

## I. Introduction

1. The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances<sup>1</sup> of 1988 provides for measures to prevent the diversion of precursor and essential chemicals into the illicit manufacture of drugs. The International Narcotics Control Board monitors the control of Governments over precursors and essential chemicals and assists them in preventing the diversion of those chemicals into illicit traffic.

2. The present report, which is the twentieth annual report on precursors published by the Board, has been restructured and now includes a thematic chapter. Following the executive summary and the introduction, substantive reporting begins in chapter II, which provides statistics and information on actions taken by Governments and the Board under the provisions of article 12 of the 1988 Convention. This includes the utilization of the Pre-Export Notification (PEN) Online system and the results of task force operational support under Project Prism and Project Cohesion. Chapter III details the extent of legitimate trade in precursors and the latest major trends in the trafficking and illicit use of chemicals, highlighting the most relevant cases of suspicious and stopped shipments in and diversions or attempted diversions from international trade, as well as seizures of those substances.

3. Chapter IV provides a thematic examination of 20 years of precursor control. It assesses the implementation of article 12 of the 1988 Convention, reviews the results in precursor control to date and, based on collective knowledge, looks to the future. Chapter V provides recommendations to Governments on the way forward for effective international and domestic precursor control.

4. Annexes I to XI provide updated, practical information that is intended to assist competent national authorities in carrying out their functions, including information on estimated annual legitimate requirements for the import of selected substances that are frequently used in the illicit manufacture of amphetamine-type stimulants, 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 I-VI can be found in the printed copy, while all annexes are available in the CD-ROM version of the report and online from the Board's website ([www.incb.org](http://www.incb.org)).

<sup>1</sup> United Nations, *Treaty Series*, vol. 1582, No. 27627.

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

### A. Scope of control

5. The transfer of phenylacetic acid from Table II to Table I of the 1988 Convention became effective on 17 January 2011.

6. In 2011 the Board, pursuant to Economic and Social Council resolution 1992/29 on measures to prevent the diversion of precursor and essential chemicals to the illicit manufacture of narcotic drugs and psychotropic substances, undertook with the World Customs Organization the establishment of a discrete tariff code for preparations containing ephedrine and pseudoephedrine to facilitate the monitoring of international trade in those substances and the identification of diversion attempts.

7. Trade in precursors, like trade in every other commodity, is monitored by customs authorities worldwide using an internationally standardized classification system of names and numbers referred to as the Harmonized Commodity Description and Coding System. While all internationally controlled precursors, including ephedrine and pseudoephedrine in bulk form, have a discrete code, pharmaceutical preparations containing ephedrine and pseudoephedrine do not. Thus, competent national authorities are presently unable to identify specifically imports or exports of those preparations from a broader grouping of pharmaceutical preparations. That weakness has often been misused by traffickers in their attempts to disguise the nature of large shipments of such preparations across borders.

8. The use of discrete Harmonized Commodity Description and Coding System codes for pharmaceutical preparations containing ephedrine and pseudoephedrine would also result in more accurate reporting of licit trade in such preparations on form D and ease the identification of shipments that exceed the annual legitimate requirements of importing countries for such substances.

### B. Adherence to the 1988 Convention

9. As at 31 October 2011, the 1988 Convention had been ratified, acceded to or approved by 184 States and formally confirmed by the European Union (extent of competence: article 12). Following the issuance of the 2010 report of the Board on the implementation of article 12, the Marshall Islands became a party to the Convention.<sup>2</sup>

<sup>2</sup> The Marshall Islands became a party to the Convention on 5 November 2010.

Sint Maarten and Curaçao, formerly part of the Netherlands Antilles, became constituent countries within the Kingdom of the Netherlands in October 2010. Details on accessions by region can be found in annex I.

10. Of the 11 States that have yet to become parties to the 1988 Convention,<sup>3</sup> six are in Oceania. The low rate of accession to the 1988 Convention in Oceania, as well as the geographical proximity of the region to illicit drug manufacturing areas, makes the region vulnerable to trafficking in precursors. Therefore, the Board again urges the 11 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.

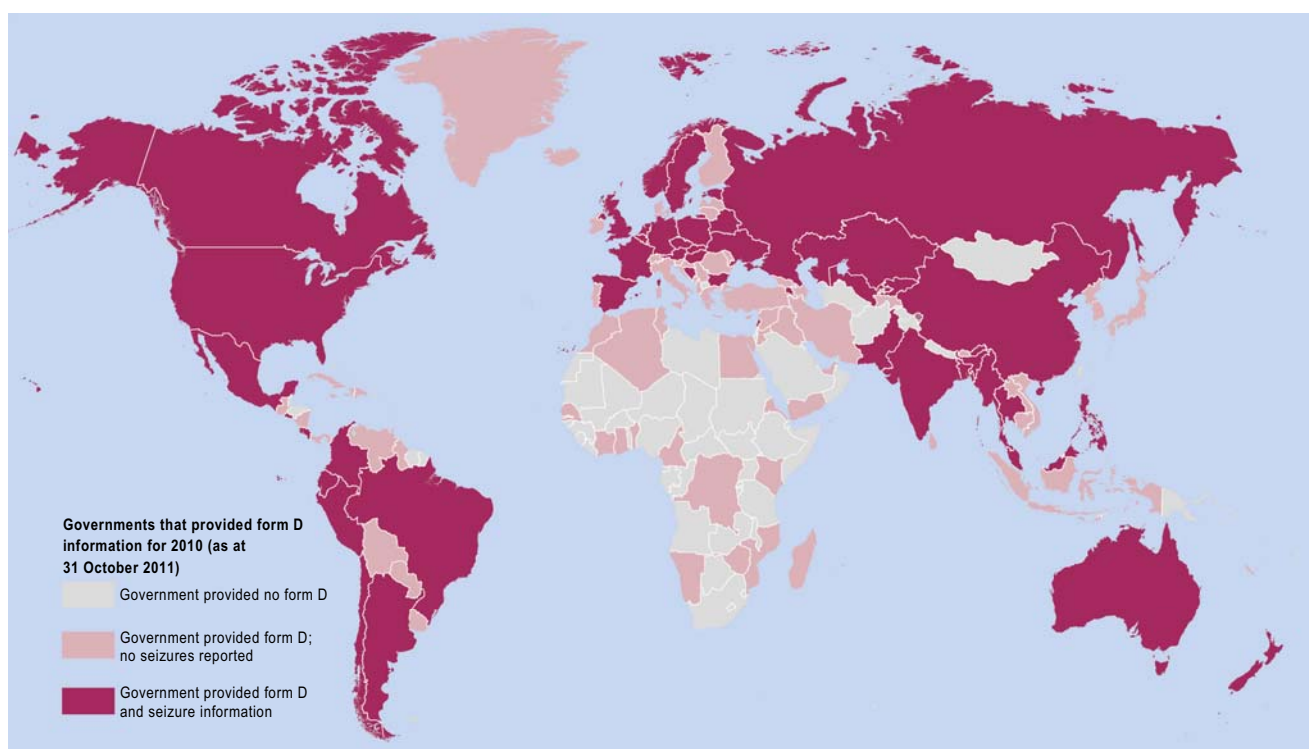
### C. Reporting to the Board pursuant to article 12 of the 1988 Convention

