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The market for amphetamine-type stimulants and their precursors in Oceania

Andreas Schloenhardt

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Director's introduction

In 2005, the United Nations Office on Drugs and Crime (2005) valued the global market for ATS at US$44 billion, approximately 13.8 percent of the global illicit drug market (at retail level). It has been estimated that Oceania accounts for about 9–10 percent of the global ATS market; a market share that is disproportionately large in relation to the small population of the region.

As a result, Oceania, particularly Australia and New Zealand, has emerged as the region with the highest rate of consumption of amphetamine-type stimulants (ATS), including ecstasy, in the world. In Australia and New Zealand, with the exception of cannabis, ATS appears to have become the drug of choice among illicit drug users. This study examines the market for ATS in Oceania (Australia, New Zealand and the Pacific Islands) and the involvement of criminal organisations in that market. It explores patterns of ATS production, trafficking and demand in the region and reviews current legislative frameworks to penalise activities in the illicit ATS market. The report does not attempt to discuss individual criminal justice responses to the ATS market. These are documented elsewhere and readily available from other sources.

The global illicit ATS production in 2005 is estimated to have been between 360 and 880 tonnes, with approximately half of the global illicit production taking place in east and southeast Asia (UNODC 2007). Approximately 9,286 kg of ATS (excluding ecstasy) were available in the illicit ATS market in Oceania with 88 percent (8,151 kg) being sourced or produced in the region itself. Highly concentrated substances, such as crystal methylamphetamine are more readily available in Asia than in Oceania.

With evidence of high levels of ATS consumption, trafficking, and production in the region, there is concern that the economic incentives for the involvement of criminal organisations in this market are growing, and exceed those for traditional narcotic drugs such as heroin, cannabis, and cocaine.

The combination of high levels of supply and demand, stable retail prices, and significant expenditure on illicit drugs provide a profitable setting for ATS sales and explain the significant and growing involvement of criminal elements in this market. High profitability (even of small quantities) and great flexibility in the production process and in the ingredients used make illicit ATS production particularly attractive to criminal elements. Organised crime is more active in the large scale production of ATS, the importation of precursors, and the manufacture of ecstasy and ATS of high purity, but even local producers of small quantities of ATS can sell their substances profitably. This explains the significant number of so called boxed labs that have been found in Australia and New Zealand.

The lack of comprehensive precursor control is often seen as the main factor contributing to the spread of ATS in the region. However, because of their widespread use for licit purposes, many precursor chemicals are not controlled or only rudimentarily, particularly in the Pacific Islands. While more comprehensive control of precursor substances in Australia and New Zealand has led to the seizure of greater quantities of ATS precursors, it is hard to gauge the impact on levels of ATS production. Patterns of production may change; for example, chemicals placed under control can be simply substituted by new ingredients, with no significant decline in illicit ATS production. However, data from the Australian Institute of Criminology's (AIC) Drug Use Monitoring in Australia (DUMA) program indicates that methylamphetamine use, at least in Australia, may have stabilised in the past few years.

The 1971 *Convention on Psychotropic Substances* and the 1988 *Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances* provide a range of criminal offences for activities associated with ATS production, trafficking, importation, and consumption, including specific provisions directed against the involvement of criminal organisations in this trade and the laundering of proceeds of such crime. However, the effectiveness of these conventions is dependent on more countries in Oceania signing up to this body of law and bringing their domestic laws into line with international obligations. While Australia, Fiji, New Zealand, Niue and the US and French territories in Oceania have very comprehensive and up-to-date legislation, the laws in Papua New Guinea, Solomon Islands and Vanuatu are particularly out-of-date and ill-suited to deal with large scale operations of transnational criminal enterprises. Model laws were recently developed by members of the Pacific Islands Forum, including an illicit drugs control Bill. The model laws, however, are best practice guidelines and countries cannot be forced to adopt them.

Toni Makkai
Director
Australian Institute of Criminology

Abbreviations

3,4-MDP	3,4-Methylenedioxyphenyl-2
ABCI	Australian Bureau of Criminal Intelligence (now ACC)
ACC	Australian Crime Commission
ACS	Australian Customs Service
ACT	Australian Capital Territory
AFP	Australian Federal Police
AIC	Australian Institute of Criminology
ATS	amphetamine-type stimulants
AuTS	Australian Treaties Series
Cth	Commonwealth of Australia
DUMA	Drug Use Monitoring in Australia
FSM	Federated States of Micronesia
ICJ	International Court of Justice
INCB	International Narcotics Control Board
MDA	methylenedioxyamphetamine
MDEA	methylenedioxyethylamphetamine
MDMA	methylenedioxymethylamphetamine
n.a.	not available
NDARC	National Drug and Alcohol Research Council
NSW	New South Wales
NT	Northern Territory
NZ	New Zealand
P2P	phenyl-2-propanone
PIF	Pacific Islands Forum
PMK	piperonylnmethylketone
PNG	Papua New Guinea
pt	point (0.1 gram)
Qld	Queensland
SA	South Australia
t	tablets
Tas	Tasmania

u	unit(s). For the purpose of calculations UNODC assumes a typical consumption unit to be 0.03 g for ATS (other than ecstasy) and 0.1 g for ecstasy
UNDCP	United Nations Drug Control Program (now UNODC)
UNODC	United Nations Office on Drugs and Crime
UNODCCP	United Nations Office for Drug Control and Crime Prevention (now UNODC)
UNTS	United Nations Treaty Series
US	United States of America
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

Disclaimer

This research report does not necessarily reflect the policy position of the Australian Government.

The author

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Chapter 1: Introduction

This study examines the market for amphetamine-type stimulants (ATS) in Oceania including Australia, New Zealand, and the Pacific Islands, and the involvement of criminal organisations in that market. The study explores contemporary patterns of ATS production, trafficking, and demand in the region, analyses the involvement of organised crime, and reviews current legislative frameworks – domestic and international – to penalise activities in the illicit ATS market, especially those relating to organised crime activities.

Although ATS are under rigid international and domestic control systems, the illicit production, traffic and use of ATS are prevalent throughout the world. In 2005, the United Nations Office on Drugs and Crime (UNODC) valued the global market for ATS at US$44 billion, approximately 13.8 percent of the global illicit drug market (at retail level; UNODC 2005: 139). It has been estimated that Oceania accounts for about 9–10 percent of the global ATS market; a market share that is disproportionately large in relation to the small population of the region.

The illicit ATS trade in Oceania is of great concern to contemporary criminal justice and poses an imminent challenge to law enforcement agencies, governments, and the international community. The production, trafficking, sale, and consumption of ATS present a significant and growing illicit market. The size of the ATS market in Oceania creates significant economic incentives for organised crime and other criminal elements, especially if the risks of detection, arrest, and seizure are outweighed by the possibilities of large profits – monetary and otherwise. With evidence of high levels of ATS consumption, trafficking, and production in the region, there is growing concern that the economic incentives for the involvement of criminal organisations in this market are growing, even exceeding those for traditional narcotic drugs such as heroin, cannabis, and cocaine.

Background

Oceania, most notably Australia and New Zealand, has emerged as the region with the highest rate of consumption of ATS, including ecstasy. UNODC's 2007 *World drug report* again confirmed that 'at the sub-regional level, the highest annual prevalence rates of amphetamines use are reported by countries in the Oceania region' (UNODC 2007: 152). Further, 'the prevalence rates [for ecstasy] are still higher in the Oceania region (3%) and the ecstasy use in the Oceania region is reported to be continuing to increase' (UNODC 2007: 161). UNODC estimates that 620,000 persons use amphetamine and 627,000 use ecstasy annually in Oceania (UNODC 2007: 151, 161).

In Australia and New Zealand, with the exception of cannabis, ATS have become the drug of choice among illicit drug users, and levels of ATS consumption exceed the abuse of

traditional narcotic drugs such as cocaine, heroin and other opium derivates. The so-called war on drugs has increasingly become a war on ATS and their chemical precursors.

The size of the ATS market is determined simultaneously by supply and demand (Pietschmann 1997: 276). The great demand for ATS in the region creates a profitable illicit market for organised crime and other criminal elements. Available data suggest that, despite increasing attention and intervention by drug enforcement agencies and legislators, the ATS market in Oceania continues to grow rapidly. ATS such as ecstasy (MDMA) and ice (crystal methylamphetamine) are on the rise, allegedly flooding the drug markets in ever increasing quantities, at reduced costs, with demand rapidly growing.

Strategic knowledge about the nature and level of involvement of criminal organisations and other operators in the ATS market in Oceania is limited. Some of the available information is conflicting, and some trends emerging in the region seem to be at odds with developments elsewhere. It is the purpose of this study to collect and review the existing documentation on the illicit ATS industry in the region, explore the criminal elements involved in that industry, and analyse current legislative frameworks at domestic and international levels.

The aims of this study are to:

- examine the volume and scale of the illicit ATS market in Oceania
- discuss the level and patterns of organised crime involvement in that market
- analyse existing mechanisms at international and domestic levels to criminalise the organised illicit trade in ATS in the region
- develop recommendations for law reform and policy change.

Scope

The focus of this study is on the production, trafficking, importation, and consumption of ATS in Oceania. The study is limited to synthetic drugs that are commonly classified as amphetamine-type stimulants (ATS), including amphetamine, methylamphetamine, MDMA, MDA, and MDEA (see Terminology below). The study also covers precursor chemicals used in the manufacturing of ATS. Other narcotic drugs and psychotropic substances are not further explored in this study.

The focus of this study is on only one class of illicit drugs, namely ATS, and explores the ATS problem only insofar as it relates to the Oceania region. This scope is further narrowed by examining only those aspects of the ATS trade that relate directly or indirectly to the involvement of organised crime. In particular, this study does not examine patterns and consequences of ATS consumption, treatment of ATS users, or drug-related crime.

Moreover, it does not explore proceeds of ATS crime and the phenomenon of money laundering, although they are closely related to the ATS problem.

Geographically, the study focuses on the Oceania region, including Australia, New Zealand, and the Pacific Islands. Throughout this study the term Pacific Islands includes Cook Islands, Fiji, Kiribati, Northern Marianas, Marshall Islands, Federated States of Micronesia (FSM), Nauru, Niue, Palau, Papua New Guinea (PNG), Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, the French Territories of French Polynesia, New Caledonia, Wallis and Futuna, and the US territories of American Samoa and Guam.

In reviewing relevant legal frameworks for ATS in Oceania, the scope of the study is limited to enforceable mechanisms under international and domestic laws. Non-enforceable and otherwise informal frameworks by international organisations, regional forums, and national agencies are not discussed in this study.

Structure

The study examines the illicit market for ATS and their precursors in Oceania in four parts:

- production
- trafficking and importation
- demand
- penal legislation.

Each part explores specifically the involvement of criminal elements and the specific legislative provisions applicable to them.

Part 1 analyses current levels of production of ATS in Australia, New Zealand, and the Pacific Islands, the availability of and illicit trade in ATS precursors, the market factors of ATS production, and organised crime involvement in ATS production and precursor trading. The second part outlines contemporary patterns and levels of ATS trafficking and importation in Oceania, market factors, and organised crime involvement. Part 3 identifies current prevalence of ATS consumption in the region and examines the retail market and retail prices for these substances.

The fourth part analyses existing domestic and international legal frameworks relevant to the criminalisation of the illicit, commercial ATS and ATS-precursor trade. This part outlines and examines relevant provisions under international legal instruments, their implementation into the domestic laws of the countries in the region, and other relevant penal provisions under domestic law.

The study concludes by highlighting some key indicators of the ATS trade in Oceania and developing a set of basic suggestions for policy change and law reform.

Literature and data

Despite significant media attention and public concern, the ATS trade in Oceania and the involvement of criminal elements in this illicit industry remain issues that are poorly documented and neither well understood nor adequately researched. While the phenomena of illicit drug use, production, trafficking, supply etc. are long standing, surprisingly little research has been undertaken into the conditions and circumstances of the illicit market for ATS and their precursors, particularly in the Oceania context.

Customs, drug and law enforcement agencies, along with international organisations such as UNODC and the International Narcotics Control Board (INCB) have produced a wealth of relevant data on this topic, but academic analysis of these statistics is rare and many figures remain unexplained. National agencies in Australia and New Zealand, especially the Australian Crime Commission (ACC), Australian Customs Service (ACS) and New Zealand Customs collect data on ATS seizures and importations. A number of studies have been undertaken to uncover and explain the levels of abuse of ATS in Australia and New Zealand (for example, AIC 1999–2007; Degenhardt et al. 2004; Hando & Hall 1997; NDARC 2006; NDARC 2004; Wilkins et al. 2005; Wilkins et al. 2004a; Wilkins, Bhatta & Casswell 2002), but frequently the samples are too small to allow generalisations (for example, NDARC 2004; NDARC 2006; Wilkins et al. 2004a). Moreover, the main focus of the existing scholarly writing is on the patterns of ATS consumption and there is, to date, no comprehensive inquiry into the organisational and operational patterns of the illicit ATS industry. Relevant penal provisions, too, have attracted limited scholarly interest and are often misinterpreted, and many gaps remain uncovered and unresolved.

To date here has not been any comprehensive study of the market aspects and the level of organised crime involvement in the production and trafficking of ATS and their precursors in Australia, New Zealand, and the Pacific Islands. Moreover, despite a plethora of international drug conventions and domestic drug offences, there is no contemporary research on the application and operation of international and domestic law in Oceania in relation to ATS and ATS precursors. This study seeks to fill this void.

Limitations and obstacles

Some general statements about the data and information used in this study need to be made from the outset. Many statistics about criminal activities and illicit markets are by their very nature fragmentary and sometimes contradictory. The illicit and clandestine nature of

these operations dictates this. While some generalisations can be made on the basis of the information found, there are significant limitations to the evidence.

The data and information used in this report come from a variety of sources, both national and international, and the methodologies used by these sources differ substantially. At domestic levels, national agencies involved in drug law enforcement collect different data depending on their jurisdiction and mandate; some operate only within national borders, other agencies investigate only cross-border operations. As a result, the data these agencies collect differ and are not always comparable. The differences that exist between different agencies within one country are further augmented if data from agencies from multiple countries are used. Their mandates, *modi operandi*, and resources differ considerably and it is difficult to compare the findings and figures from different jurisdictions. Further, statistics and other information from the Pacific Islands are notoriously scarce, though there have been significant improvements in recent years. Much of the information, however, remains anecdotal and frequently does not allow any generalisations.

Consequently, it is preferential to use figures compiled by international organisations that use a consistent methodology in collecting information from a variety of sources and that use the same methodology over a period of time. This study relies very heavily on statistics published by UNODC and the INCB. Both organisations release annual reports about levels and patterns of the global illicit drug market and provide the most comprehensive statistics on the levels of production, trafficking, and consumption of drugs in every corner of the world. These statistics are, however, not without inaccuracies. The contents and quality of UNODC and INCB reports are for the most part dependent on information supplied to these organisations by individual countries. Many countries, however, do not provide any information. Frequently, the data are not collected annually or at all. Some countries are reluctant to disclose and publicise information about the levels of their drug problem. Other countries simply do not see the illicit drug trade as a problem worth investigating. As a result, the data published by UNODC and the INCB may not, or not always, reflect accurate levels of ATS production, trafficking, and consumption. The reports are, however, very useful to monitor trends and developments over a period of time. Moreover, by using data and other information from a variety of international and national sources, methodological differences between those sources may be beneficial to identify and validate those trends and highlight contradictions.

A further difficulty arising from the nature of the topic of this study is the confidentiality of much of the information, especially if it relates to ongoing investigations. Although the study involved extensive consultation with relevant law enforcement and customs agencies and with international organisations in the region, some key contact persons were unable or unwilling to reveal information, and some of the information obtained is classified and cannot be reproduced here.

A final point to be noted about the existing research and current scholarship on this topic relates to the use of information unique to the Oceania region. In compiling evidence, documents, and data for this study, specific emphasis was placed on using research and sources from the region itself. The scale, nature, and patterns of the illicit ATS trade in the region are unique and many observations made in other parts of the world do not apply in Oceania. This study seeks to crystallise the particular characteristics of the illicit ATS trade in the region and consequently relies more heavily on local sources of information than on findings made elsewhere. The material used included published academic research in books and journal articles, reports from research centres, government agencies and international organisations, online resources, case studies reported in the news media, and personal communication with key officials in Australian Government, state/territory, and international drug enforcement agencies.

Terminology

The terminology for illicit drugs is frequently confusing, highly technical and sometimes conflicting, and many expressions used overlap. For consistency and simplicity, the study follows the terminology and definitions adopted by UNODC (UNODC 2003b: v; UNODCCP 2000).

The umbrella term to describe the synthetic drugs analysed in this study is amphetamine-type stimulants (ATS). The term covers a large group of synthetic drugs with a powerful stimulant action on the central nervous system usually without producing hallucinations. Amphetamine and methylamphetamine are closely related and have similar psychomotor, cardiovascular, anorexogenic, and hyperthermic properties. ATS can produce a sense of confidence, euphoria, and wellbeing. Compared with amphetamine, the stimulatory effects of methylamphetamine are stronger and last longer (UNODCCP 2000: 6–7; Bellamy & McNab 2003: 3; Topp et al. 2002: 341). Research shows that the euphoric effects created by ATS are very similar to (but last longer than) those created by cocaine and that even experienced cocaine users are unable to distinguish between them (Hall & Hando 1993: 59; Anglin et al. 2000: 137). In this study, ATS refers to substances encountered exclusively on the illicit market, although they may have medicinal use.

