	X	X	X	X	X
Russian Federation	X	X	X	X	X	X	X	X	X	X
Rwanda										
Saint Helena	X	X	X	X			X	X		
Saint Kitts and Nevis										
Saint Lucia	X	X							X	X
Saint Vincent and the Grenadines									X	X
Samoa									X	X
San Marino										
Sao Tome and Principe										
Saudi Arabia	X		X	X	X		X		X	
Senegal	X		X	X	X					
Serbia	X	X	X	X	X	X	X	X	X	X
Seychelles	X	X					X	X	X	X
Sierra Leone										
Singapore	X	X	X	X	X	X	X	X	X	X
Sint Maarten[b]										
Slovakia[a]	X	X	X	X	X	X	X	X	X	X
Slovenia[a]	X	X	X	X	X	X	X	X	X	X

Country or territory	2008		2009		2010		2011		2012	
	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments	Trade	Uses and/or require-ments
Solomon Islands										
Somalia										
South Africa	X	X	X	X						
South Sudan[d]										
Spain[a]	X	X	X	X	X	X	X	X		X
Sri Lanka	X	X	X	X	X		X	X	X	X
Sudan										
Suriname										
Swaziland										
Sweden[a]	X	X	X	X	X	X	X	X	X	X
Switzerland	X	X	X	X	X	X	X	X	X	X
Syrian Arab Republic	X	X	X	X	X	X			X	X
Tajikistan	X		X	X	X	X	X	X	X	X
Thailand	X	X	X	X	X	X	X	X	X	X
The former Yugoslav Republic of Macedonia					X	X				
Timor-Leste										
Togo									X	X
Tonga										
Trinidad and Tobago	X	X	X	X	X	X	X	X	X	X
Tristan da Cunha										
Tunisia	X	X	X	X	X	X	X	X	X	X
Turkey			X	X	X	X	X	X	X	X
Turkmenistan	X	X							X	X
Turks and Caicos Islands										
Tuvalu							X	X		
Uganda	X	X	X	X	X	X	X	X	X	X
Ukraine	X	X	X	X	X	X	X	X	X	X
United Arab Emirates	X	X	X	X	X	X	X	X	X	X
United Kingdom[a]	X	X	X	X	X	X	X	X	X	X
United Republic of Tanzania			X	X	X	X	X	X	X	X
United States of America	X	X	X	X	X	X	X	X	X	X
Uruguay	X		X		X	X	X	X	X	X
Uzbekistan	X	X	X	X	X	X	X	X	X	X
Vanuatu							X	X		
Venezuela (Bolivarian Republic of)		X	X	X	X	X	X	X	X	X
Viet Nam	X	X	X	X	X	X	X	X		
Wallis and Futuna Islands										
Yemen	X	X	X		X		X	X	X	X

Country or territory	2008		2009		2010		2011		2012	
	Trade	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*	*Trade*	*Uses and/or require-ments*
Zambia										
Zimbabwe			X	X	X	X		X		
Total number of Governments that submitted form D	123	116	124	117	123	114	121	114	111	113
Total number of Governments requested to provide information	212	212	213	213	213	213	213	213	213	213

[a] State member of the European Union.
[b] The Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent entities, Curaçao and Sint Maarten.
[c] The Government of Switzerland includes on form D licit trade data for Liechtenstein.
[d] By its resolution 65/308 of 14 July 2011, the General Assembly decided to admit South Sudan to membership in the United Nations.

Annex X

Governments that have requested pre-export notifications pursuant to article 12, paragraph 10 (a), of the 1988 Convention

1. Governments of all exporting countries and territories are reminded that it is an obligation to provide pre-export notifications to Governments that have requested them pursuant to article 12, paragraph 10 (a), of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, which provides that:

> "... upon request to the Secretary-General by the interested Party, each Party from whose territory a substance in Table I is to be exported shall ensure that, prior to such export, the following information is supplied by its competent authorities to the competent authorities of the importing country:
>
> "(i) Name and address of the exporter and importer and, when available, the consignee;
>
> "(ii) Name of the substance in Table I;
>
> "(iii) Quantity of the substance to be exported;
>
> "(iv) Expected point of entry and expected date of dispatch;
>
> "(v) Any other information which is mutually agreed upon by the Parties."