11. Governments are obliged to report annually on substances frequently used in the illicit manufacture of narcotic drugs and psychotropic substances (form D). That information is subsequently used to identify regional and

global patterns and trends. As at 31 October 2011, a total of 132 States and territories had submitted form D for the year 2010 (see annex VII). Less than half of Governments submit their form D by the deadline of 30 June of each year, while several middle-income and many low-income countries fail to report altogether. The Board reminds all States parties to comply with their reporting obligations under the 1988 Convention and to submit form D, using the latest version available, in a timely manner. The latest version is available in all official languages of the United Nations from the Board's web page ([www.incb.org](http://www.incb.org)).

12. Reporting on form D is not always complete. For example, only about 29 per cent of Governments in Oceania and one third of those in Africa, Central America and the Caribbean provided a form D for 2010. Some States parties to the 1988 Convention (e.g. Burundi and Gabon) have never submitted form D to the Board, while a number of States have not submitted form D for the past several years. The Board recognizes Gambia for its first-time submission of form D for 2010.

Figure I. Governments submitting form D and those providing seizure data for 2010



<sup>3</sup> Equatorial Guinea, Holy See, Kiribati, Nauru, Palau, Papua new Guinea, South Sudan, Solomon Islands, Somalia, Timor-Leste and Tuvalu.

13. As at 31 October 2011, 51 Governments had reported seizures of Table I or Table II substances on form D for 2010. Twenty-nine Governments had reported seizures of substances not included in Tables I or II. Some provided information on methods of diversion, illicit manufacture or stopped shipments; others, however, submitted insufficient information or aggregated figures without enough details to allow the Board to analyse and identify emerging trends in trafficking in precursors and illicit manufacture of drugs. The Board therefore urges all Governments effecting seizures to provide comprehensive, mandatory information on methods of diversion, stopped shipments and illicit manufacture.

#### 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 Tables I and II of the 1988 Convention and maintains a directory of those requirements to assist Governments in monitoring trade in controlled chemicals. Since the ninety-ninth session of the Board, in November 2010, several changes in control measures applied by Governments have been brought to the attention of the Board (see paras. 15-19 below).

15. Following the transfer of phenylacetic acid from Table II to Table I, several countries amended their legislation accordingly. In March 2011, the European Commission adopted Commission Regulation (EU) No. 225/2011, which requires member States of the European Union to furnish pre-export notification for exports of phenylacetic acid from the European Union and for exports of Table II substances to Afghanistan, Australia and Ghana, following their invoking article 12, paragraph 10 (a), of the 1988 Convention.

16. The trend of strengthening controls over precursors of amphetamine-type stimulants continued throughout Central and South America. In February 2011, El Salvador began prohibiting the import, export, production, manufacture, possession, distribution, storage, sale, transfer or transport of phenylacetic acid and its derivatives without express permission from the Government. Effective April 2011, Nicaragua began prohibiting the import and use of phenylacetic acid and its esters, as well as *N*-acetylanthranilic acid and anthranilic acid. In December 2010, Guatemala strengthened existing controls over phenylacetic acid and its derivatives, along with acetic anhydride and potassium permanganate. In February 2011, Paraguay established standards and requirements for the import, export and sale of medicines containing *Ephedra*, ephedrine and pseudoephedrine, their salts, their optical

isomers or the salts of their optical isomers, esters or other derivatives as a single drug or combination preparation. Colombia amended the ban on domestic use of ephedrine and pseudoephedrine to allow imports of the two substances exclusively for the manufacture of pharmaceutical preparations for export.<sup>4</sup> The Board reminds Governments of exporting countries to keep themselves informed of the importing country's existing import restrictions to ensure that their exports do not violate the laws and regulations of the importing country, and to consult available resources, such as the information package for competent national authorities available on the Board's website.

17. Effective April 2011, the United States began requiring mail-order retailers of pharmaceutical preparations containing ephedrine, pseudoephedrine or norephedrine to apply the training and self-certification requirements that were previously applicable only to other retail sellers. The new law also includes provisions covering two new offences: negligently failing to self-certify as required, and distributing pharmaceutical preparations to sellers who are not self-certified. The law requires the country's Drug Enforcement Administration to maintain a list of self-certified persons for this purpose.

18. In March 2011, the Government of Canada broadened the existing Controlled Drugs and Substances Act to prohibit any person from knowingly possessing, producing, selling or importing anything to be used in the illicit manufacture or trafficking of either methamphetamine or 3,4-methylenedioxymethamphetamine (MDMA, commonly known as "ecstasy").