Perhaps the simplest form of ATS is amphetamine which is synthesised primarily from the precursor norephedrine (see further Section 1.2.1 below). The most commonly consumed ATS is methylamphetamine, a stimulant usually synthesised from ephedrine or pseudoephedrine. Crystalline (or crystal) methylamphetamine, also known as ice, P, crystal meth, glass or shabu, is a highly refined, very concentrated (up to 80% purity) form of methylamphetamine produced as crystal powder or crystal rocks which are smoked or snorted. Crystal methylamphetamine is also produced as a clear liquid for intravenous

injection (Bellamy & McNab 2003: 3). Throughout this study the phrase ATS excluding ecstasy refers to amphetamine and methylamphetamine without hallucinogenic effect, unless otherwise stated.

Substances in the so-called ecstasy group are ATS in their chemical structure, but have different precursors and usually have different pharmacological effects. Ecstasy-type substances are usually orally ingested, sometimes snorted, and rarely injected. The most common type of this group of ATS is methylenedioxymethylamphetamine (MDMA), more commonly known as ecstasy. MDMA is an ATS with mild hallucinogenic properties which has gained notoriety internationally as a recreational or party drug (UNODCCP 2000: 43–44). Methylenedioxyamphetamine (MDA) is similar to MDMA but with strong hallucinogenic effects that can last twice as long as those of MDMA (UNODCCP 2000: 42). A third substance in this group is methylenedioxyethylamphetamine (MDEA) which is also similar to MDMA, but has less desirable effects and consequently is less frequently produced and used (UNODCCP 2000: 43). Throughout this study, the term ecstasy is used for MDMA and the related substances MDA and MDEA, unless otherwise specified.

Other synthetic stimulants such as methcathinone, phentermine, and fenetylline are not covered in this study.

Chapter 2:
Production of ATS in Oceania

The first part of this study explores the production of amphetamine-type stimulants (ATS) in Oceania and the market factors and organised crime involvement in illicit ATS manufacturing in the region. First, the history and methods of ATS production are set out and contemporary levels of illicit ATS production in Australia, New Zealand, and the Pacific Islands analysed. Second, the key precursor chemicals used in ATS production are identified and the illicit trade in these substances is examined. Third, economic and market factors of illicit ATS production are explored and some observations about the role of criminal organisations in this aspect of the ATS trade are made.

The means and methods used to produce ATS differ between those used for the production of amphetamine and methylamphetamine, and those used to manufacture ecstasy. The different manufacturing processes and the difference in ingredients used to produce ATS and ecstasy have significant consequences on the way in which the illicit production is carried out, how precursor chemicals are obtained, and also on the market and sale of these substances. Consequently, throughout this part of the study, ecstasy and ATS other than ecstasy are examined separately.

The following sections briefly outline the history and key production methods of ATS and ecstasy and give a brief overview of global and regional levels of illicit production. This is followed by an analysis of patterns and levels of ATS and ecstasy production in Australia, New Zealand, and the Pacific Islands.

ATS production (excluding ecstasy)

History

The use of ephedrine, the key ingredient of amphetamine, is said to have been first documented in 2760 BC when the Chinese herb ma huang or ephedra was used as a natural herbal remedy for asthma and other respiratory illnesses (UNODCCP 2000: 25–26). Research into Chinese medicine in the late 19th and early 20th century generated new interest in the medical use of ephedrine. As its popularity grew, there was some concern that natural supplies of ephedrine could be exhausted and pharmacologists started to search for ephedrine substitutes and investigate the creation of synthetic ephedrine (Grinspoon & Hedblom 2005: 21; Anglin et al. 2000: 138).

The first substitute for natural ephedrine was found in amphetamine, which was synthesised in 1887 by the German pharmacologist Edelano, who named the drug phenylisopropylamine or, as it became known commercially, benzedrine. Around the same time, between 1893 and 1919, methylamphetamine was discovered and synthesised by Japanese researchers. Commercial amphetamine production and consumption first emerged during the early 1930s when the substance was used for its therapeutic effects, especially in the treatment

of conditions such as asthma, epilepsy, hyperactivity in children, motion sickness, narcolepsy, obesity, and schizophrenia. Benzedrine was initially sold as an inhaler and in 1932 the American Medical Association named the substance amphetamine, short for alpha-methyl-phenethyl-amine. In 1937, the American Medical Association also approved the drug in tablet form recognising its therapeutic effect in the treatment of narcolepsy, postencephalitic Parkinsonism and certain depressive psychopathic conditions, and acknowledged the drug's ability to create 'a sense of increased energy or capacity for work, or a feeling of exhilaration' (Grinspoon & Hedblom 2005: 22; Yamada 1997: 5–6). The use of amphetamine was particularly widespread during Word War II and at that time was frequently given to soldiers for endurance and as a fatigue fighter. Historical records show that amphetamine was distributed to the British, German, and Japanese armies during World War II and later to United States (US) armed forces in the Korean War in 1950–53 and also in Vietnam (Anglin et al. 2000: 137–138; Grinspoon & Hedblom 2005: 26; Hall & Hando 1993: 59). Starting in the 1960s amphetamine use became common among long distance truck drivers and shift workers in Japan, the US, and later also in Australia (Hall & Hando 1993: 59).

The problems associated with amphetamine misuse and dependence were first recognised in the late 1940s and early 1950s. A study conducted by Monroe and Drell (1947) found high levels of amphetamine abuse by US military personnel. ATS abuse was particularly prominent in Japan where, from 1941, methylamphetamine was sold over the counter as philopon and sedrin to 'fight sleepiness and enhance vitality'. After the end of the war large surplus stocks of injectable methylamphetamine became available on the licit market. It has been estimated that at this time, between 550,000 and 1.5 million Japanese consumed methylamphetamine, leading to the first 'amphetamine epidemic'. As psychiatric disorders among heavy users became more evident – some estimates suggest about 10 percent of users developed methylamphetamine induced psychoses – the Japanese Government introduced stringent controls with the *Stimulant Control Law 1951* (Anglin et al. 2000; Brill & Hirose 1969).

Further research showed a link between paranoid psychoses and heavy ATS use, especially if ATS are administered by injection. Consequently, the manufacturing and availability of ATS were further restricted. In the US, pharmaceutical companies started to withdraw amphetamine in the early 1950s and the US Food and Drug Administration banned the sale of non-prescription amphetamine inhalers in 1959; methylamphetamine inhalers were banned in 1971 (Grinspoon & Hedblom 2005: 25–26; Hall & Hando 1993: 59). During the 1960s and 70s ATS abuse changed from being a localised problem in some countries to a worldwide phenomenon (Bassiouni & Thony 1996: 908–909). As a result, other countries followed with similar laws and ATS were eventually brought under international control with their inclusion in the list of controlled psychotropic substances in the schedules of the *1971 Convention on Psychotropic Substances* (1019 UNTS 175.

See chapter 5). In New Zealand, amphetamine production was first criminalised in 1975, with Schedule 2, Class B Controlled Drugs of the *Misuse of Drugs Act 1975* (NZ), and in Australia, with the *Psychotropic Substances Act 1976* (Cth).

The control of ATS production under international and domestic laws led to a gradual decline of legal ATS production and availability. The prohibition of ATS was followed by the emergence of a black market for amphetamine, initially fuelled by leakages from pharmaceutical companies, pharmacists, and medical practitioners. While the drugs remained easily accessible, profit margins stayed low which 'retarded the growth of large scale, organised trafficking in this area' (Lessem 1974: 128). As these avenues, too, were sealed up by law and law enforcement, criminal organisations increasingly took control of ATS production and distribution (Anglin et al. 2000: 138; Grinspoon & Hedblom 2005: 28). Illicit manufacturing of ATS started to emerge almost simultaneously with the introduction of control mechanisms for the licit ATS market in the early 1960s, manifested in the growing number of seizures of illicit laboratories (UNDCP 1996: 35; Grinspoon & Hedblom 2005: 30). The first known clandestine ATS laboratories were found in San Francisco and the Bay Area in 1962 (Anglin et al. 2000: 138). Initially, illicit production was carried out in small laboratories in or close to large metropolitan areas (Lessem 1974: 129), to reduce the distance between the places of production and sale, and thus limit exposure to law enforcement intervention. The first clandestine ATS laboratory in Australia is said to have been detected in Sydney in 1976 (Caldicott et al. 2005: 156), and large scale illicit production of ATS in Australia began in Victoria (Vic) in the late 1970s (Wardlaw 1993: 96).

ATS production process

The production process for ATS other than ecstasy is comparatively simple and does not require a great deal of skill, training, or sophistication. The chemical process to manufacture these substances involves only a few steps, is easily learned, and involves very basic equipment; even everyday household items can be used in ATS manufacturing. ATS production is further facilitated by the fact that many key ingredients – usually referred to as precursors – are easily available through legitimate and illegitimate channels. The most common precursors, ephedrine and pseudoephedrine, for instance, can be found in many cold and cough tablets, as discussed below. It should be noted, however, that the production process can be very dangerous and harmful as it involves highly flammable and poisonous substances. There have been a number of reports about injuries and deaths of 'cooks', bystanders, and nearby residents (see, for example, Caldicott et al. 2005; Wilkins et al. 2005).

Four main ATS production methods have been identified, although there is some degree of variation in each procedure and recipe (see Allen & Cantrell 1989: 183–199; Caldicott et al. 2005: 155–157; Cherney, O'Reilly & Grabosky 2005: 8; Ely & McGrath 1990: 720–723; Skinner 1990: 48; US National Drug Intelligence Center 2005: 11).

- In the ammonia ('Birch' or 'Nazi') method, ephedrine or pseudoephedrine is reduced in a chemical process using anhydrous ammonia (a fertiliser and air conditioner refrigerant) and lithium or sodium metal to form d-methylamphetamine. This method is hazardous, as any release of ammonia creates a toxic environment and lithium and sodium react violently with water, creating the possibility of fire or explosion.
- The principal chemicals involved in the hypophosphorous acid method are ephedrine or pseudoephedrine, iodine, and hypophosphorous acid. A variation of the red phosphorous method (see below), this method is often used when hydriodic acid is in short supply. This method produces high quality d-methylamphetamine and is highly dangerous as a result of the phosphine gas released.
- In the phenyl-2-propanone (P2P) method, P2P is reduced in a chemical process using methylamine and mercuric chloride to form a mixture of d- and l-methylamphetamine. This method is less common today as the resulting product is not as pure and restrictions have been placed on the supply of the necessary chemical, phenylacetic acid.
- Red phosphorous method. In this method, ephedrine or pseudoephedrine is reduced in a chemical process using red phosphorus (extracted from match box striker plates) and hydriodic acid to form d-methylamphetamine. Red phosphorous is highly unstable and slight friction will cause ignition and the release of deadly phosphine gas.

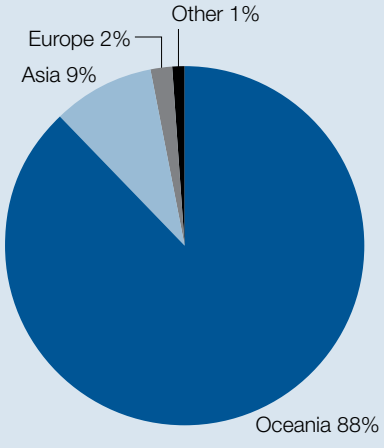
The flexibility and simplicity of the ATS production process means that production can be carried out in close proximity to the consumer market and can easily be relocated depending on market shifts and law enforcement activities (UNDCP 1996: 44). The comparatively simple synthesis and manufacturing process of ATS, such as methylamphetamine, allow small scale productions by amateur producers, and even small quantities of ATS can be produced profitably. Hence, clandestine production frequently takes place in so called kitchen or boxed laboratories found in private homes, vans, and cars (UNDCP 1996: 44). The relative simplicity of the production process also means that many unskilled amateurs attempt to manufacture ATS, though the hazardous nature of the process means that accidents and even deaths of ATS 'cooks' are not uncommon. The production can also pose significant health risks to other bystanders, including children, and the waste from the ATS production is environmentally hazardous (Bellamy & McNab 2003: 6; Cherney, O'Reilly & Grabosky 2005: 11).

Levels of production

UNODC estimates the levels of ATS production by taking an approach 'of triangulation, estimating production based on reported seizures of the end products in combination with some assumptions of law enforcement effectiveness, seizure data of precursor chemicals and estimates based on the number of consumers and their likely levels of the per capita consumption' (UNODC 2007: 261).The global illicit ATS production in 2005 is estimated to have been between 360 and 880 tonnes (UNODC 2007: 124). Some authors predict 'that the production of ATS is actually beginning to outstrip the global production of cannabis and heroin' (Cherney, O'Reilly & Grabosky 2005: 7). According to reports by UNODC, approximately half of the global illicit production of ATS (not including ecstasy) takes place in east and southeast Asia, especially in China and increasingly in Myanmar (Chawla & Pietschmann 2005: 171). North America, Europe, Oceania and, more recently, South Africa are the other main sources of ATS (UNODC 2007: 124).

Estimates in 2005 suggested that approximately 9,286 kg of ATS (excluding ecstasy) were available in the illicit ATS market in Oceania. The great majority of the ATS available in the region (88% or 8,151 kg) are sourced (or produced) in the region itself. Only 12 percent are imported from elsewhere, mostly from east and southeast Asia (796 kg or 8.6%), western and central Europe (229 kg or 2.5%), and from eastern Europe (28 kg or 0.3%). According to the ACC (2005: 11), ATS are usually only imported into Australia if they involve highly concentrated substances, such as crystal methylamphetamine which is more readily available in Asia than in Oceania.

Figure 1: ATS in Oceania 2005, place of production (percent)



Source: UNODC 2006

Ecstasy production

In contrast to other ATS, ecstasy does not have a significant history of legal production. These substances were developed largely within the illegal market (UNDCP 1996: 36). MDMA was first discovered in 1913 by the pharmaceutical company Merck as a diet pill but it was never manufactured and marketed because of its negative side effects. Although not illegal at the time, MDMA production emerged again in clandestine laboratories in the late 1960s (Gertz 2005: 67–68; Webb 2003: 84–85). Legal availability resulted in widespread use of MDMA, prompting control of the substance in the United Kingdom in 1977 and in the United States in 1985. Following a request by the World Health Organization (WHO) in 1984, MDMA was brought under international control in 1985 (UNDCP 1996: 37; Webb 2003: 89–90). New South Wales (NSW) was the first State in Australia to include MDMA in its drug laws in 1986, being added to schedule 1 of the *Drugs Misuse and Trafficking Act 1985* (NSW). Domestic control in New Zealand followed in 1987 in First Schedule, *Misuse of Drugs Amendment Act 1987* (NZ), and national control in Australia in 1990, in Schedule 3, *Crimes (Traffic in Narcotic Drugs and Psychotropic Substances) Act 1990* (Cth).

The most popular means of illegal MDMA production involves the reductive animation of 3,4-methylenedioxyphenyl-2-propane. A range of substances can be employed as reducing agents, although most frequently platinum oxide (PtO) is used as a catalysing agent or reduction is done with sodium burohydride (NaBH4) at a low temperature. Less common methods of illicit MDMA production are the Leuckart reaction and the bromination of safrole.

Ecstasy production is more complicated than other ATS. The process requires more precision and know-how, and involves precursor chemicals, such as safrole, isosafrole, and 3,4-methylenedioxyphenyl-2-propane, which are difficult to obtain and are also more heavily controlled. This explains why ecstasy production is generally concentrated in larger, sophisticated laboratories which serve greater geographical markets (UNDCP 1996: 44; Wilkins 2002: 14; Cherney, O'Reilly & Grabosky 2005: 10).

An additional, unique feature of the production and marketing of ecstasy is the design, colouring, and branding of ecstasy tablets. Unlike other illicit drugs that are usually fungible in appearance, ecstasy tablets are manufactured in a range of different samples with different effects, and users can choose between them. The branding used to market ecstasy often reflects contemporary logos and symbols that appeal to young consumers (Webb 2003: 78).

ATS production in Australia

In the absence of any actual records, the extent of illicit ATS production is usually measured with reference to seizures of clandestine laboratories. The general view is that the number of clandestine laboratories seized reflects, to some degree, the level of illicit production in a jurisdiction. As with all data used in this study, the value and validity of production figures have significant limitations. While the number of clandestine laboratories seized may give some indication about the spread of the problem, there is no systematic data collection on the size and production capacities of these illicit laboratories. This is particularly important as the size of illicit ATS laboratories is known to vary greatly. Further, it has to be noted that investigation and data collection methods have improved significantly in recent years. As a result, the total number of seizures increased, even if actual production levels remained unchanged. One additional difficulty with production data is that some agencies and jurisdictions separate the data between ATS laboratories and ecstasy laboratories while others report them together, thus making it difficult to draw comparisons.