2. Governments that have requested pre-export notifications under the above provisions are listed in the table below in alphabetical order, followed by the substance (or substances) to which the provisions apply and the date of notification of the request transmitted by the Secretary-General to Governments.

3. Governments may wish to note the possibility of requesting that a pre-export notification for all substances listed in Table II of the 1988 Convention be sent as well.

Notifying Government	*Substances to which the pre-export notification requirement applies*	*Date of communication to Governments by the Secretary-General*
Afghanistan[a]	All substances included in Tables I and II	13 July 2010
Algeria[a]	All substances included in Tables I and II	10 October 2013
Antigua and Barbuda[a]	All substances included in Tables I and II	5 May 2000
Argentina	All substances included in Table I	19 November 1999
Armenia[a]	All substances included in Table I and II[b,c]	4 July 2013
Australia[a]	All substances included in Tables I and II	12 February 2010
Austria	All substances included in Table I	19 May 2000[d]
Azerbaijan[a]	All substances included in Tables I and II	21 January 2011
Barbados[a]	All substances included in Tables I and II	24 October 2013
Belarus[e]	Acetic anhydride, ephedrine, potassium permanganate and pseudoephedrine	12 October 2000
Belgium	All substances included in Table I	19 May 2000[d]
Benin[a]	All substances included in Tables I and II	4 February 2000

Notifying Government	*Substances to which the pre-export notification requirement applies*	*Date of communication to Governments by the Secretary-General*
Bolivia (Plurinational State of)[a]	Acetic anhydride, acetone, ethyl ether, hydrochloric acid, potassium permanganate and sulphuric acid	12 November 2001
Brazil[a]	All substances included in Tables I and II	15 October and 15 December 1999
Bulgaria	All substances included in Table I	19 May 2000[d]
Canada[a]	All substances included in Tables I and II	31 October 2005
Cayman Islands[a]	All substances included in Tables I and II	7 September 1998
Chile[a]	All substances included in Tables I and II	19 October 2012
China	Acetic anhydride	20 October 2000
Hong Kong SAR of China[a]	All substances included in Tables I and II	28 December 2012
Macao SAR of China[a]	All substances included in Table I and II	28 December 2012
Colombia[a]	All substances included in Tables I and II	14 October 1998
Costa Rica[a]	All substances included in Tables I and II	27 September 1999
Côte d'Ivoire[a]	All substances included in Tables I and II	26 June 2013
Croatia	All substances included in Table I	19 May 2000[d]
Cyprus	All substances included in Table I	19 May 2000[d]
Czech Republic	All substances included in Table I	19 May 2000[d]
Denmark	All substances included in Table I	19 May 2000[d]
Dominican Republic[a]	All substances included in Tables I and II	11 September 2002
Ecuador[a]	All substances included in Tables I and II	1 August 1996
Egypt[a]	All substances included in Table I and acetone	3 December 2004
El Salvador[a]	All substances included in Tables I and II	29 July 2010
Estonia	All substances included in Table I	19 May 2000[d]
Ethiopia[a]	All substances included in Tables I and II	17 December 1999
Finland	All substances included in Table I	19 May 2000[d]
France	All substances included in Table I	19 May 2000[d]
Germany	All substances included in Table I	19 May 2000[d]
Ghana[a]	All substances included in Tables I and II	26 February 2010
Greece	All substances included in Table I	19 May 2000[d]
Haiti[a]	All substances included in Tables I and II	20 June 2002
Hungary	All substances included in Table I	19 May 2000[d]
India[a]	All substances included in Tables I and II	23 March 2000
Indonesia[a]	Acetic anhydride, *N*-acetylanthranilic acid, anthranilic acid, ephedrine, ergometrine, ergotamine, isosafrole, 3,4-methylenedioxyphenyl-2-propanone, phenylacetic acid, 1-phenyl-2-propanone, piperonal, pseudoephedrine and safrole	18 February 2000
Iraq[a]	All substances included in Tables I and II[b,c]	31 July 2013
Ireland	All substances included in Table I	19 May 2000[d]
Italy	All substances included in Table I	19 May 2000[d]