19. In September 2010, China strengthened control measures over online trading in precursors, requiring all entities that sell precursors through the Internet to be registered.

20. In the light of the continuing challenges to the international precursor control system presented by pharmaceutical preparations containing ephedrine and pseudoephedrine, in March 2011, at the fifty-fourth session of the Commission on Narcotic Drugs, Member States adopted resolution 54/8, in which Governments were encouraged to utilize the PEN Online system for pre-export notification of pharmaceutical preparations containing ephedrine and pseudoephedrine. Malaysia, Thailand and the United Arab Emirates have each requested that they receive pre-export notifications for pharmaceutical preparations. The Board welcomes the increased focus on shipments of ephedrine and pseudoephedrine in the form

<sup>4</sup> Ministry of Social Protection resolution 3962, effective 23 October 2009.

of pharmaceutical preparations and encourages Governments to utilize the PEN Online system for pre-export notification of such preparations in accordance with Commission on Narcotic Drugs resolution 54/8.

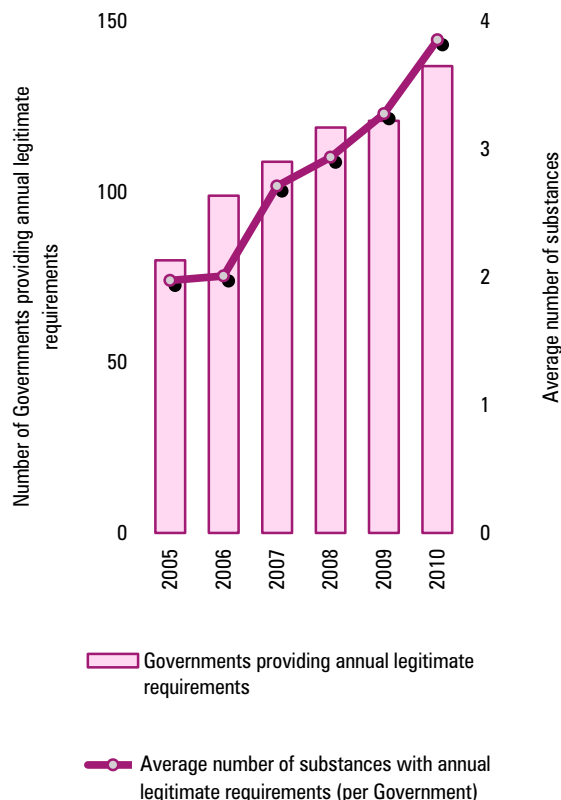
### E. Submission of data on licit trade in, uses of and requirements for precursors

21. In accordance with Economic and Social Council resolution 1995/20, Governments provide data on their licit trade in, uses of and requirements for Table I and Table II substances, which enables the Board to identify both trends in the international trade in precursors and unusual or suspicious trade patterns. As at 31 October 2011, 120 States and territories had provided information on licit trade and 113 had furnished data on licit uses of and requirements for precursors (see annex IX).

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

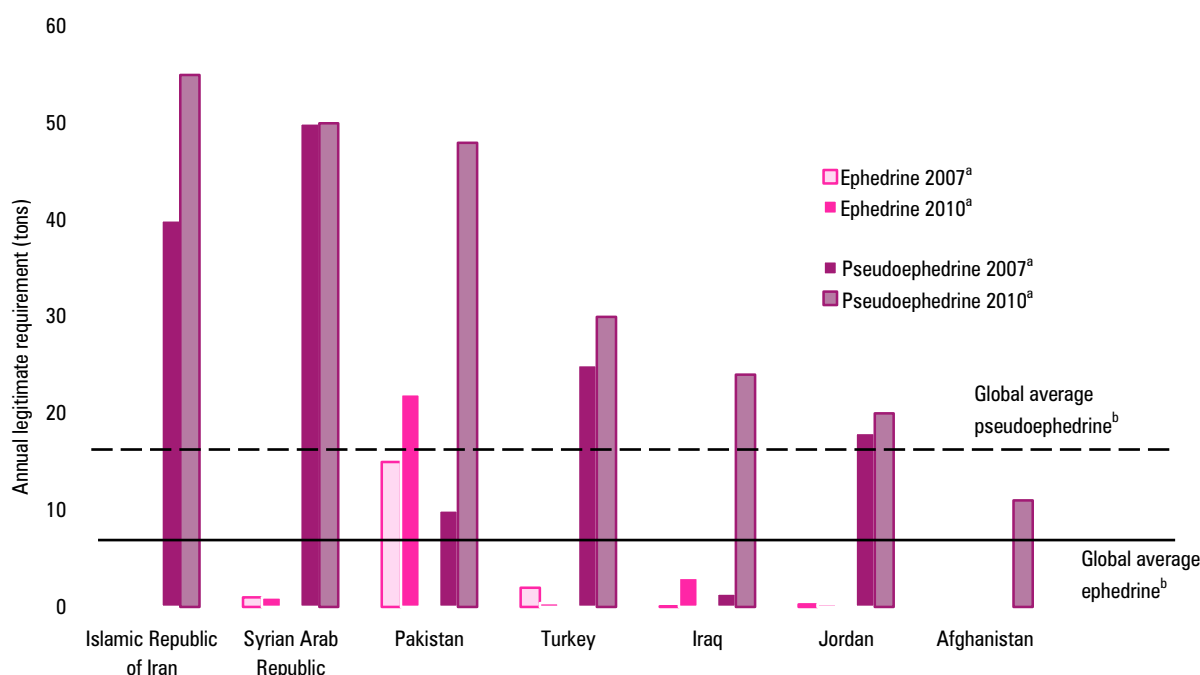
22. In its resolution 49/3, the Commission on Narcotic Drugs requested Member States to provide the Board with annual estimates of their legitimate requirements for the imports of four substances frequently used in the manufacture of amphetamine-type stimulants: 3,4-methylenedioxyphenyl-2-propanone (3,4-MDP-2-P), 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 can be easily used or recovered by readily applicable means. Both the number of Governments and the number of substances for which such estimates are provided have increased steadily in recent years. As at 31 October 2011, 137 Governments had provided such estimates for at least one substance, and on average for four substances. First-time submissions were provided by Bhutan, Christmas Island, the Cocos (Keeling) Islands, Denmark, the Gambia, the Lao People's Democratic Republic, Namibia, the Netherlands, Senegal, Singapore, Trinidad and Tobago, Ukraine and Uzbekistan. Estimated annual legitimate requirements submitted by Governments are listed in annex II, and are regularly updated on the Board's website.