ATS other than ecstasy

Illicit production of ATS (not including ecstasy) in Australia can be traced back to 1976 when the first clandestine ATS laboratory was detected in Sydney (Caldicott et al. 2005: 156). Large scale illicit production of ATS in Australia began in Victoria in the late 1970s (Wardlaw 1993: 96) and illicit production levels grew more significantly in the early 1990s. By the mid 1990s it was found that a substantial part of the global clandestine amphetamine production was taking place in Australia (UNDCP 1996: 48). It is estimated that approximately 90 percent of the ATS on the Australian market are produced domestically; only 10 percent are said to be imported (UNODC 2003a: 107–108). These observations confirm research findings from other jurisdictions which suggest that ATS are typically manufactured in the country of final consumption.

Domestic ATS production usually involves methylamphetamine of low purity in powder form, generally referred to as speed, or in the damp, sticky form of methylamphetamine base. Methylamphetamine of high purity, such as ice, is generally imported from Asia, although there have been some recent reports about domestic crystal methylamphetamine production in Australia, albeit at low levels (NDARC 2006: 47; Pieper 2006: 19).

The available data on illicit ATS production show a significant increase in the number of clandestine laboratory seizures in Australia since the mid 1990s. According to data collected by the former Australian Bureau of Criminal Intelligence (ABCI) and the ACC (shown in Table 1 below), the number of clandestine ATS laboratories seized increased almost seven-fold between 1996–97 and 2005–06 (see also Figure 4 below). The vast majority of clandestine ATS laboratories appear to have been used for the illicit production of methylamphetamine (INCB 2006: para 637).

Table 1: Clandestine drug laboratories in Australia[a] (number)

	1996–97	1997–98	1998–99	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Detected[b]	58	95	131	150	201	252	314	358	381	390
Seized[c]	n.a.	n.a.	n.a.	n.a.	201	240	n.a.	314	221	381

a: UNODC reports are based, at least in part, on annual ACC surveys. Differences can often be explained by the fact that UNODC reports cover calendar years while ACC reports refer to fiscal years. Moreover, detection of non-ATS clan labs is not included in the UNODC data

b: Clandestine drug laboratories detected in Australia. Source: ABCI and ACC 1997–2007

c: Seizures of illicit laboratories, combined amphetamine, methylamphetamine group. Source: UNODC 2004: 259; 2006: 265; 207: 7

UNODC data, shown in Table 1, although not available for every single year, confirm this trend. UNODC also observed that '[r]apidly rising laboratory seizures have had no significant impact on prices and purities – suggesting that overall production increased in recent years' (UNODC 2005: 101). However, UNODC notes that 'against this backdrop of stabilising of domestic production, it appears that attempts are being made to import methamphetamine, including crystal-ice, from South-East Asia, notably from China' (UNODC 2007: 129).

According to UNODC, there appear to be signs of a levelling off in the scale of ATS production in Australia since 2004. UNODC statistics show a decline in clandestine drug laboratory seizures between 2003 and 2004 and UNODC noted that the lower figure of 2004 coincided with 'slightly falling purity levels, indicating that production was losing momentum' (UNODC 2006: 130). This, however, does not seem to affect the availability of ATS in the Australian marketplace as 'there are increasing imports of methylamphetamine produced in southeast Asia, notably China and the Philippines, offsetting some [of] the decline in domestic production' (UNODC 2006: 130). The data released by Australian agencies currently do not confirm these observations, however.

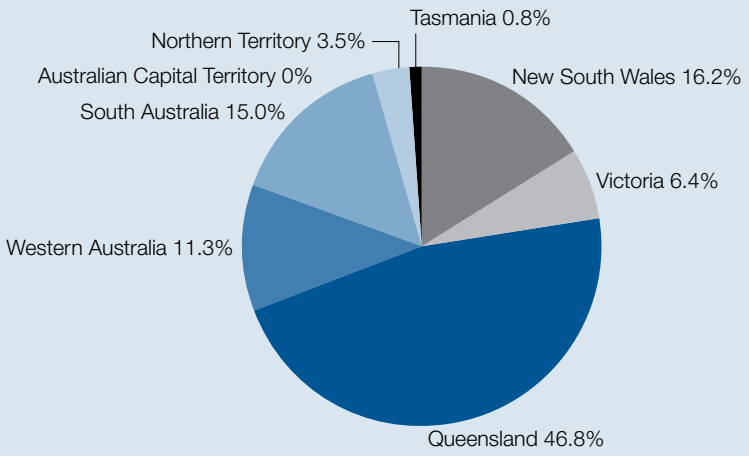
Within Australia the illicit production of ATS (not including ecstasy) is, and has been for some time, concentrated in Queensland (Qld), especially in the southeastern part of the state near the two main cities of Brisbane and the Gold Coast. According to a study published in 2005, almost half of all clandestine drug laboratory detections in Australia have been made in Queensland, followed by NSW and South Australia (SA).

Table 2: Clandestine drug laboratories detected in Australia by jurisdiction (number)

	1999	2000	2001	2002	2003–04
New South Wales	20	20	42	32	56
Victoria	4	18	32	24	22
Queensland	83	79	77	138	162
Western Australia	8	17	22	22	39
South Australia	8	19	31	31	52
Australian Capital Territory	2	1	0	0	0
Northern Territory	2	1	3	1	12
Tasmania	0	0	1	3	3
Total	**137**	**155**	**208**	**251**	**346**

Source: Caldicott et al. 2005: 156

Figure 2: Clandestine drug laboratories detected, by jurisdiction, 2002–03 (percent)



Source: Caldicott et al. 2005: 156

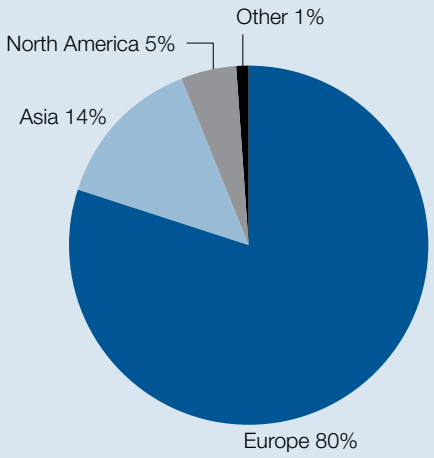
UNODC reports confirm that methylamphetamine production 'is particularly concentrated in Queensland (35 per cent of all dismantled amphetamines laboratories in 2004, followed by New South Wales (20 per cent), and South Australia (20 per cent)' (UNODC 2006: 130). This geographical distribution does not reflect the size of the population in these states. The specific causes for this concentration of clandestine ATS laboratories in southeast Queensland are currently not well understood and require further investigation and research. As Koch asks, '[d]o these statistics mean that Queensland has become the drug capital of Australia: that amphetamine manufacture and the consumption of illicit drugs are disproportionately high in this state? Or does it mean as [Police Minister] Spence suggests, that Queensland police are far more vigilant than their counterparts in all other states?' (Koch 2006: 33).

The number of clandestine laboratories seized each year does not reflect the level of actual production, because no information is available publicly about the size of the laboratories seized. There have been numerous reports that domestic illicit ATS production in Australia usually takes place in small, often mobile laboratories (sometimes referred to as boxed or boot labs). Domestic seizures of ATS precursors have been limited in size (not in numbers) thus suggesting that production generally does not take place in large scale manufacturing sites (UNODC 2003a: 107–108). Small scale manufacturing is harder to detect for law enforcement agencies and can more easily be relocated. On the other hand, larger and more profitable laboratories are probably more professionally concealed and difficult to detect. There are no reliable estimates about the 'dark figure' of clandestine ATS laboratories, although one report suggested 'that for every laboratory discovered, three are not' (Skeers 1992: 6–10).

Ecstasy

In contrast to other ATS, ecstasy in Australia is, for the most part, sourced from overseas. As shown in Figure 3 ecstasy sold or seized in Australia is largely produced in Europe (78%) and in smaller numbers, in north America (14%), and east and southeast Asia (5%; UNODC Regional Centre for East Asia and the Pacific 2004: 9; INCB 2005: para 640; cf Webb 2003: 109). There are a number of recent reports suggesting that production is being moved away from Europe and that east and southeast Asian countries are increasingly becoming a new source of ecstasy in Australia (Cherney, O'Reilly & Grabosky 2005: 6).

Figure 3: Ecstasy in Oceania, place of production (percent)



Source: UNODC 2004: 9

Domestic production of ecstasy in Australia is limited and only a rudimentary fraction of the ecstasy sold in Australia is manufactured here. Accordingly, the number of clandestine ecstasy laboratories detected in Australia is very limited, especially in comparison to the high number of clandestine laboratories used for the production of other ATS.

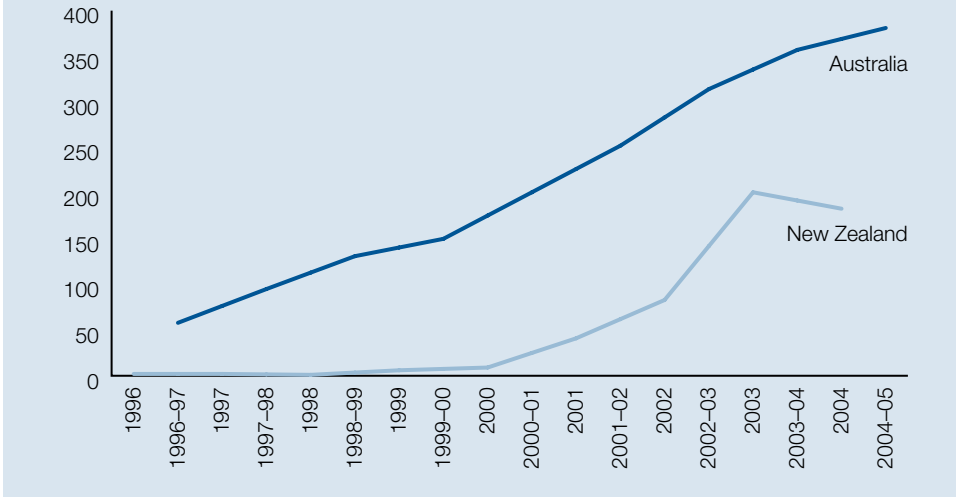
There are a growing number of reports and anecdotal evidence suggesting that domestic production of ecstasy may be growing, and that this, along with the large quantities that continue to be imported from overseas, is further increasing the availability of ecstasy in the Australian market (Chawla & Pietschmann 2005: 173). In 2004, 24 laboratories used for the production of MDMA were seized in Australia (UNODC 2006: 132, 168; Webb 2003: 109). UNODC notes that in 2005 'some ecstasy labs were dismantled in Australia, but were included under the category of ATS laboratories, with no detailed breakdown provided' (UNODC 2007: 132). The INCB reported in 2006 'some evidence that clandestine laboratories are increasingly being used for the illicit manufacture of both methylamphetamine and MDMA (ecstasy)' (INCB 2005: para 621; Webb 2003: 109). New South Police detected 'several large labs producing high quality ecstasy' in the six months between August 2005 and February 2006, 'perhaps indicating a new trend' (NSW Police 2006: 2). The Australian Federal Police (AFP), too, has observed 'a move towards the domestic manufacture of MDMA, highlighted by the recent detection of MDMA labs, the increased detection rate of [MDMA] precursors and the identification of specialist Dutch chemists' (AFP 2006: 5).

The otherwise low levels of domestic ecstasy production can be explained by the technical equipment, sophistication, and ingredients required for the production of ecstasy. Many local producers do not possess the know-how for this process and find it very difficult to obtain ecstasy precursors. Given the obstacles associated with ecstasy production and the limited availability of precursors on the one hand, and the significant demand for ecstasy in Australia on the other (see chapter 4), some local entrepreneurs have entered into the production of fake MDMA, which visually resembles ecstasy and is sold as ecstasy, but does not contain the chemical ingredients of MDMA (UNODC 2003a: 108; Webb 2003: 79).

ATS production in New Zealand

Levels of ATS production in New Zealand are considerably lower than in Australia. ATS was predominantly imported into New Zealand, and domestic production has only recently been established (see Figure 4).

Figure 4: Clandestine drug laboratories detected in Australia and New Zealand (number)



Source: ABCI and ACC 1997–2007; NZ Parliamentary Library 2003; UNODC 2006

According to New Zealand Police and UNODC reports, annual seizures of clandestine ATS laboratories increased from just one in 1998, to 41 in 2001, and 202 in 2003. The number decreased slightly, to 182 in 2004 (Wilkins et al. 2005; Wilkins 2002; NZ Parliamentary Library 2003; Narcotics trafficking… 2006).

Table 3: Seizures of illicit methylamphetamine drug laboratories, New Zealand, 1996–2004 (number)									
	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total	2	2	1	6	9	41	83	201	182

Source: NZ Parliamentary Library 2003; UNODC 2006: 267

ATS labs detected in New Zealand were used solely for the production of methylamphetamine. Evidence of ecstasy production in New Zealand is extremely limited. Official reports show records of only one clandestine MDMA laboratory, which was detected in 2003 (Wilkins 2002; UNODC 2006: 268).

While the total number of illicit ATS laboratories seized in New Zealand is small in comparison with Australia, seizure numbers in New Zealand are greater relative to the small population of the country. However, further information about the size and capacities of laboratories seized in both countries is currently unavailable.

ATS production in the Pacific Islands

Compared with Australia and New Zealand, the Pacific Island nations are not significant producers of illicit drugs. UNODC confirms that 'none of the islands in the region are considered major global drug producers of any drug' (UNODC Regional Centre for East Asia 2003: 8; US Dept of State 2004). Comprehensive data on the levels of production in the islands are not available and much of the conventional wisdom on drug manufacturing in the islands derives from anecdotal sources and not from academic research. The information used in this study derives from international organisations such as UNODC, PIF and INCB, from media reports, and from a small number of scholarly articles.

In the past, much of the local production of illicit drugs involved native kava and betelnut plants (Crocombe 2001: 84; Devaney, Reid & Baldwin 2006b: 300). Cannabis is cultivated in the region especially in the Melanesian islands and there are some reports from Micronesia, Tonga, and Samoa (INCB 2002: para 564; Crocombe 2001: 85–86; Devaney, Reid & Baldwin 2006b: 82; Halvaksz 2006: 56–58; US Dept of State 2004). There have also been some anecdotal reports about coca cultivation in PNG's Sepik province (UNDCP Regional Centre for East Asia 2003: 12), but UNODC stated this 'has never been proven due to lack of evidence' (UNODC Regional Centre for East Asia 2003: 8).

Recent seizures of amphetamine and methylamphetamine in the region have led to suggestions that some illicit production of ATS is occurring in the Pacific Islands. In 2003, UNODC remarked that 'as yet there is no evidence of production. However, with a growing

incidence of abuse the establishment of local production facilities is unlikely to lag far behind' (UNODC Regional Centre for East Asia 2003: 7). Gordon (c2003) has suggested that it is 'only a relatively small step from using a country like PNG as a conduit for precursors to actually manufacturing methylamphetamine there for export purposes, perhaps in some of the highland areas where the rule of law is relatively difficult'. In 2002, authorities foiled an apparent attempt to import up to 12 tonnes of the precursor chemicals, ephedrine from India, and pseudoephedrine from China, into PNG. Although the importation was originally authorised by PNG authorities, the INCB expressed concern over the size and purpose of the shipment, given that PNG only ever knowingly imported 46.5 kg of pseudoephedrine in 1998 (Gordon c2003; PIF 2006: 20).

The most significant ATS seizure was made on 9 June 2004 by Fijian authorities in Laucala Beach, Suva, where 2.8 kg of crystal methylamphetamine and over 1.5 tonnes of precursor chemicals were found (*State v Yuen Yei Ha* [2005] FJHC 165). This seizure was described as one the world's largest clandestine labs ever detected, having the potential to produce 500–1000 kg of crystal methylamphetamine a week (*State v Yuen Yei Ha* [2005] FJHC 165; Delaney et al. 2006: 303; Chulov & Harvey 2004). Local authorities suggested the precursors used to make the drug had been brought to Fiji from Australia and New Zealand and that the end products were destined for markets in Australia, the US, and Europe.

Following these incidents the Pacific Islands Forum (PIF) Secretariat (2006: 19–20) issued a *Transnational crime strategic assessment* warning about the use of the Pacific Islands for illicit ATS production:

> There has been, are currently and are likely to continue in the future, efforts to develop large methamphetamine production facilities (clandestine laboratories or 'clanlabs') on the model of the Suva clanlab in 2004. There are continued efforts to import large volumes of methamphetamine precursor agents into certain Forum Island Countries (FICs). This is a clear notice of intent where a country has no pharmaceutical industry that someone wants to produce ATS and is trying to either trans-ship the precursors through the FIC or even manufacture ATS in the importing country.

The PIF strategic assessment further remarked that '[t]he location of another major laboratory is assessed to be a matter of time. This remains a very serious issue for the present and foreseeable future' (2006: 22). Other reports also anticipate growing methylamphetamine production in the Pacific Islands and suspect that profits deriving from illicit cannabis cultivation may be used to set up clandestine ATS laboratories in the region (Devaney, Reid & Baldwin 2006b: 303). As later parts of this study show, there is growing concern that the Pacific Islands are witnessing a rapidly expanding methylamphetamine market at production, trafficking, and retail levels (see chapters 3 and 4).