Notifying Government	*Substances to which the pre-export notification requirement applies*	*Date of communication to Governments by the Secretary-General*
Jamaica	All substances included in Table I[b,c]	4 July 2013
Japan	All substances included in Table I	17 December 1999
Jordan[a]	All substances included in Tables I and II	15 December 1999
Kazakhstan[a]	All substances included in Tables I and II	15 August 2003
Kenya[a]	All substances included in Tables I and II[b,c]	10 October 2013
Kyrgyzstan[a]	All substances included in Tables I and II[b,c]	21 October 2013
Latvia	All substances included in Table I	19 May 2000[d]
Lebanon[a]	All substances included in Tables I and II	14 June 2002
Libya[a]	All substances included in Tables I and II[b,c]	21 August 2013
Lithuania	All substances included in Table I	19 May 2000[d]
Luxembourg	All substances included in Table I	19 May 2000[d]
Madagascar[a]	All substances included in Tables I and II	31 March 2003
Malaysia[a]	All substances included in Table I,[b] anthranilic acid, ethyl ether and piperidine	21 August 1998
Maldives[a]	All substances included in Tables I and II	6 April 2005
Malta	All substances included in Table I	19 May 2000[d]
Mexico[a]	All substances included in Tables I and II	6 April 2005
Netherlands	All substances included in Table I	19 May 2000[d]
Nigeria[a]	All substances included in Tables I and II	28 February 2000
Oman[a]	All substances included in Tables I and II	16 April 2007
Pakistan[a]	All substances included in Tables I and II	12 November 2001 and 6 March 2013
Panama	Ephedrine, ergometrine, ergotamine, norephedrine and pseudoephedrine	14 August 2013
Paraguay[a]	All substances included in Tables I and II	3 February 2000
Peru[a]	Acetic anhydride, acetone, ephedrine, ergometrine, ergotamine, ethyl ether, hydrochloric acid, lysergic acid, methyl ethyl ketone, norephedrine, potassium permanganate, pseudoephedrine, sulphuric acid and toluene	27 September 1999
Philippines[a]	All substances included in Tables I and II	16 April 1999
Poland	All substances included in Table I	19 May 2000[d]
Portugal	All substances included in Table I	19 May 2000[d]
Qatar[a]	All substances included in Tables I and II[b,c]	16 July 2013
Republic of Korea[a]	All substances included in Table I and acetone	3 June 2008
Republic of Moldova[a]	All substances included in Tables I and II[b,c]	29 December 1998 and 8 November 2013
Romania	All substances included in Table I	19 May 2000[d]