**Figure II. Number of Governments providing estimates of annual legitimate requirements and the average number of substances for which such information was provided, 2005-2010**



23. Estimates of annual legitimate requirements are an effective tool that assists Governments in assessing the legitimacy of chemical shipments. Rapid or significant increases in such estimates can be used to identify countries and regions where the risk of diversion is increasing. For example, estimates of annual legitimate requirements for bulk pseudoephedrine on a per capita basis in West Asia more than tripled between 2007 and 2010. During that period, large increases in such estimates were reported by the Islamic Republic of Iran (from 40 tons to 55 tons), Iraq (from 1.4 tons to 14 tons) and Pakistan (from 10 tons to 48 tons), among others, far exceeding per-country average annual legitimate requirements. On a per capita basis, Jordan and the Syrian Arab Republic have consistently reported unusually high estimates of their annual legitimate requirements for bulk pseudoephedrine — between 10 and 20 times the global average. The Board encourages countries in West Asia to review both their estimates of annual legitimate requirements and their methods for calculating such estimates. Furthermore, the Board invites all Governments to inform it of the methodologies used for preparing their estimates.

**Figure III. Annual legitimate requirements for combined bulk and pharmaceutical preparations containing ephedrine or pseudoephedrine from select countries in West Asia, 2007 and 2010**



<sup>a</sup> Totals include both bulk and pharmaceutical preparation forms of the substances.

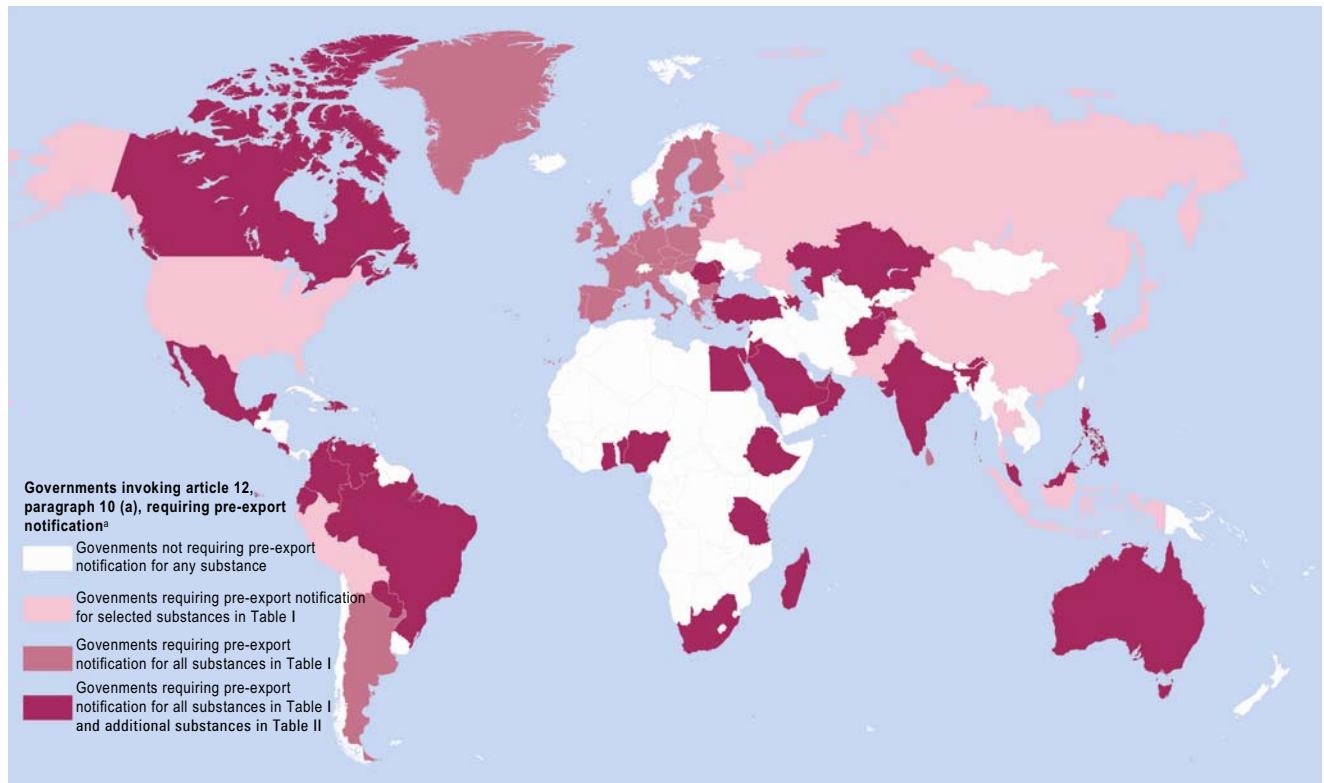
<sup>b</sup> Global average per-country annual legitimate requirements for those Governments requiring a minimum of 10 or more kg in 2010.

24. While many Governments update their estimates of annual legitimate requirements annually to reflect changing market conditions, some have not done so for years. Others have authorized imports of those substances in quantities far in excess of their published estimates. Nearly a third of Governments, including those of some major trading countries, have yet to provide an estimate of their annual legitimate requirements for any of the amphetamine-type stimulant substances. The Board encourages Governments to regularly review their estimates of annual legitimate requirements, utilizing the most recent market data. The Board also calls upon Governments, especially those with significant trade (including re-export) in the four substances and their preparations, to exercise continuing vigilance to ensure that their estimates of annual legitimate requirements are commensurate with prevailing market conditions.