Precursors

The production of ATS involves a variety of precursor substances such as acids, solvents, reagents and other chemicals. The following sections identify the key precursors used to manufacture amphetamine, methylamphetamine, and ecstasy, and explore the illicit trade in precursor chemicals.

Precursor substances

In relation to ATS other than ecstasy, it has already been noted that the ingredients and the manufacturing process are comparatively simple: 'it is possible to build amphetamine-type stimulants through a relatively simple process, in a few steps, requiring few and easily available additional chemicals and relatively simple technology' (UNDCP 1996: 50). ATS production is characterised by great flexibility in the processes and ingredients used:

> [O]ne key precursor may have a number of pre-precursor ancestors and may serve as starting material for several ATS end-products; conversely, any end-product may have several alternate precursors within a broader synthetic concept; and finally, synthetic pathways from a given precursor to a given end-product are numerous (UNDCP 1996: 50).

The main ATS precursor is ephedrine, a substance which can either be derived from the ephedra bush, a plant that is native to northwest China, or manufactured synthetically. Throughout the 1990s, China was seen as the most significant source of ephedrine but as the Chinese Government began to enforce the ban on precursor production, India emerged as a new source of ephedrine (Chawla & Pietschmann 2005: 170).

Amphetamine production involves norephedrine which is also commonly used in the manufacture of nasal decongestants and appetite suppressants. Norephedrine is also known as phenylpropanolamine and certain isomers occur naturally in the *Catha edulis* (or khat) plant. The key ingredient in methylamphetamine is usually pseudoephedrine which is synthesised ephedrine. The substance is usually obtained from over the counter cold remedies and can be extracted simply by soaking the tablets in methylated spirits, decanting or filtering to remove sediment, and then evaporating the solvent, leaving the precursor (Caldicott et al. 2005: 156).

A further precursor used in ATS production is 1P2P or 1-Phenyl-2-Propanone (P2P) which is also used in the pharmaceutical industry (INCB 2005: 73–74). Other ingredients occasionally used to manufacture ATS include anhydrous ammonia, a farm fertiliser, and phenylacetic acid, which is a cleaning solution.

In contrast to other ATS, ecstasy precursors are more difficult to obtain through licit and illicit channels. Ecstasy precursors have extremely limited legitimate use (largely in the perfume industry) and are therefore placed under more rigid control. Two of the key ingredients of ecstasy are safrole and isosafrole (also used in the manufacture of piperonal and as a pesticide). Other ecstasy precursors include piperonal, which is sometimes found as a component of insect repellents, and 3,4-Methylenedioxyphenyl-2, a substance used in piperonal production (INCB 2005).

Illicit precursor trade

The precursor substances used in illicit ATS production are also used by the chemical industry for licit purposes. The control regimes that were instituted for ATS in the 1970s initially focused only on the finished substances and not on their precursor ingredients. As a result, the trafficking patterns shifted away from the finished ATS to the diversion and trafficking of precursor substances which, until recently, were subject to lesser, if any, control.

The lack of comprehensive precursor control is often seen as the main factor that contributed to the spread of ATS in the region (Hando & Hall 1997: 81). Given their widespread use for licit purposes, many precursor chemicals were not, are still not, or are only rudimentarily, controlled. It is widely held that inconsistencies in precursor control and in penalties attached to precursor-related offences are actively exploited by criminal elements (Wilkins 2002; Gilmore 1996: 10–11). Moreover, some substances can be extracted from easily available medicine or can be purchased, diverted, or stolen from pharmacies, commercial distributors, or manufacturers. For example, a common pattern of obtaining pseudoephedrine (so called 'pseudo-runs') is where medication containing pseudoephedrine is purchased from multiple pharmacies and then extracted to be used in illicit ATS production (Cherney, O'Reilly & Grabosky 2005: 10; Caldicott et al. 2005: 157). Other means of precursor diversion include,

> channelling shipments avoiding countries with good or effective control systems; product mislabelling, falsification of official authorisations and/or shipping documents; misuse of facilities of free ports, free trade zones and bonded warehouses; and by the lack of accountability on the part of brokers and others who arrange transactions with fictitious names of recipients or re-exports to other undisclosed suppliers (Jayasuriya 1998: 273).

International precursor control commenced in the 1980s and 90s in an attempt to prevent illicit ATS production by denying access to the chemicals required for the manufacturing process (Gilmore 1996: 2; Jayasuriya 1998: 272). As control and enforcement measures for precursors were stepped up, a new illicit market for the substances emerged. Research has shown that producers of ATS frequently shift between different precursors or substitute

precursors in response to availability, control, regulation, enforcement, and price (UNDCP 1996: 65). Today, precursors are sourced, trafficked, and sold by criminal organisations in the same way as ATS and other illicit drugs. The increasing control of precursors has triggered illicit precursor production for supply to illicit ATS manufacturers and a new illicit trade for pre-precursor substances has emerged (Cherney, O'Reilly & Grabosky 2005: 10; Caldicott et al. 2005: 157). There have also been reports about ATS producers 'assuming the roles of specialised brokers of precursor chemicals' (Cherney, O'Reilly & Grabosky 2005: 8). Moreover, illicit manufacturers change their manufacturing procedure to include substitute precursors that are not, or not equally, criminalised. In some instances, certain herbal preparations may be used (Caldicott et al. 2005: 157).

Recent research into the types and purity of ATS available in the Australian illicit drug market has confirmed that the ingredients and purity of ATS are determined by the availability and control of relevant precursors. It was noted that throughout the 1980s, for example, amphetamine in Australia was usually sold as amphetamine sulphate. The increased precursor control in the 1990s necessitated changes to the ingredients and recipes used for ATS production. As a result, methylamphetamine began to feature more prominently in the Australian illicit drug market as it can be produced from pseudoephedrine which is comparatively easy to obtain (Topp et al. 2002: 342).

An additional difficulty in the control of precursors is the fact that much of the ATS production occurs in very small, often mobile laboratories. This means that the small amounts of precursors kept for ATS production are easy to disguise and may fall below monitoring and record keeping thresholds (UNDCP 1996: 66). To further conceal the illegal activities, the manufacturing process is frequently subdivided into several small procedures which are carried out in different locations by different persons. Precursors are often stored a safe distance from the ATS 'kitchens'. It has also been observed that the people purchasing the precursor substances in pharmacies or elsewhere are often only rudimentarily involved with the criminal enterprise, do not have a criminal record, and are frequently paid in ATS to create a cashless transaction (Caldicott et al. 2005: 158; Cherney, O'Reilly & Grabosky 2005: 11).

Precursor seizures

Levels of illicit ATS production are frequently measured in reference to seizures of precursors. Article 12 of the *1988 Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* introduced a requirement that signatory parties must report annually on precursor seizures to the INCB (see chapter 5). The data generated this way are, however, extremely fragmentary and do not allow generalisations about the illicit trade

and use of ATS precursors. As early as 1996, UNDCP highlighted 'a few salient points' about the precursor data collected by the INCB:

> (a) The relatively small quantities of the different precursors seized do not correspond with the widespread availability of the related end-products on illicit markets. […] (b) The total number of countries reporting seizures of precursor chemicals has decreased steadily […]. (c) The only exception is ephedrine […] (UNDCP 1996: 55).

There is a general correlation between seizures of clandestine ATS laboratories and seizures of ATS precursors, which is largely to be expected. Naturally, countries that detect large numbers of illicit laboratories also seize greater quantities of ATS precursors. For example, in 2004 about 97 percent of all clandestine laboratories were detected in north America, which is said to have the greatest illicit methylamphetamine industry in the world. The United States has also consistently recorded large seizures of ephedrine and pseudoephedrine, which are used in the synthesis of methylamphetamine (UNODC 2006: 126). Similarly, Germany, Netherlands, and Poland – three other main source countries of illicit ATS – have reported significant seizures of these controlled substances over the past decade. In the Asia Pacific region, China, Myanmar, and the Philippines have intercepted large amounts of ephedrine, pseudoephedrine, and 1-P-2-P. China and India are also the principal producers of ATS precursors, largely because of the size of their licit pharmaceutical and chemical industries (Pieper 2006: 20).

Among the countries in Oceania, only Australia reported ATS precursor seizures to the INCB in recent years. The Australian data are, however, incomplete as information is only available for some years and only for selected precursor substances. Despite repeated precursor seizures in these countries, no data have been submitted by New Zealand or Pacific Island countries. Some Pacific Island nations, however, are not state parties to the 1988 convention and thus are not obliged to compile and report that information. Also, in some Pacific nations, possession of some ATS precursors is not controlled and not criminalised (see chapter 5).

Australia

Table 4: ATS precursor seizures, Australia, 2000–03 (number)				
	2000	2001	2002	2003
ATS precursors (excl. MDA/MDMA)				
Norephedrine (kg)	n.a.	15	3	14
-P-2-P (l)	n.a.	4	n.a.	n.a.
Phenylacetic acid (kg)	n.a.	n.a.	5	n.a.
Ephedrine, pseudoephedrine (kg)	124	7,230	n.a.	856
MDMA/MDA precursors				
Isosafrole (l)	n.a.	n.a.	n.a.	n.a.
-3,4 MDP (l)	v	n.a.	3	n.a.
Piperonal (g)	n.a.	32	16,100	n.a.
Safrole (l)	n.a.	1	1	405

Source: INCB 2005: Annexe III

Table 4 shows the size of ATS precursor seizures in Australia between 2000 and 2003 as reported to the INCB. The data shown in the table are too fragmentary for any conclusive observations to be made or to allow any generalisations on precursor availability and ATS production in Australia. There appeared to be an increase in seizures of ephedrine and pseudoephedrine between 2000 and 2003, although this increase was possibly more reflective of increasing control and law enforcement during that period than of the actual levels of precursor trading and ATS production.

More comprehensive figures are released by the Australian Customs Service which collects data on ATS precursor seizures at the border. These figures reflect only the level of illegal importation of precursor substances, not their availability, circulation, or actual use in clandestine ATS production in Australia. ACS data also do not include information on diversion of precursors and pharmaceuticals in Australia, which is said to be very significant despite tighter regulatory controls (Pieper 2006: 20). The information published by ACS is separated between precursors for MDMA (ecstasy) (Table 6), and other ATS precursors (Table 5).

Table 5: ATS (excluding ecstasy) precursor detections[a] by mode of importation, Australia, 2002–06 (number of cases)

	2002–03	2003–04	2004–05	2005–06
Air (passengers + crew)	66	56	23	30
Cargo and postal[b]	1,506	705	235	494
Shipping + aircraft[c]	1	n.a.	n.a.	1
(Total)	**(1,573)**	**(782)**	**(276)**	**(525)**

a: Detection of chemical substances that are prohibited imports/exports which may be used in the manufacture of illicit drugs. Precursors for ATS include ephedrine, ma huang/ephedra, phenylpropanolamine/norephne, pseudoephedrine

b: Includes detections made from air cargo, sea cargo, and international post

c: Includes detections made from searches of sea passengers and crew, vessels, and aircraft

Source: ACS 2005b; 2006

According to ACS figures, there was a decrease in ATS precursor seizures between 2002–03 and 2004–05 followed by an increase in 2005–06. As border control measures and precursor regulation in Australia and elsewhere have tightened significantly during that time, this development may indicate that fewer ATS precursors are, in fact, imported into Australia. On the other hand, it was mentioned earlier that the ACC has recorded greater levels of ATS production in recent years. Accordingly, precursor seizures increased between 2004 and 2006. Domestic seizures of ATS, too, increased during that time (see chapter 3), suggesting that greater amounts of precursors were imported or diverted. The AFP anticipates that following the institution of tighter domestic controls over precursors and pharmaceuticals in recent years (see Sections 4.16 and 4.2.1 below) importation of ATS precursors will again increase (AFP 2006: 2; Pieper 2006: 19).

Very limited information is available about the origin of the ATS precursors that are imported into Australia. NSW Police has identified China and India as the main sources of ephedrine and pseudoephedrine imports (NSW Crime Commission 2006: 3). Piperonal (also referred to as PMK, piperonylnmethylketone) seems to originate largely from China which is said to have the only factories producing that substance (Cherney, O'Reilly & Grabosky 2005: 10).

There are no separate data available on the size of illegal precursor shipments, although seizures of large quantities of ephedrine and pseudoephedrine are not uncommon. For example, on 19 June 2006 ACS and the AFP seized over 2 million tablets containing 120 kg of pseudoephedrine (ACS 2006). In August 2005, the two agencies found over 400 kg of ephedrine concealed in statues (ACS 2005a).

Table 6: MDMA (ecstasy) precursor detections[a] by mode of importation, Australia, 2002–06 (number of cases)				
	2002–03	2003–04	2004–05	2005–06
Air (pass + crew)	n.a.	n.a.	n.a.	n.a.
Cargo and postal[b]	3	1	4	2
Shipping + aircraft[c]	n.a.	n.a.	n.a.	n.a.
(Total)	**(3)**	**(1)**	**(4)**	**(2)**

a: Detection of chemical substances that are prohibited imports/exports which may be used in the manufacture of illicit drugs. Precursors for MDMA (ecstasy) may also be precursors to related drugs such as MDA or MDEA, and includes piperonal, and safrole, isosafrole, and3,4-MDP-2-P)

b: Includes detections made from air cargo, sea cargo, and international post

c: Includes detections made from searches of sea passengers and crew, vessels, and aircraft

Source: ACS 2005b; 2006

ACS statistics displayed in Table 6 show very small numbers of MDMA precursor importation into Australia. All detections were made in cargo and postal shipments. NSW Police identified China and the Netherlands as the main sources of MDP2P and sassafras oil, the two main ecstasy precursors (NSW Crime Commission 2006: 3). There is no suggestion that many cases of importation and attempted importation of ecstasy precursors remain undetected. In contrast, these data confirm earlier observations that MDMA and other ecstasy-type substances are manufactured overseas and imported into Australia as a finished product rather than being produced domestically.

Tables 5 and 6 demonstrate that most detections of ATS precursor importation are made in air cargo, sea cargo, and in international post. Approximately 90 percent of seizures involved these types of shipments in recent years. Trafficking routes and patterns are very flexible and change frequently, depending on available sources of precursors and control and enforcement mechanisms in source and transit points.

New Zealand

Data produced by New Zealand Customs show a considerable increase in seizures of ephedrine and pseudoephedrine in recent years, albeit starting from low levels (see Table 7). This supports the view that growing quantities of precursors are being imported into New Zealand for local production which, too, is increasing. Figures for other precursors are currently not available.

Table 7: Precursor seizures, New Zealand, 2000–05[a]					
	2000–01	2001–02	2002–03	2003–04	2004–05
Ephedrine/pseudoephedrine	16,600	143,300	570,482	1,329,488	1,436,862

a: tablets or powder equivalent of 50 g tablets

Source: NZ Customs Service 2005: 10

Pacific Islands

The Pacific Islands are not considered sources of any precursors used to produce synthetic drugs, largely because of the lack of any significant chemical industry in the region (UNODC Regional Centre for East Asia 2003: 10). There are, however, some reports of precursor trafficking to and through the island nations. For example, there have been some reports about attempts to import up to 12 tonnes of ephedrine and pseudoephedrine into PNG from India and China (Gordon c2003). In 2003, almost 2.5 kg of pseudoephedrine was found in scuba tanks shipped to Brisbane from Fiji (Feizkah 2004), and the 2004 seizure of the 'megalab' in Suva, too, involved 1000 kg of liquid methylamphetamine precursors (Chulov & Harvey 2004).

Organised crime involvement in ATS production

The incentives for criminal organisations to engage in the illicit manufacturing of ATS are obvious, given that profit margins are high and ongoing demand is virtually certain.

The involvement of organised crime in the production of ATS dates back to the 1960s when amphetamine was first banned from commercial sale. Initially, most of the ATS available on the black market were illegally diverted substances from pharmaceutical companies, pharmacies, and medical practitioners. When efforts to criminalise all aspects of the ATS production and precursor trade were stepped up, criminal organisations became increasingly sophisticated in manufacturing ATS domestically, and importing precursors and ecstasy from overseas. Research published as early as 1993 confirmed that

> [t]here appears to be a well organised system of illicit manufacture and distribution which has developed because amphetamines have been easy to manufacture in the absence until recently of controls on the supply of precursor chemicals (Hall & Hando 1993: 61).

ATS production in Australia involves a large number and changing mix of criminal elements ranging from highly sophisticated criminal organisations to small scale entrepreneurs who operate within small, local markets or friendship circles (ACC 2005: 14). Naturally, the larger

clandestine laboratories are more often associated with sophisticated criminal organisations with overseas links. On the other hand, the smaller and 'boxed' labs are often run by local manufacturers; a phenomenon that appears to be particularly common in southeast Queensland (ABCI 2002: 47–50; ACC 2006: 8).

Outlaw motorcycle gangs

In Australia, there appears to be significant involvement of so-called outlaw motorcycle (or bikie) gangs in the manufacturing and distribution of ATS (Caldicott et al. 2005: 158; ACC 2006b: 8; Barrett 2004). Some reports suggest that outlaw motorcycle gangs were in control of the illicit ATS production when it first began in Victoria in the 1970s (Wardlaw 1993: 96). Similarly, in the US, illicit ATS production, too, was initially limited to 'motorcycle gangs and other independent groups' (Anglin et al. 2000: 138).