Notifying Government	*Substances to which the pre-export notification requirement applies*	*Date of communication to Governments by the Secretary-General*
Russian Federation[a]	Acetic anhydride, ephedrine, ergometrine, ergotamine, 3,4-methylenedioxyphenyl-2-propanone, norephedrine, phenylacetic acid, 1-phenyl-2-propanone, potassium permanganate, pseudoephedrine and all substances included in Table II	21 February 2000
Saint Vincent and the Grenadines	All substances included in Tables I and II[b,c]	16 July 2013
Saudi Arabia[a]	All substances included in Tables I and II	18 October 1998
Sierra Leone[a]	All substances included in Tables I and II[b,c]	5 July 2013
Singapore	All substances included in Table I	5 May 2000
Slovakia	All substances included in Table I	19 May 2000[d]
Slovenia	All substances included in Table I	19 May 2000[d]
South Africa[a]	All substances included in Table I and anthranilic acid	11 August 1999
Spain	All substances included in Table I	19 May 2000[d]
Sri Lanka	All substances included in Table I	19 November 1999
Sweden	All substances included in Table I	19 May 2000[d]
Switzerland	All substances included in Table I	25 March 2013
Syrian Arab Republic[a]	All substances included in Tables I and II	24 October 2013
Tajikistan[a]	All substances included in Tables I and II	7 February 2000
Thailand[a]	All substances included in Table I (except potassium permanganate) and anthranilic acid[b]	18 October 2010
Togo[a]	All substances included in Tables I and II	6 August 2013
Tonga[a]	All substances included in Tables I and II[b,c]	4 July 2013
Trinidad and Tobago[a]	All substances included in Tables I and II[b,c]	15 August 2013
Turkey[a]	All substances included in Tables I and II	2 November 1995
United Arab Emirates[a]	All substances included in Tables I[b] and II	26 September 1995
United Kingdom	All substances included in Table I	19 May 2000[d]
United Republic of Tanzania[a]	All substances included in Tables I and II	10 December 2002
United States of America	Acetic anhydride, ephedrine and pseudoephedrine	2 June 1995 and 19 January 2001
Venezuela (Bolivarian Republic of)[a]	All substances included in Tables I and II	27 March 2000
Zimbabwe[a]	All substances included in Tables I and II[b,c]	4 July 2013
European Union (on behalf of all its States members)[f]	All substances included in Table I	19 May 2000[d]

Note: The names of territories and special administrative regions (SAR) are in italics.

[a] The Secretary-General has informed all Governments of the request of the notifying Government to receive a pre-export notification for some or all of the substances listed in Table II of the 1988 Convention as well.

[b] The Government has requested to receive pre-export notifications for pharmaceutical preparations containing ephedrine and pseudoephedrine as well.

[c] Government requested to receive pre-export notifications for safrole-rich oils as well.

[d] On 19 May 2000, the Secretary-General communicated to Governments the request by the European Commission, on behalf of the States members of the European Union, to receive pre-export notifications for the indicated substances.

[e] Not yet notified by the Secretary-General as, in a subsequent communication, the Government of Belarus requested the Secretary-General to suspend such notification until a national mechanism to receive and process pre-export notifications is established.

[f] Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom of Great Britain and Northern Ireland.

Annex XI

Licit uses of the substances in Table I and Table II of the 1988 Convention

Knowledge of the most common licit uses of substances in Tables I and II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, including the processes and end products in which the substances may be used, is essential to the verification of the legitimacy of orders or shipments. The most common licit uses of those substances reported to the International Narcotics Control Board are as follows:

Substance	*Licit uses*
Acetic anhydride	Acetylating and dehydrating agent used in the chemical and pharmaceutical industries for the manufacture of cellulose acetate, for textile sizing agents and cold bleaching activators, for polishing metals and for the production of brake fluids, dyes and explosives
Acetone	Common solvent in the chemical and pharmaceutical industries; used in the production of lubricating oils and as an intermediate in the manufacture of chloroform and in the manufacture of plastics, paints, varnishes and cosmetics
N-Acetylanthranilic acid	Used in the manufacture of pharmaceuticals, plastics and fine chemicals
Anthranilic acid	Chemical intermediate used in the manufacture of dyes, pharmaceuticals and perfumes; also used in the preparation of bird and insect repellents
Ephedrine	Used in the manufacture of bronchodilators (cough medicines)
Ergometrine	Used in the treatment of migraine and as an oxytocic in obstetrics
Ergotamine	Used in the treatment of migraine and as an oxytocic in obstetrics
Ethyl ether	Commonly used solvent in chemical laboratories and in the chemical and pharmaceutical industries; mainly used as an extractant for fats, oils, waxes and resins; also used for the manufacture of munitions, plastics and perfumes and, in medicine, as a general anaesthetic
Hydrochloric acid	Used in the production of chlorides and hydrochlorides, for the neutralization of basic systems and as a catalyst and solvent in organic synthesis
Isosafrole	Used in the manufacture of piperonal; to modify "oriental perfumes"; to strengthen soap perfumes; in small quantities, together with methyl salicylate, in root beer and sarsaparilla flavours; and as a pesticide
Lysergic acid	Used in organic synthesis
3,4-Methylenedioxyphenyl-2-propanone	Used in the manufacture of piperonal and other perfume components
Methyl ethyl ketone	Common solvent; used in the manufacture of coatings, solvents, degreasing agents, lacquers, resins and smokeless powders
Norephedrine	Used in the manufacture of nasal decongestants and appetite suppressants