## G. Pre-export notifications

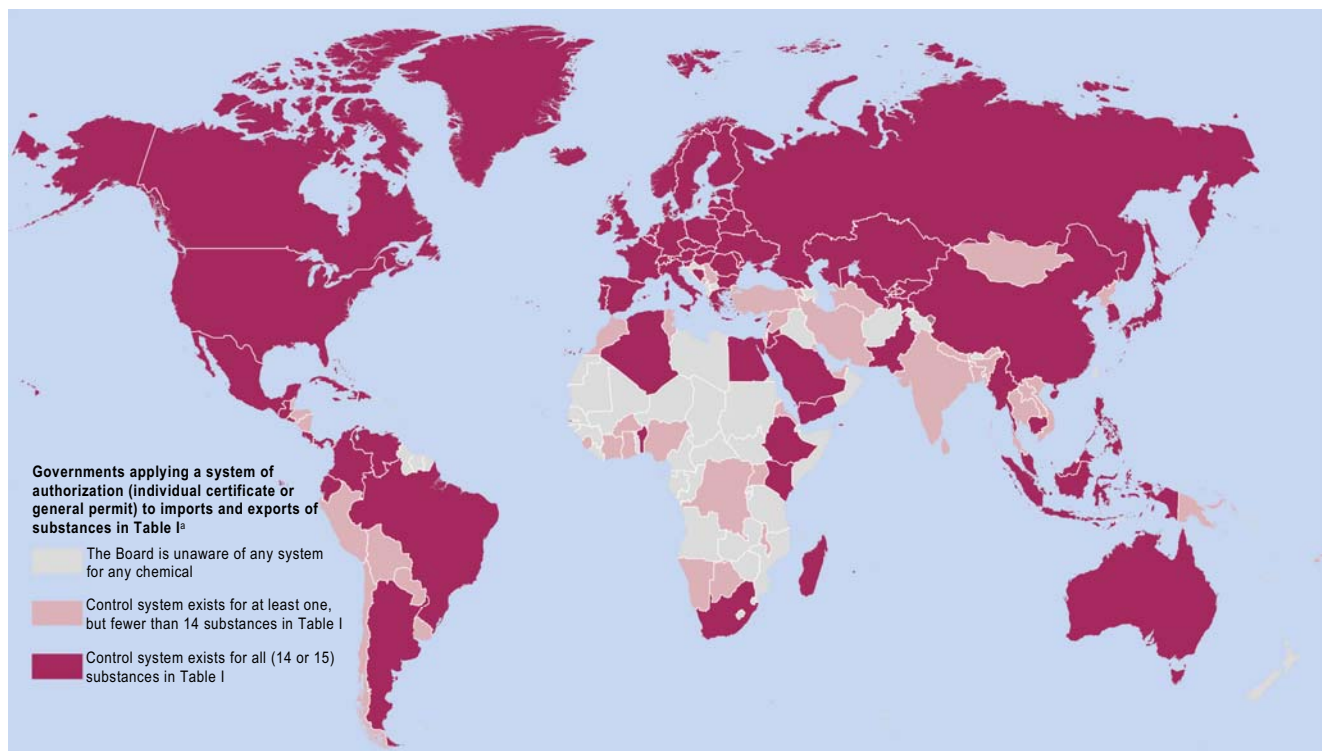
25. A fundamental tool for preventing the diversion of precursors from international trade is for Governments to invoke article 12, paragraph 10 (a), of the 1988 Convention, which requires exporting countries to inform importing countries of proposed chemical shipments. As at 31 October 2011, 79 Governments, including those of two territories, had formally requested pre-export notifications (see annex X). Since the previous report, the Government of Azerbaijan had requested pre-export notifications for all Table I and Table II substances. In some regions, however, the majority of countries had yet to invoke the right to be informed, leaving large areas vulnerable to the diversion and attempted diversion of chemicals into illicit channels. The Board encourages all Governments to invoke their right to be notified of all exports of precursors destined for their country. The Board wishes to remind Governments of all parties to the 1988 Convention that it is an obligation to provide pre-export notifications to Governments of importing countries and territories that have officially requested them.

**Figure IV. Governments invoking article 12, paragraph 10 (a), of the 1988 Convention (as at 31 October 2011)**



a For details, see annex X in the present publication.

**Figure V. Governments informing the Board of their import and export control system for substances in Table I**



a Source: Information package of the Board on the control of precursors 2011 (E/INCB/2011/WP.5)

26. At the same time, the Board is aware that some countries do not apply a system of authorizations to exports of certain precursors listed in Table I and Table II, or base the export authorization solely on the issuance of a general permit. The Board is concerned that these countries might not be in a position to comply with their treaty obligation to provide notifications to importing countries prior to the export of precursors. In addition, experience shows that countries applying less stringent controls over precursors, in particular non-traditional trading countries, are at a greater risk of being targeted by traffickers of precursors. The Board therefore urges Governments of all countries and territories to verify their precursor control mechanisms to ensure that they are informed of any proposed export of precursors and are able to provide pre-export notifications, particularly to the importing countries that have officially requested such notifications.