Research into the structure of motorcycle gangs has shown that they are characterised by a hierarchy divided into different regions, each with some autonomy, also referred to as chapters. Each chapter is headed by a president, who has absolute rule. Outlaw motorcycle gangs are bound together by social bonds and gang members are usually drawn from caucasian, working class backgrounds. Gangs are entirely male. Admission to the groups was formerly regulated by strict internal procedures, although this has been relaxed to allow greater numbers of new members to join. It is estimated that outlaw motorcycle gangs have several thousand members in approximately thirty chapters around Australia and are involved in a variety of illegal activities. To carry out their operations, the gangs sometimes hire specialists such as accountants, chemists, real estate agents, and lawyers. The gangs engage in a range of legitimate business activities, such as operating bars or security firms, and there is extensive crossover between their licit and illegitimate activities. To conduct their criminal activities and increase profits, the gangs frequently resort to violence in order to silence witnesses or eliminate rival gangs. It is said that they have no political influence and do not usually engage in corruption. The activities of outlaw motorcycle gangs are, for the most part, domestic but the gangs do cooperate with other chapters abroad (UNODC 2002: 19, 21, 36, Appendix B).

Despite frequent media reports on organised motorcycle gangs, little is known about their level of involvement in the ATS trade and the degree of sophistication of their operations. UNODC described the role of outlaw motorcycle gangs in the manufacturing and supply of ATS as 'prominent' (UNODC 2002: 36). In 2001, the ACC reported that outlaw motorcycle gangs

> feature heavily in the domestic production of methylamphetamine. Their involvement may be more significant than reported given that these groups often employ 'associates' to carry out various tasks in the production and supply process (ABCI 2002: 47).

The ACC suggested links between outlaw motorcycle gangs in Australia and Canada where these gangs are involved in ecstasy production (ACC 2004: 5–6). In 2004, Superintendent Fred Gere from the WA Police was cited:

> [T]hese groups are very much business [oriented] criminal organisations who strategically plan their expanding criminal enterprises that reach far into all forms of organised crime and focus on building partnerships with other criminal networks such as street-gangs, Southeast Asian organised crime syndicates, the Russian mafia and other crime gangs, even rival OMCGs (Barrett 2004).

There have been some reports about collaboration between criminal organisations involved in the production of ATS in Australia and those sourcing precursors from overseas. In 2001, the ABCI reported links between ethnic-based criminal organisations and outlaw motorcycle gangs. It has been suggested that these gangs use specialists from other organisations to perform specific tasks and distribute drugs which outlaw motorcycle gangs rarely do themselves to avoid police attention (ABCI 2002: 48, 55).

It is unclear just how much of the ATS trade in Australia is controlled by or associated with outlaw motorcycle gangs. It seems that, as the methods of ATS production and supply become more widely known, a greater variety of criminal elements of different sophistication and size are appearing. It has been suggested that '[i]t is now doubtful if it is possible to identify a small group of manufacturers or distributors whose removal would have a long term disruption effect on the market' (Wardlaw 1993: 100).

A further trend relating to ATS production in Australia noticed by the ACC involves the infiltration of chemical and pharmaceutical companies by criminals to divert ATS precursors from them (ACC 2005: 14). Statements about a nexus between ATS production in the region and terrorist organisations are, however, at best, speculative and are currently not supported by evidence (see Caldicott et al. 2005: 158).

Only limited information is available about organised crime involvement in ATS production in NZ. From the very few reports available it appears that there is a close link between clandestine ATS laboratories and criminal organisations and that different gangs are collaborating in ATS production. There is also some evidence of well-established production networks with anecdotal reports about one major gang producing methylamphetamine since the 1980s (Bellamy & McNab 2003: 7–8).

The limited information available on the Pacific Islands suggests that ATS production is closely related to organised crime networks from southeast Asia and is usually not under the control of local islanders. The crystal methylamphetamine lab seized in Suva in 2004, for example, had links to syndicates in Hong Kong and Malaysia (Feizkah 2004).

Market factors in ATS production

A number of factors determine the income that can be achieved from the production of ATS. Among the main factors are the availability and price of ATS precursors, the volume of ATS production locally, the volume and availability of ATS produced elsewhere, risks of seizures, arrests, and other losses, and the availability of the necessary personnel, skills, and technical equipment (Pietschmann 1997: 276, 281). A particular advantage of ATS production (other than ecstasy) is flexibility in the use of precursor chemicals which offers a degree of independence from the supply of specific substances. Many precursors can easily be substituted with alternative ingredients. Furthermore, some substances are available on the licit market or are subject to only rudimentary controls.

The relative ease with which ATS production can be carried out means that more people or groups of people are likely to engage in the activity and that production levels are likely to rise if levels of law enforcement remain unchanged. If production levels are high and if substances are widely available, prices are lower.

Seizures of illicit ATS laboratories impact not only on the amounts of ATS available at wholesale and retail levels but also on the prices charged for these drugs. Seizures of manufacturing sites also influence the way in which ATS production is carried out, on the way it is disguised, and ultimately on the level of supply of and demand for these substances. In simple terms, the greater the danger of seizures, arrests, and other losses associated with ATS production, the more expensive the substances are at the place of production, and at the wholesale and retail levels (Pietschmann 1997: 278). Seen this way, law enforcement activities that target ATS production contribute to an increase in profit margins for criminal organisations. The increased profit has been described as 'a "risk premium", ie a compensation for the additional risks taken by manufacturers' (Pietschmann 1997: 278; Cherney, O'Reilly & Grabosky 2005: 13).

In 2005, UNODC undertook the first study into the profit margins of ATS production in Oceania (Table 8). For ATS other than ecstasy, UNODC suggests that most are sourced within the region and that great quantities are available for sale. As a result, laboratory prices for ATS at origin are relatively low, approximately US$7 per gram or US$7,099 per kilogram. UNODC estimates that the total income for ATS producers in Oceania in 2005 amounted to approximately US$58 million.

The relatively low price of ATS other than ecstasy is a result of the ease with which production can be carried out. This, in turn explains the magnitude of local production. For criminal operators, illicit ATS production offers a range of advantages especially when compared with other narcotic drugs. Research published in 2005 stated that:

> To produce one kilo of cocaine, one has to cultivate nearly one hectare of coca, and use nearly 200 kilograms of inputs which include acids, solvents,

bases and salts. To produce one kilogram of synthetic drugs requires only five kilograms of inputs, an amount that can vary depending on the precursors used and the method of manufacture (Cherney, O'Reilly & Grabosky 2005: 7).

In contrast to opium and cocaine, ATS production and profits do not depend on climate, harvests, or other environmental factors. Precursors can be sourced very easily, cheaply, and often legally. For example, '30 tablets containing 60 milligrams each of pseudoephedrine […] available in pharmacies for around $AUD10.00 can produce more than 300 doses of methamphetamine which retails between $2000 and $8000 on the illicit drug market' (Cherney, O'Reilly & Grabosky 2005: 7). The manufacturing process, especially for substances other than ecstasy, is simple and inexpensive (especially relative to the wholesale price for ATS), involves limited skills, and can be completed within one or two days. Further, the manufacturing process is highly flexible and can be carried out almost anywhere, including household kitchens, garages, hotel rooms, cargo containers, or even the boot of a car (Wilkins et al. 2005). This also allows for the process to be disguised very easily.

These observations confirm research findings from other jurisdictions which suggest that ATS are typically manufactured in the country of final consumption. This, in turn, means that any value-adding of the production process remains in the country of final consumption, making ATS production very attractive for local entrepreneurs who work in close proximity to consumers. From the available information it appears that it is the ease with which profits can be made, and not necessarily the size of those profits, that attracts new competitors. This is manifest in the growing number of clandestine laboratories throughout the region (Wilkins et al. 2005).

Table 8: Amounts and income of ATS and ecstasy production, Oceania, 2005

	ATS (excl. ecstasy)	Ecstasy
Production in Oceania	8,151 kg	784 kg
Total available for sale	8,151 kg	784 kg
Laboratory price per kg at origin	US$7,099/kg	US$47,014/kg
Producer income	US$58 million	US$37 million

Source: UNODC 2005: 140

In comparison to other ATS, ecstasy production in the region is small, especially relative to the levels of ecstasy trafficking and importation into Oceania (see chapter 3). Given the costs of and difficulties in obtaining ecstasy precursors in the region and the higher costs and greater degree of sophistication required to carry out ecstasy manufacturing, laboratory prices at origin for ecstasy are much greater than those for other ATS. Table 8 shows that UNODC estimates that the price for ecstasy at origin in Oceania is US$47.00 per gram or

US$47,014.00 per kilogram. The total income of ecstasy producers in the region is estimated to be US$37 million. The profit margin relative to the small amount of production is much greater for ecstasy than it is for other ATS.

Despite the great profit margins of local ecstasy production, most of the producer income for ecstasy is made overseas, not in the region. According to UNODC figures, the amount of ecstasy imported into the region is over seven times greater than the local production. Other reports suggest that 90 percent of the ecstasy available in Oceania is sourced from overseas (see chapter 3). Consequently, and in contrast to other ATS, ecstasy production outside the region limits value-adding in the consumer countries to trafficking and retail activities. For ecstasy (as well as for crystal methylamphetamine, heroin and cocaine) only minor production or modification processes occur in Australia, New Zealand, and the Pacific Islands, thus production profits remain offshore and essentially beyond the reach of local criminal organisations.

Observations

Although exact figures on the level of illicit ATS production do not exist, the available information from domestic and international agencies and from academic research confirms a number of trends and allows the following observations about illicit ATS production in Oceania:

- The beginning of illicit production of ATS in the region coincided with the ban on licit production and on over-the-counter availability of ATS. A market opportunity for organised crime was created with the prohibition of ATS.
- Of the ATS (excluding ecstasy) available in Oceania, approximately 90 percent are manufactured in the region, particularly in Australia and, in smaller proportions, in New Zealand. Manufacturing of ATS, with the exception of high quality methylamphetamine and ecstasy, usually takes place in close proximity to the retail market. In Australia, illicit ATS production is particularly concentrated in southeast Queensland. There is also some isolated, occasional production of ATS in the Pacific Islands.
- ATS produced in the region are, for the most part, methylamphetamine of low purity. Methylamphetamine of higher purity, such as crystal methylamphetamine or ice, is largely imported into the region from east Asia. Ecstasy, too, is for the most part imported into the region from Europe and increasingly from east and southeast Asia. There are some reports of small levels of ecstasy production in Australia.

- According to Australian sources, the number of clandestine ATS laboratories and the volume of domestic ATS production have continued to grow in recent years. UNODC and New Zealand agencies noticed a slow decrease in the number of detections of clandestine laboratories since 2003 but suggest that domestic production may have been substituted by greater imports of ATS.
- As a result of more comprehensive control of precursor substances, Australian and New Zealand agencies are interdicting more cases and greater quantities of ATS precursors. Precursor seizures, however, do not seem to have impacted on the levels of illicit ATS production, although in Australia use of ATS appears to have stabilised. The availability and control of precursors does, however, impact on the methods and ingredients used for illicit ATS production. Increased precursor control so far seems to be followed by a shift in illicit ATS production. Precursor control remains very rudimentary in the Pacific Islands and is nonexistent in some island nations.
- High profitability (even of small quantities) and great flexibility in the production process and in the ingredients used make illicit ATS production particularly attractive to criminal elements. Organised crime features more prominently in the large scale production of ATS, the importation of precursors, and the manufacture of ecstasy and ATS of high purity.
- Organised crime involvement in the illicit ATS trade in the Pacific region is unsurprising given the existence of well-organised, sophisticated criminal networks in the region with established networks across borders and around the world.
- Of the criminal organisations operating in Australia, outlaw motorcycle gangs have a long standing association with illicit ATS manufacturing and have controlled much of the domestic production. These gangs continue to feature prominently in the domestic ATS markets in Australia and New Zealand but their position may be weakening as new criminal elements, including entrepreneurial amateurs, enter the market. Other criminal organisations have a less visible involvement in illicit ATS production, and seizures made in the Pacific islands show links to Asian criminal syndicates.
- Current research suggests that illicit ATS production in Oceania will continue. There are some suggestions that ATS of higher purity and ecstasy, too, will increasingly be produced locally. Many reports anticipate that illicit ATS production in the Pacific Islands will increase.

Chapter 3:
Trafficking and importation

Trafficking and importation of ATS in Oceania

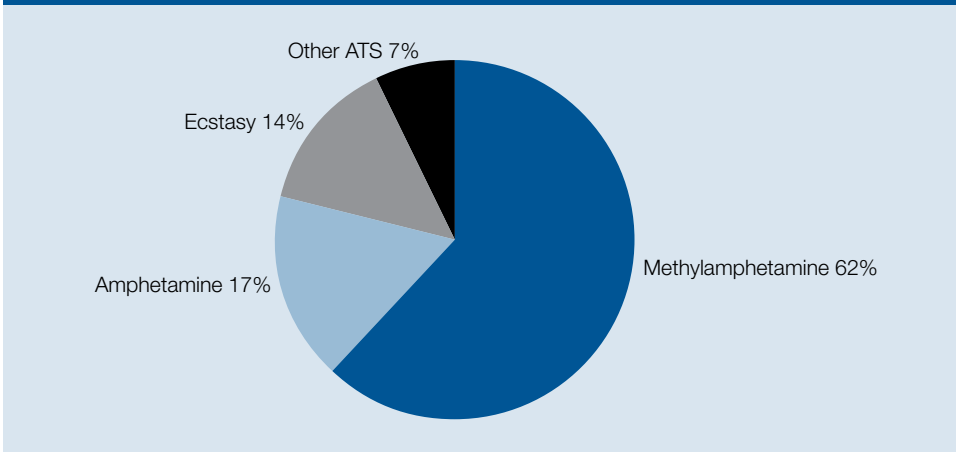
In the absence of exact records of imports and exports of illicit substances, the extent of trafficking in ATS is usually measured with reference to the size of ATS seizures made by law enforcement and customs agencies. As with all data used in this study, statistics and other information are subject to different reporting practices in different countries. The information is often incomplete and frequently anecdotal rather than representative of the true extent of trafficking and illicit importation activities. The figures for ATS seizures generally only reflect the level and intensity of law enforcement activity and do not show the true extent of the ATS problem. For example, research from New Zealand has suggested that only about eight percent of ecstasy is seized by law enforcement agencies and that seizure rates for amphetamine are as low as four percent of the actual supply (Wilkins et al. 2004b: 63). Similar suggestions have been made by UNODC, which estimates that during the trafficking stage only about 12.6 percent of ecstasy and as little as 6.1 percent of other ATS are seized by law enforcement agencies (UNODC 2005: 140).

An additional problem in assessing ATS trafficking arises from the fact that the statistics usually do not reflect the quality or purity of the substances seized. To complicate matters further, different jurisdictions measure their seizures differently – some in kilograms, some in litres, some in units – with no accepted standard of conversion between the three scales.

Global trends

Worldwide, methylamphetamine is the most commonly seized type of ATS, accounting for about 62 percent of all seizures between 2000 and 2004 (Figure 5). Ecstasy accounted for 17 percent of seizures during that time period, although its proportion has grown to 28 percent in 2004. Amphetamine accounted for 14 percent of all seizures in 2000–04 and other ATS make up the remaining seven percent (UNODC 2006: 132).

Figure 5: Global ATS seizures (including ecstasy) by type, 2000–05 (percent)



Source: UNODC 2007: 123

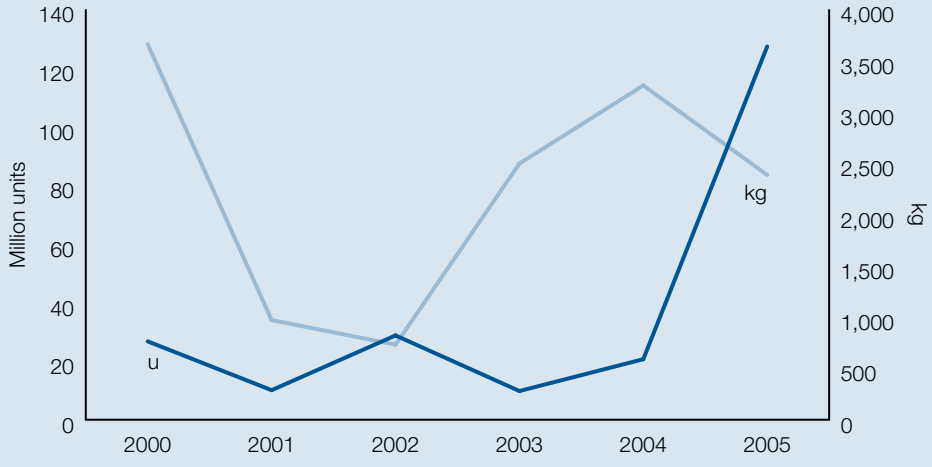
The *World drug report*, published annually by the UNODC, shows a considerable increase in the seizures of ATS in recent years. The methodology is described in the report (UNODC 2007: 261–262). Worldwide seizures increased ten-fold between 1990–91 (4 tonnes) to almost 40 tonnes in 2000–01 (UNODC 2003a: 3). After cannabis, ATS are the most frequently seized drugs. Global ATS seizures peaked in 2000 and have since decreased significantly (see Table 9 and Figure 6). For example, seizures in 2002 and 2004 were only about half of the amount seized in 2000. Most ATS are seized in Asia. In 2002, 64 percent, and in 2003, 52 percent of worldwide amphetamine seizures (excluding ecstasy) were made in east and southeast Asia (UNODC 2005: 103; Chawla & Pietschmann 2005: 170). Accordingly, the decrease of worldwide seizures of ATS in recent years has largely been attributed to lower seizures in Asia.