Substance	*Licit uses*
Phenylacetic acid	Used in the chemical and pharmaceutical industries for the manufacture of phenylacetate esters, amphetamine and some derivatives; also used for the synthesis of penicillins and in fragrance applications and cleaning solutions
1-Phenyl-2-propanone	Used in the chemical and pharmaceutical industries for the manufacture of amphetamine, methamphetamine and some derivatives; also used for the synthesis of propylhexedrine
Piperidine	Commonly used solvent and reagent in chemical laboratories and in the chemical and pharmaceutical industries; also used in the manufacture of rubber products and plastics
Piperonal	Used in perfumery, in cherry and vanilla flavours, in organic synthesis and as a component for mosquito repellent
Potassium permanganate	Important reagent in analytical and synthetic organic chemistry; used in bleaching applications, disinfectants, antibacterials and antifungal agents and in water purification
Pseudoephedrine	Used in the manufacture of bronchodilators and nasal decongestants
Safrole	Used in perfumery, for example in the manufacture of piperonal, and for denaturing fats in soap manufacture
Sulphuric acid	Used in the production of sulphates; as an acidic oxidizer; as a dehydrating and purifying agent; for the neutralization of alkaline solutions; as a catalyst in organic synthesis; in the manufacture of fertilizers, explosives, dyestuffs and paper; and as a component of drain and metal cleaners, anti-rust compounds and automobile battery fluids
Toluene	Industrial solvent; used in the manufacture of explosives, dyes, coatings and other organic substances and as a gasoline additive

About the International Narcotics Control Board

The International Narcotics Control Board (INCB) is an independent and quasi-judicial control organ, established by treaty, for monitoring the implementation of the international drug control treaties. It had predecessors under the former drug control treaties as far back as the time of the League of Nations.

Composition

INCB consists of 13 members who are elected by the Economic and Social Council and who serve in their personal capacity, not as Government representatives. Three members with medical, pharmacological or pharmaceutical experience are elected from a list of persons nominated by the World Health Organization (WHO) and 10 members are elected from a list of persons nominated by Governments. Members of the Board are persons who, by their competence, impartiality and disinterestedness, command general confidence. The Council, in consultation with INCB, makes all arrangements necessary to ensure the full technical independence of the Board in carrying out its functions. INCB has a secretariat that assists it in the exercise of its treaty-related functions. The INCB secretariat is an administrative entity of the United Nations Office on Drugs and Crime, but it reports solely to the Board on matters of substance. INCB closely collaborates with the Office in the framework of arrangements approved by the Council in its resolution 1991/48. INCB also cooperates with other international bodies concerned with drug control, including not only the Council and its Commission on Narcotic Drugs, but also the relevant specialized agencies of the United Nations, particularly WHO. It also cooperates with bodies outside the United Nations system, especially the International Criminal Police Organization (INTERPOL) and the World Customs Organization.