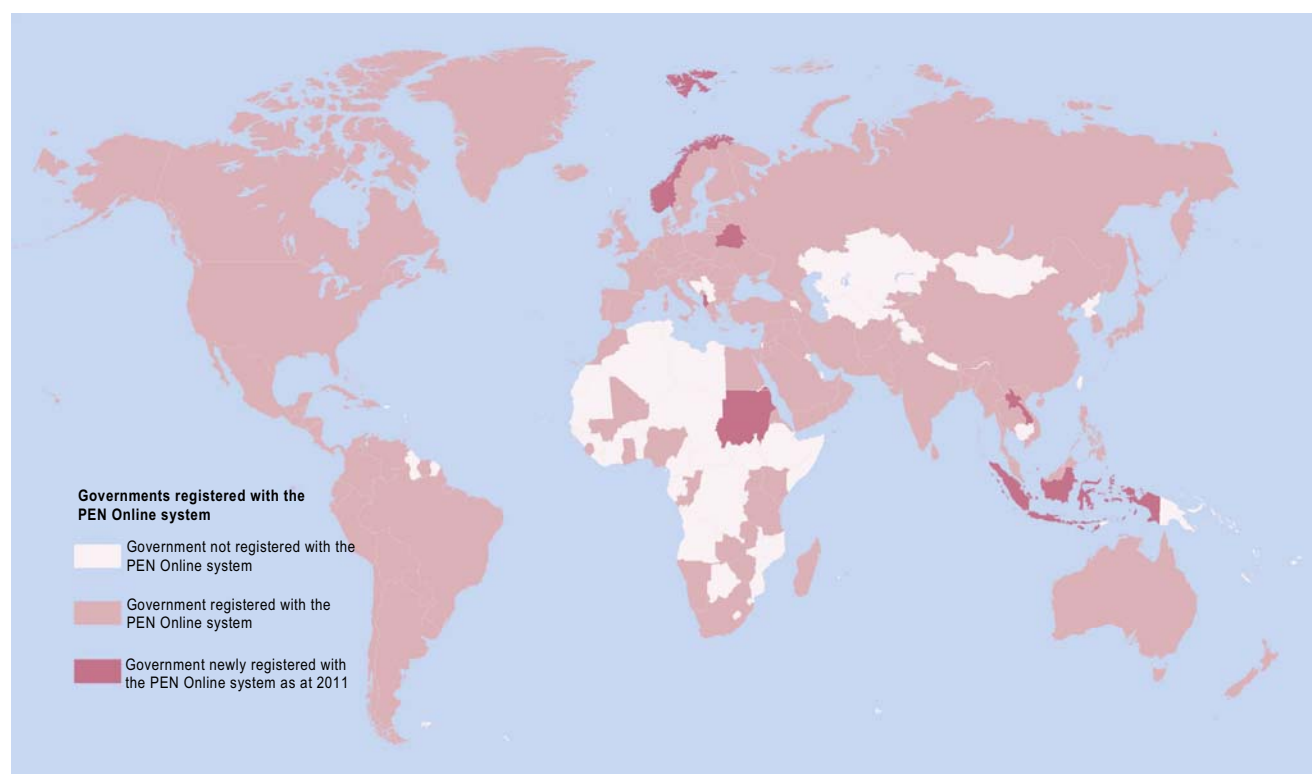
27. The Board's PEN Online system was officially launched in March 2006 and has since become a highly effective, cost-free tool that allows Governments to monitor international trade in scheduled substances and to rapidly identify suspicious shipments. As at 31 October 2011, 126 countries and territories had registered to access PEN Online. In 2011, the Governments of Albania, Belarus,

Indonesia, the Lao People's Democratic Republic, Norway and the Sudan each registered with the PEN Online system. On average, more than 1,800 pre-export notifications are submitted through the system every month, a significant increase over the roughly 600 monthly notifications just four years ago. The Board encourages all Governments that are not currently registered with the PEN Online system to do so without delay.

28. Among countries that have not yet registered with PEN Online, many are in regions that are actively being targeted by traffickers as both a transit point and a destination for precursors. These include substantial parts of Africa, areas of South-Eastern Europe and much of Central Asia.

29. Timely submission of notifications and subsequent feedback are fundamental elements of the PEN Online system; however, in some cases notifications regarding the export of chemicals are not being submitted early enough for proper checking by importing countries or are received after the shipment has departed. The Board reminds Governments of their obligation under article 12 of the 1988 Convention to provide notification regarding exports of chemicals before such exports depart to those countries that have requested notification. Governments

**Figure VI. Governments registered with the PEN Online system (as at 31 October 2011)**



are also encouraged to respond by the verification deadline when denying authorization for a shipment. If more time is needed for the verification of a particular transaction, the competent authorities of the importing country should inform the exporting country and ask it to delay the delivery of the shipment, pending the outcome of the verification.

30. Although most countries that are major traders of precursors are actively using the PEN Online system, a number of registered Governments do not utilize it. Additionally, some fail to use the PEN Online system for every chemical transaction, while others may not be reviewing the pre-export notifications they receive. The Board urges Governments that have already registered with the PEN Online system to make active use of the system for every transaction involving precursors. In those cases in which there are any grounds for suspicion, exporting countries are encouraged to release shipments only upon official confirmation from the competent authority of the importing country. Importing countries are reminded to use the reply function of the PEN Online system (rather than sending e-mails or faxes) to provide feedback, when necessary, in order to ensure an unbroken chain of monitoring throughout the system.

31. Information from Taiwan Province of China on precursors is not provided to the Board. According to statistics reported in the Global Trade Atlas online data system, as cited in the 2011 *International Narcotics Control Strategy Report* of the United States, Taiwan Province of China was the third single largest exporter of pseudoephedrine (75.5 tons) and the fourth largest exporter of ephedrine (7.7 tons) globally in 2009.<sup>5</sup> Notifications through the PEN Online system and reporting on form D identified 25 countries trading significant amounts of acetic anhydride with Taiwan Province of China since 2005. Seizures of diverted precursors, including those in the form of pharmaceutical preparations, that originated there have been reported to the Board previously. The current situation represents a significant weakness in the international control mechanism, as a result of which the diversion of chemicals into illicit trade occurs. The Board invites the Government of China to discuss appropriate ways and means of addressing pre-export notifications, suspicious shipments and attempted chemical diversion cases related to Taiwan Province of China.