Table 9: Global ATS seizures, 2000–05

	2000	2001	2002	2003	2004	2005
ATS (excl. ecstasy)						
kg	3,659.257	971.103	731.496	2,496.015	3,257.541	2,385.764
lt	229.96				1.00	10.51
u	26,725,520	10,075,500	28,748,890	9,789,583	20,641,080	127,294,300
Ecstasy (MDA, MDEA, MDMA)						
kg	1,653.981	1,056.245	3,278.132	1,956.448	5,042.606	2,640.433
lt		3.00			210.00	12.00
u	33,345,990	34,398,240	34,547,290	23,739,870	26,194,790	26,504,540

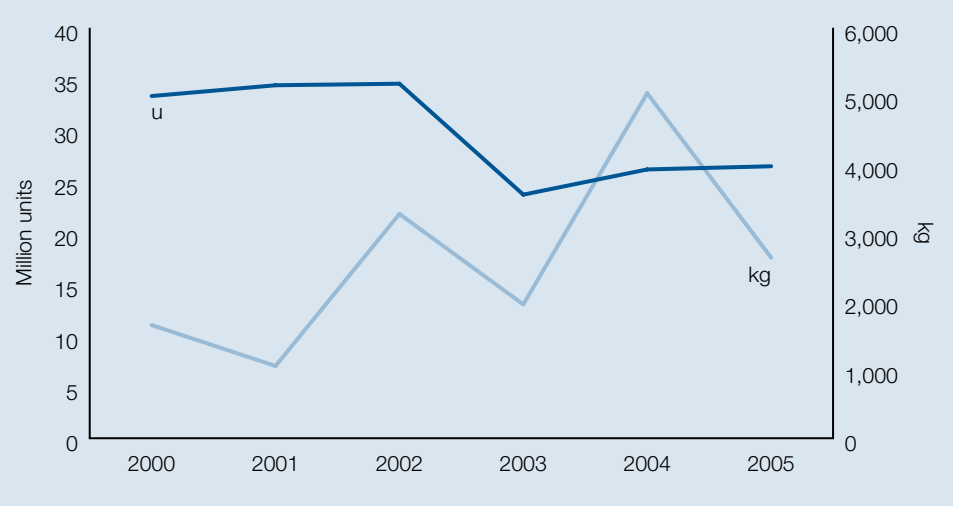
Source: UNODC 2007: seizures

Figure 6: Global ATS seizures (excluding ecstasy), 2000–05



Source: UNODC 2007: 64

Figure 7: Global ecstasy seizures, 2000–05



Source: UNODC 2007: 82

Global seizures for ecstasy seem to be unrelated to seizures of other ATS. The available information also shows some conflicting developments, depending on the measurement used. Overall, total ecstasy seizures worldwide increased in the 2000–05 period and there have been some suggestions that worldwide seizures of ecstasy increased further since 2004 (INCB 2005: para 640). Measured in weight, ecstasy seizures increased almost ten-fold between 2000 and 2005, although decreases were recorded in individual years; see Table 9 and Figure 7 above. Seizures of ecstasy in units (u), in contrast, peaked in 2001 with the seizure of almost 40 million units and have since decreased by about 25 percent to approximately 28 million ecstasy units in 2005, mostly due to a decline in ecstasy production in Europe.

Oceania

As the following sections show, trafficking trends in Oceania, manifested in the seizure of ATS and ecstasy, do not seem to follow global developments. In general, seizures of ATS in Oceania, especially methylamphetamine and ecstasy, grew significantly over recent years until 2003. Ecstasy seizures continued to increase in 2004 while methylamphetamine seizures in Oceania dropped slightly, largely due to reduced methylamphetamine trafficking in Australia and lower levels of methylamphetamine importation from southeast Asia (UNODC 2006: 134).

The different developments at global and regional levels are explained by the common and long standing observation that trafficking in ATS, with the exception of ecstasy, is conducted only within a particular region or within one country (UNDCP 1996: 40). 'Production and consumption of ATS are, in general, less geographically separated than in the case of the other illicit drugs' (Chawla & Pietschmann 2005: 175). Much of the illicit ATS trade (other than ecstasy) is carried out within one region or even within one country and is not interregional. Thus, the developments in Oceania are not necessarily linked to developments elsewhere or to global trends. In contrast to substances such as heroin and cocaine, ATS other than ecstasy are not commonly trafficked across great geographical distances. It was mentioned in chapter 2 of this study that approximately 90 percent of ATS in Oceania are also manufactured in the region. This means, *inter alia*, that suppression and seizures of ATS in one part of the world do not automatically translate into shortages in other parts. However, production capacities in Oceania are limited relative to the high demand in the region (see chapter 4). As a result, there is also some trafficking of methylamphetamine from southeast Asia into the region (UNODC 2006: 132), especially in the form of crystal methylamphetamine. Precursor chemicals for ATS production, too, are sourced from outside Oceania. Thus ATS availability in Australia is, to some degree, dependent on the availability of ATS and ATS precursors elsewhere.

A somewhat different picture emerges for ecstasy, which is trafficked internationally, often across very great geographical distances. The global ecstasy market connects different regions and countries across the world and thus enforcement measures or fluctuations in production on one side of the globe may indeed have flow on effects on the opposite side. The trade in ATS precursors, too, is interregional, partly because of the great discrepancies in precursor control in different countries (Chawla & Pietschmann 2005: 176).

Australia

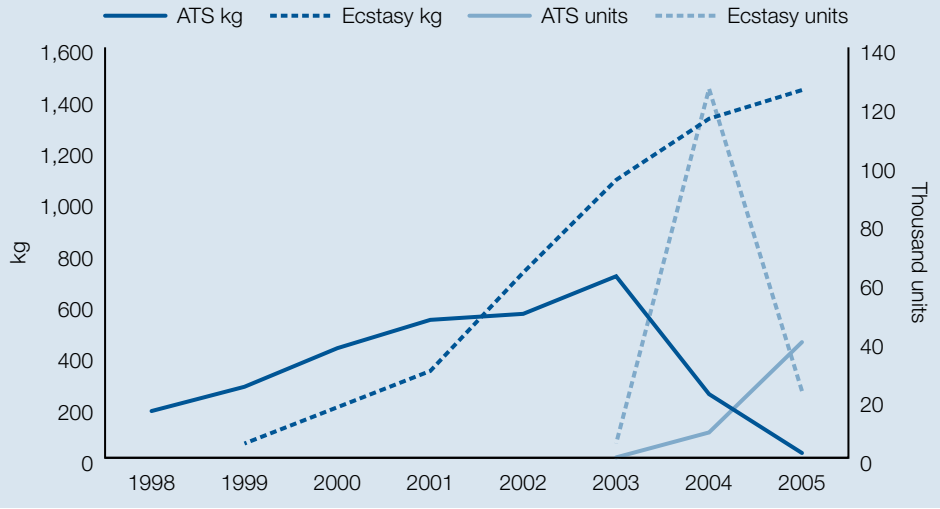
ATS and ecstasy seizures

ATS seizures in Australia are relatively high, accounting for approximately six percent of global seizures (UNODC 2005: 103). In Australia, seizures of ATS generally and ecstasy seizures in particular (including MDA, MDEA, and MDMA) increased greatly between 1998 and 2003, as illustrated in Table 10 and Figure 8. The greatest quantity of ATS seizures was recorded in 2003 when over 707 kg of ATS were seized in Australia. The quantity of ATS seizures has since decreased, to less than 250 kg in 2004. In contrast, ecstasy seizures are continuing to increase. Over 1.4 tonnes of ecstasy were seized in 2005 alone.

Table 10: ATS and ecstasy seizures, Australia, 1998–2005								
	1998	1999	2000	2001	2002	2003	2004	2005
ATS (excl. ecstasy)								
kg	182.2	276.8	427.3	537.6	561.1	707.55	248.18	18.59
u						136	8,645	39,449
lt							0.08	10.51
Ecstasy								
kg	n.a.	55.6	n.a.	338.4	722.0	1,083.1	1,321.63	1,433.43
u						4,885	125,867	22,756

Source: UNODC 2005: 316, 321; UNODC 2006: 339, 344

Figure 8: ATS and ecstasy seizures, Australia, 1998–2005



Source: UNODC 2005: 321; UNODC 2007: 64, 82

The first ecstasy seizure in Australia is believed to have been made in June 1986 at Sydney airport (Webb 2003: 91). Ecstasy seizures in Australia have since increased steadily and continued to grow rapidly in the 1999–2004 period. As shown in Table 10 and Figure 8, seizures nearly doubled between 2001 and 2002 and increased by a further 30 percent between 2002 and 2003, and again from 2003 to 2004. According to UNODC, 13 percent of global ecstasy seizures between 2001 and 2003 were made in Australia. In 2003 alone, 24 percent of all ecstasy seizures worldwide were made in Australia, second only to the Netherlands (28%). Ecstasy seizures in Australia in 2004 account for about 17 percent of all seizures made worldwide, ranking third behind Canada and Belgium (both 19%

of global seizures). In 2005, the Oceania region accounted for 27 percent of ecstasy seizures worldwide, second only to west and central Europe (38%; UNODC 2007: 145). As mentioned before, most of the ecstasy seized in Australia originates from Europe, smaller amounts come from Asia, and recently there are reports of some low scale domestic ecstasy production in Australia (UNODC 2006: 132, 140; see chapter 2).

Unlike UNODC data, ATS seizures recorded by the ACC shown in Table 11 are not separated between ecstasy and other ATS, making is impossible to identify a distinct trend for either substance. The ACC statistics do, however, show a steady increase in the total number of ATS seizures and also in the quantity (measured in weight) seized annually between the 1997–98 and 2005–06 financial years. ACC statistics do not reveal the actual size of individual seizures. From the data shown in Table 11 it appears that the average size of seizures has increased in recent years, as the total weight of ecstasy seized by state, territory, and federal agencies has grown more rapidly than the total number of seizures. The number of ATS seizures more than doubled between 1997–98 and 2005–06. This reflects the fact that law enforcement and border controls improved significantly during that time. During the same period the amount of ATS seized (in weight) increased about twelve-fold, which may be explained by the growth of ATS production (see chapter 2 above).

Table 11: ATS (including ecstasy) seizures, Australia, 1998–2006

	1997–98	1998–99	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Seizures (n)	4,551	6,529	4,861	6,309	6,471	6,179	8,027	8,600	9,987
Weight (kg)	182.22	256.98	381.27	801.50	1,835.98	2,023.02	1,371.94	2,276.15	1,296.62

Source: ABCI and ACC 1997–2007

Seizures by type of substance

The previous section has shown that in recent years, seizures of ecstasy have been greater than seizures of other ATS. This trend is also confirmed by reports by the Australian Customs Service which collects comprehensive statistics on detections of illicit importations of ATS into Australia. These statistics are by their very nature limited to detections that occur at the border and do not involve ATS seizures that are made by law enforcement agencies domestically. Table 12 shows that in the period between 1999 and 2004 the total number of and weight of ecstasy seizures at the border have been far greater than those of other ATS. While there has been a slight decrease in the number of ecstasy seizures since the 2002–03 financial year, the quantity of ecstasy seized in these years has continued to remain high, suggesting that ecstasy is increasingly found in very large shipments.

Table 12: ATS (including ecstasy) detection by type of substance, Australia,1999–2006

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
ATS (excl. MDMA, ice)							
Detections (n)	42	35	173	198	128	186	n.a.
Weight (kg)[a]	13.02	1.22	273.94	6.15	3.55	27.31	
Ice (crystal meth.)							
Detections (n)	18	15	30	17	12	18	n.a.
Weight (kg)	8.73	83.47	154.31	233.18	2.37	123.85	
Ecstasy (MDMA)							
Detections (n)	104	148	285	311	294	169	135
Weight (kg)	142.67	338.42	445.04	556.19	872.95	2,374.95	413.31

a: Weight shown is an estimation only. Unless the exact weight was available, weight is calculated using 0.29 g per tablet

Source: ACS 2002–06

There have been a number of reports stating that crystal methylamphetamine is increasingly popular and more easily available than previously on the Australian illicit drug market. There have also been suggestions that crystal methylamphetamine is, for the most part, imported into Australia from Asia where the substance is produced in great quantities and is thus more easily available (ACC 2005: 11; Pieper 2006: 19). It was mentioned earlier that local clandestine laboratories in Australia generally do not produce methylamphetamine of such high purity. The data in Table 12 show that ACS seizures of crystal methylamphetamine account for approximately 10 to 30 percent of ATS seizures (excluding ecstasy) with great variations between individual years. Measured in weight, crystal methylamphetamine detections are greater than seizures of other ATS in some years. While Table 12 does not show any particular trend in the level of illicit importation of crystal methylamphetamine, the data confirm that relatively large quantities of crystal methylamphetamine are imported into Australia, while border seizures of other ATS are small relative to local production. In 2004, the ACC suggested that '[c]rystalline methamphetamine is exclusively imported and the market is dominated by a small number of large shipments and a large number of small scale imports' (ACC 2004: 6). Other reports confirm that crystal methylamphetamine is almost exclusively imported into Australia, especially from mainland China via Indonesia and the Philippines and also increasingly from Myanmar (Pieper 2006: 19). There have been suggestions that the increased level of importation, combined with the growing demand for high purity crystal methylamphetamine, is impacting on Australian illicit methylamphetamine producers who, in order to compete with overseas suppliers, are forced to produce higher quality products (Topp et al. 2002: 346).

Mode of importation

In the absence of any land borders with another country, importation of ATS into Australia occurs exclusively by air and sea. Customs classifies ATS detections into three different modes of importation:

- air (passengers and crew)
- air and sea cargo and international post
- shipping vessels and aircraft (including ship crews and passengers).

Table 13 illustrates that approximately 90 percent of ATS detections (not including ecstasy) are made in cargo and postal shipments. In most years, only a comparatively small number of detections are made on passengers and crew, and on board sea vessels and aircraft. This leads to the suggestion that most ATS are imported into Australia in air, sea and postal shipments and are not commonly brought in by couriers or drug mules. The total weight of ATS detections involving cargo and postal shipments is also greater than the quantities found in other modes of importation, although in some years, individual large seizures of ATS have been made in searches of aircraft and sea vessels. For example, in 2001–02, more than 400 kg of ATS were found in (only) three seizures aboard sea vessels and aircraft. This demonstrates that the statistics can be heavily influenced by individual seizures and unique incidents, making it difficult to form any generalised observations about trafficking patterns. From the raw data, it appears that imported ATS, for the most part, arrive in Australia in many, relatively small shipments. Further information about the size of seizures is discussed in the following section.

Table 13: ATS (excluding ecstasy) detection by mode of importation, Australia, 1999–2006

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Air (passengers + crew)							
Detections (n)	20	17	22	13	15	7	13
Weight (kg)	19.52	2.81	1.99	1.06	2.40	8.06	16.32
Cargo and postal[a]							
Detections (n)	39	32	178	199	124	196	410
Weight (kg)	2.23	81.88	14.81	238.26	3.51	133.30	73.34
Shipping + aircraft[b]							
Detections (n)	1	1	3	3	1	1	n.a.
Weight (kg)	0.00	0.00	411.45	0.01	0.01	9.81	n.a.
Total							
Detections (n)	60	50	203	215	140	204	423
Weight (kg)	21.75	84.69	428.26	239.33	5.92	151.17	89.67

a: Includes detections made from air cargo, sea cargo, and international post

b: Includes detections made from searches of sea passengers and crew, vessels, and aircraft

Source: ACS 2002; 2005b; 2006

As with other ATS, trafficking in ecstasy mostly occurs by way of concealment in sea cargo, air cargo, and postal shipments, although some opportunistic trafficking aboard commercial flights also occurs. This is shown below in Table 14 and Figure 9. In most years, the number of ecstasy detections is higher than the number of detections of other ATS. The total quantities of ecstasy seized each year are also far greater than those of other ATS. The number and quantity of ecstasy seized from airline passengers and crews has gradually decreased in recent years, suggesting that ecstasy is rarely imported by couriers or drug mules. This is also confirmed by reports from the ACC (2005: 25).