Functions

The functions of INCB are laid down in the following treaties: the Single Convention on Narcotic Drugs of 1961 as amended by the 1972 Protocol; the Convention on Psychotropic Substances of 1971; and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988. Broadly speaking, INCB deals with the following:

(a) As regards the licit manufacture of, trade in and use of drugs, INCB endeavours, in cooperation with Governments, to ensure that adequate supplies of drugs are available for medical and scientific uses and that the diversion of drugs from licit sources to illicit channels does not occur. INCB also monitors Governments' control over chemicals used in the illicit manufacture of drugs and assists them in preventing the diversion of those chemicals into the illicit traffic;

(b) As regards the illicit manufacture of, trafficking in and use of drugs, INCB identifies weaknesses in national and international control systems and contributes to correcting such situations. INCB is also responsible for assessing chemicals used in the illicit manufacture of drugs, in order to determine whether they should be placed under international control.

In the discharge of its responsibilities, INCB:

(a) Administers a system of estimates for narcotic drugs and a voluntary assessment system for psychotropic substances and monitors licit activities involving drugs through a statistical returns system, with a view to assisting Governments in achieving, inter alia, a balance between supply and demand;

(b) Monitors and promotes measures taken by Governments to prevent the diversion of substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances and assesses such substances to determine whether there is a need for changes in the scope of control of Tables I and II of the 1988 Convention;

(c) Analyses information provided by Governments, United Nations bodies, specialized agencies or other competent international organizations, with a view to ensuring that the provisions of the international drug control treaties are adequately carried out by Governments, and recommends remedial measures;

(d) Maintains a permanent dialogue with Governments to assist them in complying with their obligations under the international drug control treaties and, to that end, recommends, where appropriate, technical or financial assistance to be provided.

INCB is called upon to ask for explanations in the event of apparent violations of the treaties, to propose appropriate remedial measures to Governments that are not fully applying the provisions of the treaties or are encountering difficulties in applying them and, where necessary, to assist Governments in overcoming such difficulties. If, however, INCB notes that the measures necessary to remedy a serious situation have not been taken, it may call the matter to the attention of the parties concerned, the Commission on Narcotic Drugs and the Economic and Social Council. As a last resort, the treaties empower INCB to recommend to parties that they stop importing drugs from a defaulting country, exporting drugs to it or both. In all cases, INCB acts in close cooperation with Governments.

INCB assists national administrations in meeting their obligations under the conventions. To that end, it proposes and participates in regional training seminars and programmes for drug control administrators.

Reports

The international drug control treaties require INCB to prepare an annual report on its work. The annual report contains an analysis of the drug control situation worldwide so that Governments are kept aware of existing and potential situations that may endanger the objectives of the international drug control treaties. INCB draws the attention of Governments to gaps and weaknesses in national control and in treaty compliance; it also makes suggestions and recommendations for improvements at both the national and international levels. The annual report is based on information provided by Governments to INCB, United Nations entities and other organizations. It also uses information provided through other international organizations, such as INTERPOL and the World Customs Organization, as well as regional organizations.

The annual report of INCB is supplemented by detailed technical reports. They contain data on the licit movement of narcotic drugs and psychotropic substances required for medical and scientific purposes, together with an analysis of those data by INCB. Those data are required for the proper functioning of the system of control over the licit movement of narcotic drugs and psychotropic substances, including preventing their diversion to illicit channels. Moreover, under the provisions of article 12 of the 1988 Convention, INCB reports annually to the Commission on Narcotic Drugs on the implementation of that article. That report, which gives an account of the results of the monitoring of precursors and of the chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances, is also published as a supplement to the annual report.

INTERNATIONAL NARCOTICS CONTROL BOARD

The International Narcotics Control Board (INCB) is the independent monitoring body for the implementation of United Nations international drug control conventions. It was established in 1968 in accordance with the Single Convention on Narcotic Drugs, 1961. It had predecessors under the former drug control treaties as far back as the time of the League of Nations.

Based on its activities, INCB publishes an annual report that is submitted to the United Nations Economic and Social Council through the Commission on Narcotic Drugs. The report provides a comprehensive survey of the drug control situation in various parts of the world. As an impartial body, INCB tries to identify and predict dangerous trends and suggests necessary measures to be taken.

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