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)

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

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.

* 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 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 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\(^\S\) 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

\(^{\S}\) 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.

I. Global precursor priority

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.

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

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

* 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.