Table 14: Ecstasy (MDMA) detection by mode of importation, Australia, 1999–2006

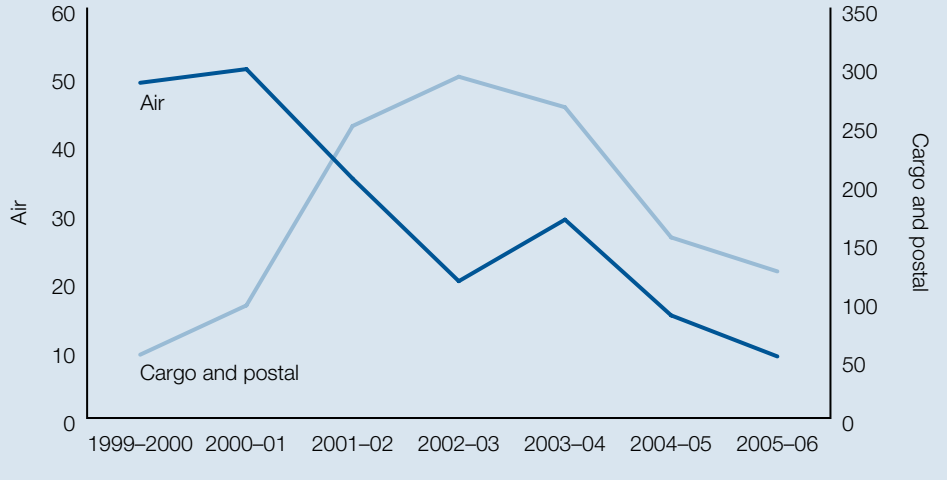
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Air (passengers + crew)							
Detections (n)	49	51	35	20	29	15	9
Weight (kg)	36.27	64.70	123.24	10.30	37.89	42.59	25.62
Cargo and postal[a]							
Detections (n)	54	96	249	291	265	154	125
Weight (kg)	90.61	273.71	320.24	545.89	835.06	2,332 36	387.69
Shipping + aircraft[b]							
Detections (n)	1	1	1	n.a.	n.a.	n.a.	1
Weight (kg)	15.80	0.00	1.56				n.a.
Total							
Detections (n)	104	148	285	311	294	169	135
Weight (kg)	142.67	338.42	445.04	556.19	872.95	2,374.95	413.31

a: Includes detections made from air cargo, sea cargo, and international post

b: Includes detections made from searches of sea passengers and crew, vessels, and aircraft

Source: ACS 2002; 2005b; 2006

Figure 9: Ecstasy (MDMA) detection by mode of importation, Australia, 1999–2006



Source: ACS 2002; 2005b

Size of ATS seizures

Seizures of ATS made by ACS are further classified by the size of the detection. ACS differentiates between commercial, trafficable, and minor quantities, a terminology also used in the former drug offences under the *Customs Act 1901* (Cth). The actual quantities associated with these terms differ depending on the substance involved. For ATS other than ecstasy, commercial quantities are seizures involving 750 grams or more, and trafficable quantities involve two or more grams but less than 750 grams of ATS. Quantities that are smaller than two grams are classified as minor.

Table 15: ATS (excluding ecstasy) detection, Australia, 1999–2006

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Commercial (≥ 0.75 kg)							
Detections (n)	3	1	4	2	1	8	12
Weight (kg)	17.28	79.11	421.17	233.90	2.32	146.78	79.81
Trafficable (≥ 2 g, < 0.75 kg)							
Detections (n)	45	33	152	179	117	170	311
Weight (kg)	4.46	5.57	7.06	5.41	3.59	4.37	9.76
Minor (less than trafficable, < 2 g)							
Detections (n)	12	15	47	34	22	26	100
Weight (kg)	0.01	0.01	0.02	0.02	0.01	0.02	0.09
Total							
Detections (n)	60	50	203	215	140	204	423
Weight (kg)	21.75	84.69	428.26	239.33	5.92	151.17	89.67

Source: ACS 2002; 2005b; 2006

Table 15 shows that most seizures made by ACS involve trafficable quantities of ATS, accounting for about 80 percent of all detections made each year. A small number of commercial-size shipments are also apprehended each year. The picture that emerges is that ATS other than ecstasy are trafficked most frequently in medium sized shipments, although individual very large shipments are also detected each year. If seen in context with the modes of importation outlined before, it appears that the very large shipments almost exclusively arrive by sea cargo, air cargo, or in postal shipments. These observations are confirmed by reports of recent ATS seizures. For example, in June 2005, 11 kg of crystal methylamphetamine was seized, having been imported on a US Navy vessel (ACS 2005b). In February 2006, the AFP and ACS seized 46 kg of crystal methylamphetamine in a speedboat from Canada (ACS 2006). It has been suggested that the importation of large shipments of ATS into Australia occurs along established routes which are simultaneously used for other illicit drugs such as heroin (ACC 2005: 14; ACC 2003: 5–6).

Ecstasy detections show the same pattern as seizures of other ATS (see Table 16). The size of ecstasy seizures is, however, classified differently. Seizures of 500 grams or more are called commercial quantity. Trafficable quantities involve 0.5 grams or more but less than 500 grams. Seizures of less than 0.5 grams are referred to as minor. The great majority of ACS seizures involve trafficable quantities of ecstasy. In contrast to other ATS, ecstasy appears to be more frequently trafficked in very large shipments. While the number of seizures involving commercial quantities is relatively low, accounting for approximately five to 20 percent of all seizures in most years, the total quantity in weight of commercial seizures is extremely high. For example, the 21 seizures of commercial-size shipments apprehended in 2004–05 involved over 2.3 tonnes of ecstasy. This is confirmed by reports of recent large scale seizures of MDMA in Australia. In June 2006, 350 kg of MDMA was seized in Melbourne in an ink shipment from Canada. In April 2005, 1 tonne or 5 million tablets, the then largest seizure of MDMA, was found in Melbourne in a sea cargo consignment of tiles from Italy (SA Police 2006). In November 2004, 161 kg of MDMA was detected in Port Botany (NSW) in a sea cargo consignment from Belgium. And in October 2004, 818 kg of MDMA was found in Sydney concealed in an air cargo consignment from Poland (ACS 2005b).

Table 16: Ecstasy detection, Australia, 1999–2006

	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Commercial (≥ 0.5 kg)							
Detections (n)	25	39	24	16	32	21	17
Weight (kg)	139.88	333.35	435.79	550.14	861.81	2,369.49	407.19
Trafficable (≥ 0.5 g, < 0.5 kg)							
Detections (n)	70	99	244	281	247	146	117
Weight (kg)	2.84	5.06	9.26	6.05	11.13	5.46	6.12
Minor (less than trafficable, < 0.5 g)							
Detections (n)	9	10	17	14	15	2	1
Weight (kg)	0.00	0.00	0.00	0.00	0.00	0.00	n.a.
Total							
Detections (n)	104	148	285	311	294	169	135
Weight (kg)	142.67	338.42	445.04	556.19	872.95	2374.95	413.31

Source: ACS 2002; 2005b; 2006

In summary, it appears that there is, at present, no significant trend in the level of importation of ATS (other than ecstasy) into Australia. While some years have seen very high numbers of seizures and the seizure of very large quantities, there is no consistent development over time. Ecstasy importations, in contrast, have grown steadily in recent years.

The growing number of seizures of ATS and ecstasy made by law enforcement agencies in Australia has, for the most part, been attributed to greater law enforcement activity, including the levels and intensity of investigations, intelligence, etc. Greater seizures may, however, also be explained by greater availability of ATS in the illicit market. In this context UNODC has described the upsurge in seizures of ATS in Australia, especially ecstasy, over the past 15 years as 'a frightening measure of a growing market' in Australia, Oceania, and worldwide (UNODC 2003a: 3). This is supported by evidence showing an increase in the number and size of manufacturing sites in more countries (UNODC 2003a), including Australia.

New Zealand

Patterns of ATS trafficking and importation in New Zealand are very similar to developments in Australia, although there are some signs of greater levels of ATS importation relative to the local illicit ATS production. Until recently, ATS other than ecstasy were, for the most part, imported into New Zealand. Before local ATS production in New Zealand reached significant levels in 2000, ATS were largely sourced from Australia and the United States (Wilkins 2002). At that time, seizures of ATS in New Zealand also rose rapidly from only 1.3 kg in 1998 to 10.2 kg in 2000 (see Table 17 below). As local production of ATS in New Zealand grew, the need for ATS imports declined. Accordingly, ATS seizures decreased between 2000 and 2003. However, a new high was reached with the seizure of over 30 kg and 934 units of ATS in 2004.

Data for seizures of methylamphetamine in New Zealand are not available for all years. Seizures increased markedly between 1999 and 2002 and the New Zealand press reported elsewhere that seizures of methylamphetamine in the form of crystal methylamphetamine or ice alone rose from just one kilogram in 2003 to 17 kg in 2004 (Narcotics trafficking through NZ causes UN concern 2006).

Table 17: Seizures, New Zealand, 1998–2003								
	1998	1999	2000	2001	2002	2003	2004	2005
ATS (excl. ecstasy)[a]								
kg	1.34	1.10	10.18	4.17	7.44	2.19	30.47	n.a.
u		1,400	103		523	57	934	
Methylamphetamine[b]								
kg	n.a.	1.8	2.1	3.8	6.4	n.a.	n.a.	n.a.
Ecstasy (UNODC)[a]								
lt	n.a.	n.a.	0.07	3.00				
u			8,798 u	83,449	256,350	271,799	45,387	25,401
Ecstasy (NZ Customs)[c]								
u	3,000	n.a.	10,000	73,000	167,000	260,000	n.a.	n.a.

a: from UNODC 2005: 316, 321; 2006: 339, 344; 2007: 64, 82

b: Bellamy & McNab 2003: 7

c: Wilkins 2002: 14; Wilkins et al. 2005: 142

Table 17 shows that ecstasy seizures in New Zealand have followed similar trends to those in Australia, showing rapid increases in the years up to 2003. According to UNODC data, seizures of ecstasy grew ten-fold between 2000 and 2001 alone, albeit starting from very low levels. Ecstasy seizures in New Zealand peaked in 2003 with seizures totalling over 270,000 units. A significant decrease in seizures was recorded by UNODC in 2004 and 2005, although it is unclear at this point whether this drop signalled a new trend.

Figures provided by the New Zealand Customs Service show the total amount of ecstasy seized at the border and in imported shipments. Unlike UNODC data, these figures do not include purely domestic seizures. The Customs data confirm that the great majority of ecstasy is imported into New Zealand. It was noted earlier that there is no evidence of ecstasy production in that country. Other reports confirm that ecstasy in New Zealand originates for the most part from Western Europe and is trafficked to New Zealand by air or through international mail (Wilkins 2002).

Pacific Islands

The Pacific Islands have been considered vulnerable to trafficking and smuggling activities by sea and air for some time. Their geographical location between Asia, Australia, and the Americas make the islands important stopover, storage, and transit points for cross-Pacific operations and serve to camouflage the origins and routes of illicit consignments (Devaney, Reid & Baldwin 2006b: 300, 304; Shibuya & Smith 2002). In 2003, UNODC observed that:

> Viewed from a drug-business perspective, the geographic location of the Pacific islands lends itself to facilitation of traffic from major drug suppliers in East Asia and South America to serving demand in Australia/New Zealand and North America. The Pacific islands connect some of the world's largest drug producers with the largest drug markets in the world. It is a strategic, if perilous, location with regard to the global illicit drug trade. Adding to this is the virtual isolation of many of the islands (security for traffickers) and their sheer number (opportunities) including often hundreds, sometimes thousands, of smaller islets. A Pacific transit can also enable drug traffickers to camouflage the country of origin of their illicit drug consignments originating from high-risk countries. It is a fact that the Pacific islands are extremely vulnerable to exploitation by drug traffickers (UNODC Regional Centre for East Asia 2003: 9; cf McCusker 2006).

The actual level of trafficking in illicit drugs through the Pacific Islands is unknown and, unlike Australia and New Zealand, there are no annual reports of drug seizures, and modes and sizes of importations. Recent seizures may give some indication about the existence and *modi operandi* of drug traffickers in the region but the available data do not allow any generalisations about the true extent of the problem.

Much of the available information on the Pacific Islands relates to illicit trafficking in narcotic drugs and not specifically to ATS shipments. For example, during the late 1990s, there was some evidence of trafficking in 'illicit southeast Asian heroin and cannabis products, South American cocaine, European ATS and LSD […] at varying scales and intensity using Vanuatu, Papua New Guinea, Fiji, Tonga, Tahiti, and New Caledonia as transit points' (UNDCP 2003: 12; cf Crocombe 2001: 370; Gordon c2003). In 2000, police in Suva seized 357 kg of heroin bound for Australia, New Zealand, and Canada. It is believed that the heroin originated in southeast Asia (INCB 2002: para 564). In April 2001, some Chinese nationals were arrested in Fiji for shipping 160 kg of heroin from Myanmar to Vanuatu, presumably on their way to Australia. A frequently cited case is that of 50 kg of cocaine which was found floating in a lagoon in Micronesia. The locals who found it mistook the white powder for washing detergent and used it accordingly, before realising that the powder was not lathering as expected (Hon P McIlrath, Secretary, Dept of Justice, FSM, pers. comm. 6 June 2001). In 2001, the INCB reported that 'Fiji and Vanuatu are known

to be used by drug traffickers as transit points for large consignments of heroin originating in southeast Asia and destined for Australia […]. Drug traffickers continue to move cocaine from South America to Australia through the Pacific islands' (INCB 2002: paras 565–567). On 10 September 2004 police in Vanuatu found 120 kg of heroin on a beach in the biggest such haul in the Pacific nation's history (Winter 2006).

In recent years, the focus of drug trafficking in the Pacific Islands seems to have shifted from heroin and cocaine to ATS especially in the form of methylamphetamine, including crystal methylamphetamine (or ice). A 2006 assessment by the Pacific Islands Forum Secretariat identified methylamphetamine seizures in three different forms:

> namely crystal, liquid and methamphetamine powder. There are three possible scenarios that may account for this. The first is that different groups are involved in the manufacture of different drug forms. Secondly, the importers are changing the *modus operandi* in an attempt to evade detection and thirdly, it is an importer preference (PIF 2006: 21).

Since the late 1980s there have been many reports of crystal methylamphetamine importation from the Republic of Korea, Japan, the Philippines, and Taiwan into Hawai'i, which was the first US state to be affected by this drug (Lerner 2005: 74–76; Anglin et al. 2000: 138; Devaney, Reid & Baldwin 2006b: 305). In 2000, Palau and the Northern Marianas also reported their first significant seizures of 332 g and 8.8 kg respectively of crystal methylamphetamines from the Philippines (UNDCP Regional Centre for East Asia 2003: 13; Shibuya & Smith 2002). A further 700 g of ice was reportedly seized in Palau in 2001 (UNODC Regional Centre for East Asia 2003: 10). Seizures of crystal methylamphetamine in Palau have averaged 3–7 kg per year for the past several years (INCB 2002: paras 565–567). Guam, too, has reported seizures of ice originating from the Philippines (INCB 2002: paras 565–567; UNDCP Regional Centre for East Asia 2003: 13; Devaney, Reid & Baldwin 2006b: 305). One of the most recent cases reported in Guam involved a Korean national who was caught in possession of two kilograms of methylamphetamines (PIF 2006: 20). In a 2003 study of the illicit drug problem in the Pacific region, UNODC argued that:

> With a growing ice abuse problem in some of the American Pacific islands in recent years, the surrounding Pacific islands could be at risk of becoming transshipment points for these drugs that are destined within the region. According to some sources, federal and local law enforcement officials now consider the heroin and cocaine traffic in Guam and the Northern Marianas to be small in comparison with 'ice' imports (UNODC Regional Centre for East Asia 2003: 10).

In Melanesia, much of the ATS trafficking seems to involve methylamphetamine and its precursors. There have been no reported ecstasy seizures in the Pacific Island countries

since a single detection in 2003 (PIF 2006: 22). In 2000, 0.333 kg of (unspecified) ATS were seized in Fiji (UNODC 2005: 316, 399). In 2002, 74 kg of methylamphetamine was found on a ship in Singapore headed for Fiji and Australia (Feizkah 2004). In 2003, UNODC reported of evidence of methylamphetamine importation into PNG by Filipino and Asian syndicates (UNDCP Regional Centre for East Asia 2003: 13). The seizure of a large scale illicit laboratory used for crystal methylamphetamine production in Fiji in June 2004, the seizure in Australia of 125 kg of ice from PR China in October 2004, along with significant seizures in New Zealand has led to suggestions 'that Oceania may be emerging as a transit area for consignments of crystal methylamphetamine.' (INCB 2006: paras 522, 638).

Trafficking in illicit drugs through the Pacific Islands occurs by air and sea, frequently using common commercial shipping and trading routes. The sea trade involves regular cargo vessels as well as small, private vessels that can be used to access shallow bays and beaches. The vulnerabilities of the Pacific Islands to trafficking are obvious: archipelagic coastlines, sea borders, and vast areas of ocean are difficult, if not impossible, to patrol, especially for countries with limited financial, technical, and human resources. This makes it easy, especially for small vessels to remain undetected and cross international borders clandestinely (Devaney, Reid & Baldwin 2006b: 304; Feizkah 2004). Moreover, the size of the seaborne trade across the Pacific is difficult to monitor and control. UNODC reports that:

> There are about 5,000 vessels transiting the Pacific on any given day. Large shipments may be unloaded from a mother ship into a smaller vessel, and can subsequently go in hiding at the many small, uninhabited islets and atolls, waiting for the next step. Rapidly expanding regional transportation links to Asia, North and South America is also a factor and is likely to increase the use of islands as a transit area (UNODC Regional Centre for East Asia 2003: 11).