<sup>5</sup> United States Department of State, Bureau of International Narcotics and Law Enforcement Affairs, *International Narcotics Control Strategy Report: 2011* (March 2011), vol. I, pp. 83-84.

## H. Activities and achievements under Project Prism and Project Cohesion

32. The two international initiatives of the Board, Project Prism and Project Cohesion, serve as communication platforms for the monitoring of licit trade in chemicals that can be used in the illicit manufacture of, respectively, amphetamine-type stimulants, and heroin and cocaine, and for launching targeted, time-bound operations. Specifically, the reporting period saw the March 2011 launch of Operation PAAD (Phenylacetic Acid and its Derivatives) under Project Prism, as well as the continuation of post-operation communications under Operation Pila (2009/10). The activities and results of Operation PAAD were evaluated at the Project Prism Task Force meeting held in Canberra in October 2011. The results of that meeting are summarized in paragraphs 34-38 below. There were no new operational activities under Project Cohesion during the reporting period.

33. Together with the Project Cohesion and Project Prism task forces, a new secure platform for communication has been designed to quickly share real-time information about seizures, diversions and attempted diversions among competent national authorities. Task force members operationally tested and evaluated the new platform, which is expected to be fully implemented during 2012.

### 1. Activities and achievements under Project Prism

34. The results of various task force operations under Project Prism have demonstrated the ability of organized chemical traffickers to rapidly adapt to pressure from regulatory and law enforcement agencies. Operation Crystal Flow (2007) determined that ephedrine and pseudoephedrine, largely in bulk form, were still readily available to criminals operating in Mexico. Operation Ice Block (2008) determined that traffickers were shifting to precursors in the form of pharmaceutical preparations to circumvent international controls. Operation Pila (2009/10) confirmed the shift towards pharmaceutical preparations and, in its post-operational phase, suggested a return of the P-2-P method for manufacturing methamphetamine, particularly in Mexico. Operation PAAD identified the size and scope of diversion of phenylacetic acid derivatives (esters) to Mexico and Central American countries. The Task Force reviewed in detail the results of Operation PAAD, which focused on global trade in phenylacetic acid and its derivatives that are not under international control.<sup>6</sup> Operation PAAD was launched on

<sup>6</sup> Also referred to as esters of phenylacetic acid.



1 March 2011 and ended on 31 August 2011 and built on experiences from previous operations. Operation PAAD generated important strategic and operational information on the unprecedented amounts and specific types of phenylacetic acid derivatives used in the manufacture of methamphetamine, their source and destination countries, trafficking routes and *modi operandi*. The results highlight the rapid changes in precursors and inherent weaknesses in both international and national control mechanisms. Highlights of the achievements of Operation PAAD can be found in chapter III of the present report (see paras. 89-94 below).

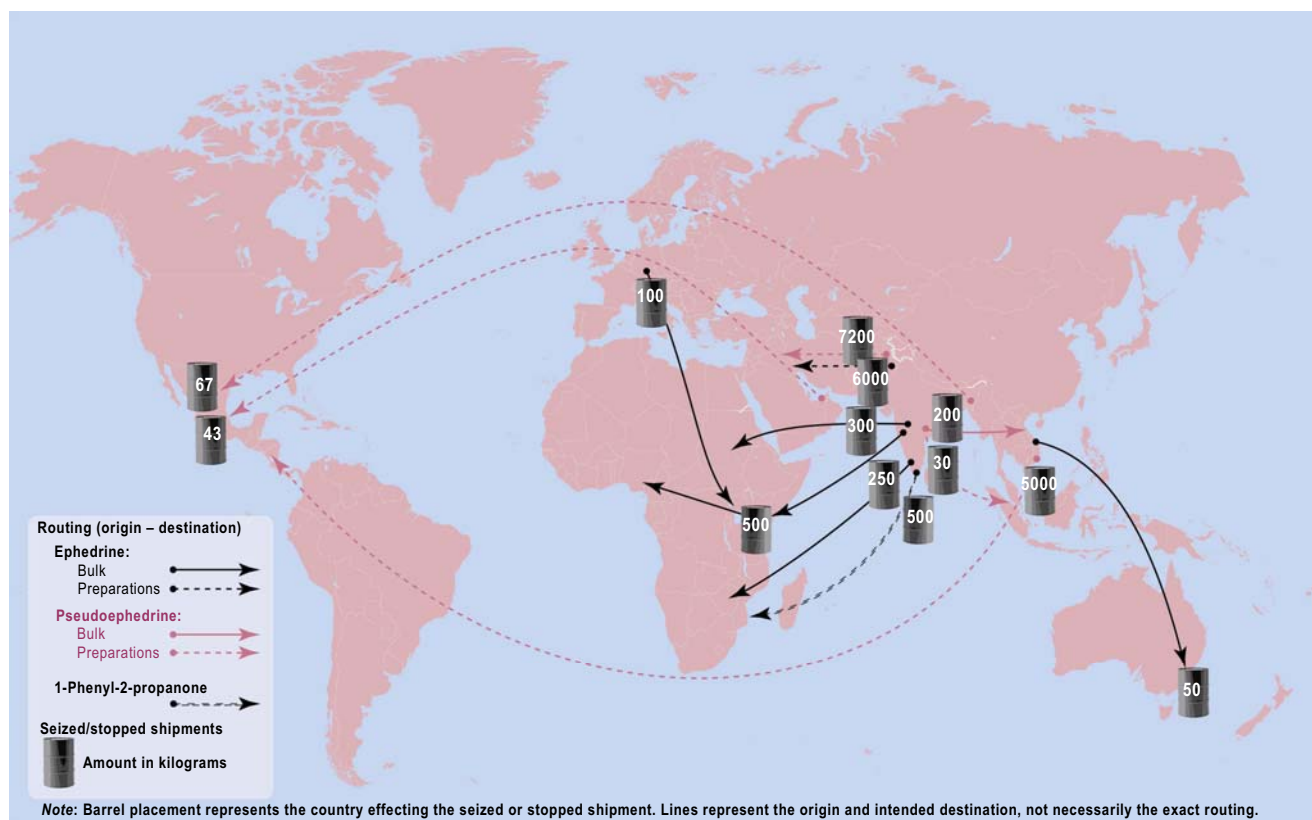
35. The Board continued to identify suspicious transactions involving precursors of amphetamine-type stimulants that were reported through the PEN Online system. Although Operation Pila concluded on 31 March 2010, 20 post-operational communications have been issued since the Board's previous report.<sup>7</sup> Since November 2010,

there have been 19 communications to Task Force members related to seizures of chemicals totalling 42 tons, and 71,600 tablets of pharmaceutical preparations containing ephedrine and pseudoephedrine, as well as an additional 5.7 tons of stopped shipments. A shipment of 500 kg of P-2-P was suspended, and three other shipments totalling 13.4 tons were reported as suspicious.

## 2. Activities and achievements under Project Cohesion

36. Post-operational activities related to chemicals used to manufacture heroin also continued, with two post-operational communications following the conclusion of Operation Data and Intelligence Collection and Exchange (DICE-2) reporting on seizures of acetic anhydride in Afghanistan under Programme Global Shield<sup>8</sup> and in Tajikistan.

**Figure VII. Origin and destination of key seizures and stopped shipments of precursors of amphetamine-type stimulants identified in post-Operation Pila communications between November 2010 and July 2011**



<sup>7</sup> The following substances were reported: ephedrine, 1-phenyl-2-propanone, *Ephedra* plants, pseudoephedrine hydrochloride and pseudoephedrine preparations.

<sup>8</sup> Programme Global Shield, originally Project Global Shield, is a multinational initiative, launched jointly by the United Nations Office on Drugs and Crime, the International Criminal Police Organization and the World Customs Organization, which targets high-risk precursor chemicals used to manufacture improvised explosive devices. Programme Global Shield targets, among other chemicals, acetic anhydride. Given the already existing coverage of acetic anhydride under ongoing projects such as Project Cohesion, close cooperation and information-sharing with the Board under Programme Global Shield has been agreed.

37. After a year of reflection, during which Task Force members analysed in more depth the results of Operation DICE-2, which concluded in mid-April 2010, the Project Cohesion Task Force agreed at its 2011 meeting in Canberra that there was a need to improve reporting on heroin precursors in Afghanistan. The Board would continue to address that through established channels. At the same time, efforts would be undertaken to seek the cooperation of countries with a presence in Afghanistan to share relevant information with the Board. Additional efforts should also be taken to improve understanding of the sources of acetic anhydride seized in connection with the illicit manufacture of P-2-P and, subsequently, methamphetamine.

38. Regarding chemicals used in the illicit manufacture of cocaine, progress in the implementation of the plan of action agreed on during the 2010 Task Force meeting in Bogotá has been very slow. In July 2011, the Government of Colombia concluded a baseline study to identify trends in the legitimate use of potassium permanganate and to determine the country's needs in that regard. However, since that study and other available information suggested that a majority of potassium permanganate and other required chemicals were diverted from, or illicitly manufactured within the Latin American region, the 2011 Task Force meeting was of the view that, unless there was evidence to the contrary, the problem might be more effectively addressed within the region than through an international operation.

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

39. The present chapter provides an overview of the licit trade in precursors and major trends and developments in their illicit trade. It summarizes information on seizures and cases of diversion or attempted diversion from international trade, as well as activities associated with illicit drug manufacture. Significant variation in annual data occur as a result of inconsistent reporting by Governments and the fact that seizures of precursors generally reflect the results of individual significant seizures and targeted regulatory and law enforcement initiatives. Similarly, as seizures of precursors are often the result of cooperation among several countries, the occurrence and magnitude of seizures made in a given country should not be misinterpreted or overestimated with regard to that country's role in the overall trafficking in precursors situation, but rather should be considered in a broader context, reflecting time periods longer than the

actual reporting year. Consequently, the data and conclusions presented herein reflect information that covers multiple years.

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

40. Significant international trade occurs in many of the precursors used in the manufacture of amphetamine-type stimulants. During the reporting period, the authorities of 44 exporting countries used the PEN Online system to report 5,000 transactions involving shipments of precursors of amphetamine-type stimulants. The Board initiated more than 280 enquiries into the legitimacy of shipments during the period, resulting in 36 shipments being suspended, stopped or seized.

##### 1. Ephedrine and pseudoephedrine

###### *Licit trade*

41. During the reporting period, information regarding 3,965 shipments of ephedrine and pseudoephedrine, in both bulk and pharmaceutical preparations, was submitted through the PEN Online system. The amounts involved were 1,130 tons and 1.4 million tablets for pseudoephedrine and 137 tons for ephedrine. Shipments of ephedrine and pseudoephedrine originated in 42 exporting countries and territories and were destined for 143 importing countries and territories. The Board recognizes that successful cooperation and follow-up investigations involving Canada and Belgium confirmed that suspended shipments of 1.6 tons of pseudoephedrine in 2009 were determined to be legitimate and subsequently released.

###### *Trafficking*

42. Thirty-five Governments provided information on form D on seizures totalling 26.8 tons of ephedrine and pseudoephedrine in bulk and pharmaceutical preparation forms. Eighteen tons of bulk ephedrine, 110 kg of ephedrine in the form of pharmaceutical preparations, 6.5 tons of pseudoephedrine and 2.2 tons of pseudoephedrine in the form of pharmaceutical preparations were seized. An additional 33.7 million tablets of preparations for the substances were also reported seized. China, India, Mexico and the United States each reported multi-ton seizures in 2010, accounting for 84 per cent of the volume seized. Together, Australia and New Zealand accounted for 1.7 tons, mostly seized in the form of pharmaceutical preparations.