The small amounts of ATS that are brought into the region for the purpose of local consumption are usually carried by couriers or drug mules on commercial flights and sometimes by parcel delivery. These two methods seem to be the preferred *modi operandi* for crystal methylamphetamine brought into Micronesian countries (Devaney, Reid & Baldwin 2006b: 304). Unlike trafficking patterns in Australia and New Zealand there is, to date, no evidence of trafficking by way of concealed cargo shipments to Pacific Island destinations. The relatively small amounts of ATS consumed in the region perhaps do not warrant this type of operation. Bulk consignments of ATS apprehended on boats in the Pacific Islands are generally destined for drug markets in Australia, New Zealand, and North America (Devaney, Reid & Baldwin 2006b: 304).

Organised crime involvement in ATS trafficking and importation

Knowledge about actual levels and types of organised crime involvement in the trafficking and importation of ATS in the region is very limited and frequently conflicting. In particular, there appears to be some disagreement among official reports and scholarly analysis about the scale and sophistication of ATS trafficking and importation. On the one hand it has been argued that organised crime involvement in the ATS trade in Australia and elsewhere in the region is limited because the local nature of ATS production, distribution, and consumption does not warrant the involvement of large, international criminal networks. On the other hand, there are reports which see the local ATS trade as part of big international enterprises with strong links to other parts of the Asia Pacific region and to other parts of the world. In reviewing the available evidence, it appears that both views are in fact closely related and that the degree of organised crime involvement in the ATS trade in Oceania varies from large international criminal syndicates to local amateur operations.

International studies on linkages between organised crime and ATS trafficking have found significant differences between different regions in the level and patterns of organised crime involvement. Some studies show that in east and southeast Asia the ATS trade is, for the most part, controlled by transnational criminal organisations that dominate supply and distribution. For example, it was found that the Japanese Yakuza controls much of the illegal methylamphetamine importation into Japan. In Myanmar, ethnic based groups who traditionally engaged in opium crop growing and opium trafficking are increasingly involved in the production and distribution of ATS. In contrast, in Europe, north America, and also in Australia and New Zealand, the criminal elements involved in the illicit ATS trade appear to be much more diverse, ranging from small amateur operations to global criminal syndicates (Chawla & Pietschmann 2005: 176).

Comprehensive research into the presence and magnitude of criminal organisations in Australia and in other parts of the region is very scarce and some of the available information is out of date. For example, the last major inquiry into organised crime in Australia was conducted in 1995 by the then Parliamentary Committee on the National Crime Authority. This inquiry focused specifically on Asian organised crime. It found ample evidence of Chinese and Vietnamese organised crime involvement in the heroin trade in Australia did not address their involvement in ATS trafficking (Australia. Parliament… 1995), possibly because of a lack of evidence at that time. In 2002, UNODC studied a number of criminal organisations and found that outlaw motorcycle gangs are a dominant group in the ATS trade in Australia. Other syndicates such as, for example, the McLean Group or the Japanese Yakuza may engage in cannabis and cocaine trafficking, but it was found that they are generally not involved in ATS supply and distribution (UNODC 2002: Appendix B).

Trafficking in 'traditional' narcotic drugs such as heroin and cocaine differs substantially from the ATS trade as the key ingredients of heroin and cocaine – opium and coca – are not

grown in Oceania, thus necessitating the creation of global transportation networks and wide ranging criminal organisations. In contrast, much of the ATS production (excluding ecstasy) is carried out within the region and the production process is simple and ingredients are, for the most part, easy to obtain. This frequently removes the need to engage in cross-border trafficking and allows for small scale, amateur operations (see Section 1 above).

In contrast to purely local, small scale ATS production and distribution, larger operations which involve the importation of precursor substances or finished products into the region require the involvement of persons in multiple locations and invite for the creation or use of transnational criminal networks. It was noted earlier that many precursor chemicals are sourced outside the region, that crystal methylamphetamine is usually imported from east Asia, and that ecstasy, for the most part, comes from European and some Asian sources. Trafficking of these substances to Australia, New Zealand, and the Pacific Islands covers long geographical distances and uses complex and often circuitous routes and transport systems to disguise operations and avoid border controls. It is therefore not surprising that the high end of ATS trafficking frequently involves international criminal syndicates. The AFP and NSW Police, for instance, report that trafficking in ecstasy to Australia is largely carried out by European organised crime groups from Belgium, Netherlands, the UK, and also Israel (AFP 2006: 4; NSW Crime Commission 2006: 2). In recent years, law enforcement agencies have reported greater ecstasy precursor seizures in Australia and in Asia and also made several arrests in the region of European chemists involved in illicit ecstasy production. This has led to suggestions that European syndicates involved in ecstasy production are moving some manufacturing to Asia and also Australia, bringing it closer to the place of consumption (Pieper 2006: 19–20; Chawla & Pietschmann 2005: 176). There is also evidence that criminal organisations engaged in heroin and cocaine trafficking increasingly diversify by using their established routes and networks for the distribution of ATS (ACC 2005: 14; ACC 2003: 5–6; Cherney, O'Reilly & Grabosky 2005: 7). Given the shift of ecstasy and ATS trafficking to Asia it can be assumed that Asian syndicates are equally involved in the illicit ATS trade in the region, but there is, at present, no published material that identifies particular criminal organisation.

Thus, the trafficking in, importation and supply of ATS in Australia involves a variety of criminal elements ranging from highly sophisticated criminal organisations to small scale entrepreneurs who operate within small, local markets or friendship circles (ACC 2005: 14; ACC 2003: 5–6; AFP. ACT Policing 2006: 1). The Queensland Crime and Misconduct Commission, for example, has described the organised crime elements involved in the ATS trade as

> fluid groups of criminals who share a common purpose. […] [T]he description of these groupings of criminal as 'networks' is for analytical convenience rather than an accurate reflection of the criminals' intention (CMC 2006: 3).

It seems that the ATS trade in WA, Qld, and SA is dominated by local, sometimes small scale networks, and all three states report the continuing involvement of outlaw motorcycle gangs in the domestic ATS trade (South Australia Police 2006; Western Australian Police 2006: 1; CMC 2006: 3; ACC 2006b: 3). In contrast, the general experience of investigations made by the AFP and some state police forces seems to suggest that the trafficking and importation of ATS in Australia and the Pacific region is dominated by large Asian syndicates (pers. comm. AFP Border & International, 30 June 2006; Western Australian Police 2006:1). In Queensland, however, 'there is currently an absence of large-scale ethnic criminal syndicates' (CMC 2006: 8). There is also evidence that ecstasy from European sources is trafficked through southeast Asia by Asian criminal networks (Gordon 2001: 21–22).

A similar picture emerges from New Zealand, where ATS trafficking was initially carried out by outlaw motorcycle gangs with international connections (Wilkins 2002; Wilkins et al. 2004b: 57). In a 2003 survey of persons working in drug enforcement and drug treatment in New Zealand most respondents confirmed that criminal gangs 'have a wide influence' in methylamphetamine supply (Wilkins et al. 2004a). Recent reports suggest that outlaw motorcycle gangs remain dominant suppliers of ATS in New Zealand but no longer hold a monopoly position (Wilkins et al. 2004b: 57, 116–118).

The types and size of ATS seizures made in the Pacific Islands seem to suggest that transshipments of ATS in the Pacific Islands are part of transnational criminal enterprises and are not under the control of people belonging to the local population. The majority of reports about ATS trafficking in the Pacific Islands argue that most operations are organised by criminal networks operating outside the region, often in China, southeast Asia, Australia, or the United States (ACC 2004: 6; Devaney, Reid & Baldwin 2006b: 304, 305; Feizkah 2004: 54; UNODC, Regional Centre for East Asia and the Pacific 2003). A recent analysis of the illicit drug market in the region also found evidence of subgroups of the Japanese Yakuza engaging in crystal methylamphetamine trafficking to the Northern Marianas (Devaney, Reid & Baldwin 2006b: 305).

Market factors in ATS trafficking and importation

The opportunities and profits of ATS trafficking and importation are determined by a variety of factors. These include, *inter alia*, the volume of domestic ATS production, types and quality of domestic production, precursor availability and prices in domestic and international markets, levels of law enforcement activities (including seizures and arrests) in production and transit points, volume of overseas ATS production, the number of transactions and trafficking steps needed between production, wholesale, and distribution points, requirements and availability of human resources, skills and know-how, carriers, suppliers, technical equipment, etc (Pietschmann 1997: 276).

The existence and level of law enforcement activities that take place between illicit ATS production and retail sale impact significantly on the level of ATS trafficking, on the routes and types of trafficking, and ultimately on the prices for ATS and the profits that can be made in ATS trafficking and importation. High degrees of border control and law enforcement seizures warrant more sophisticated *modi operandi* to disguise the illicit substances and may necessitate the re-routing of shipments via less stringent transit points, thus making the operation more costly and increasing wholesale and retail prices (Pietschmann 1997: 278).

Drug seizures and arrests of persons involved in supply and delivery may also disrupt and, at times, destroy supply chains. Seizures and other losses reduce the availability of ATS in the illicit market. If, despite these losses and disruptions, levels of demand remain unchanged, prices for ATS increase thus raising profit margins further. ATS become more expensive if 'it is highly risky to bring them to the market. The high prices they can fetch, however, create vast profits' (Block 1993: 693). It has been argued that law enforcement activities that target the trafficking stage of the illicit ATS trade result in greater profits for criminal organisations as they factor 'a "risk premium", ie a compensation for the additional risks' into their prices (Pietschmann 1997: 278).

As noted earlier, cross-border trafficking in and importation of ATS in Oceania largely involves more potent forms of ATS such as ecstasy and crystal methylamphetamine, while the local production in Australia for the most part involves ATS of lower quality, lesser purity and potency, and lower price. In simple terms, the domestic ATS production and trade involve substances of lower value in comparison to the international ATS trade. The domestic ATS production also frequently involves amateur operators with limited skills operating in small clandestine laboratories. International ATS trafficking, in contrast, is more commonly associated with large, sophisticated criminal enterprises. This pattern is unsurprising as transnational organised crime is more likely to engage in operations which involve products of greater value even though these products are more likely to be the focus of law enforcement activities. In this context, Block has argued that the degree of law enforcement activities also determines the quality of the products in the illicit market:

> [T]he more severely [prohibition] is administered, the stronger will be the potency of the ensuing drugs. A smuggler would rather risk transporting a suitcase full of cocaine than marijuana because of its greater value. […] This, too, is the explanation for the most recent generation of chemical substitutes: crack, ice, PCP, etc. (Block 1993: 692).

Others have argued that profit margins are greater if levels of law enforcement and the associated risks of seizures are arrests are low. For example, it has been held that 'the risks associated with manufacture and trafficking of [ATS] are definitely not larger than those associated with cocaine or heroin where several borders have to be crossed and law

enforcement authorities have developed skills in detection'. Consequently, an illicit drug market, such as that for ATS other than ecstasy, in which production, supply, and sale are confined to one jurisdiction, is seen by some as less vulnerable and thus more profitable. 'It is particularly this additional profitability' of ATS, argues Pietschmann, 'that goes beyond that of heroin or cocaine, which represents a special danger for fuelling further expansion in the future' (1997: 275).

In 2005, UNODC made some model calculations about the income generated by trafficking in ecstasy and other ATS in Oceania. This calculation, shown in Table 18 below, takes into account the total amount (in weight) of ATS intended for sale and consumption in the region, the total of substances lost through seizures and otherwise, the total amount of ATS available for consumption, and the wholesale price.

Table 18: Income for ATS and ecstasy wholesale, Oceania

	ATS (excl. ecstasy)	Ecstasy
Total intended for consumption	9,286 kg	5,940 kg
Total seized/lost	569 kg	748 kg
Total available for consumption	8,718 kg	5,192 kg
Wholesale price per pure gram	US$63	US$143
Wholesaler income	**US$550 million**	**US$741 million**

Source: UNODC 2005: 140

According to UNODC figures, approximately 9,286 kg of ATS other than ecstasy were intended for consumption in Oceania. Only 569 kg or approximately 6.1 percent of the total were lost or seized by law enforcement agencies, leaving 8,718 kg available for consumption. In other words, losses of ATS between production and wholesale are quite small. As much of the production of ATS is carried out locally in great quantities, and as law enforcement seizures only marginally reduce the quantity available for consumption, the wholesale price for ATS other than ecstasy is estimated to be comparatively low; 'the closer the manufacturing site, the cheaper the product' (UNODC 2003a: 7). According to UNODC data, the wholesale price in Oceania for ATS other than ecstasy is as low as US$63 per pure gram. This represents an increase of US$56 or 800 percent compared with the price at production level (c US$7 per gram; see Table 8 above).

UNODC estimated that the amount of ecstasy intended for consumption in Oceania was 5,940 kg. It is suggested that 12.6 percent of that amount (749 kg) is lost in seizures or otherwise, leaving 5,192 kg of ecstasy available for consumption. As ecstasy is, for the most part, imported into the region and as greater quantities are lost to law enforcement agencies, the price for ecstasy increases greatly at the wholesale stage. UNODC estimated that the wholesale price for ecstasy was US$143 per gram; that is US$97 (or 300%) higher than the price at production level, resulting in a total income of US$741 million for ecstasy wholesalers.

The data displayed in Table 18 confirm that profit margins at the trafficking stage are higher for ecstasy than for other ATS. Three principal reasons can be identified:

- the amount of ecstasy intended for consumption in Oceania is smaller than the amount of other ATS
- unlike other ATS, ecstasy is almost exclusively imported into the region and often trafficked across long distances
- greater amounts of ecstasy (absolute and relative) are seized and otherwise lost in Oceania.

These three reasons were factored into the calculation of wholesale prices and resulted in greater profits for ecstasy trafficking; '[a]t each trafficking step the mark-up is still greater' (UNODC 2003a: 7). This confirms earlier suggestions that profit margins for ecstasy traffickers and importers are remarkably higher although the illicit trade in ecstasy in Oceania is smaller in size than the trade in other ATS. Similar observations have been made in studies undertaken in the United States, United Kingdom, Germany, and Norway in the early 1990s where it was found that

> [c]alculations of total gross profitability (total gross profits from both manufacturing and trafficking as a percent of initial costs of raw material) suggest that MDMA [ecstasy] may be the economically most attractive substance to manufacture and distribute, followed by methamphetamine and methcathinone (Pietschmann 1997: 282, 285 with reference to Saunders 1994: 137).

ATS wholesale prices (excluding ecstasy)

Price and profitability for ATS wholesale vary between substances and also on the purity of the substances on offer. Table 19 shows price estimates for methylamphetamine at wholesale level in Australia and New Zealand in recent years. According to these figures, the wholesale price in Australia in 2004 averaged US$84,500 per kilogram of methylamphetamine (US$84.50 per gram). Actual wholesale prices depend on the purity of the substance involved which can vary between 3.7 percent and 77 percent. Accordingly, one kilogram of methylamphetamine may be as cheap as US$ 44,313, while purer and more potent forms of methylamphetamine sell for as much as US$118,168.

Wholesale prices for methylamphetamine in New Zealand are much higher than those in Australia. This can be explained by the country's more distant location, greater difficulties of obtaining precursor chemicals, and tighter border and law enforcement controls. It is estimated that the typical wholesale price for one kilogram of methylamphetamine was US$253,550 in 2004. Table 19 also shows that 'typical' wholesale prices in New Zealand increased by almost 29 percent between 2002 and 2003 and by a further 13 percent from 2003 to 2004. This increase is surprising, given that local production and demand also rose at the same time, but it may be reflective of more methylamphetamine seizures and tighter law enforcement during that period.

Table 19: Wholesale price estimates, methylamphetamine, Australia and New Zealand, 2002–04

	2002	2003	2004
	US$ / kg	US$ / kg	US$ / kg
Australia			
Typical price/purity ($ / %)	n.a.	n.a.	84,500 / 38
Price range ($)	n.a.	n.a.	44,313 – 118,168
Purity range (%)	n.a.	n.a.	3.7 – 77
New Zealand			
Typical price ($)	176,741	224,810	253,605
Price range ($)	160,670 – 192,810	204,370 – 245,250	230,550 – 276,660

Source: UNODC 2004: 381; 2005: 357–358; 2006: 378

Ecstasy wholesale prices

Table 20 shows ecstasy wholesale price estimates for Australia and New Zealand. From the limited data available, it seems that, as with other ATS, wholesale prices vary greatly depending on the purity of the substances on offer. Wholesale prices in New Zealand are again higher than those in Australia. It has been estimated that the typical wholesale price for ecstasy in Australia in 2004 was US$16,851 per 1,000 units (or US$16.51 per unit). In comparison, the typical price in New Zealand in 2003 was US$26,070 (or US$26.7 per unit). The price difference can be attributed to the greater distances and difficulties associated with importations into New Zealand.

Table 20: Wholesale price estimates, ecstasy, Australia and New Zealand, 1999–2004

UNODC	1999 US$/ 1000 units	2000 US$/ 1000 units	2001 US$/ 1000 units	2002 US$/ 1000 units	2003 US$/ 1000 units	2004 US$/ 1000 units
Australia						
Typical price/purity ($ / %)	12,735	n.a.	n.a.	n.a.	n.a.	6,851 / 46
Price range ($)	9,590 – 15,980	n.a.	n.a.	n.a.	n.a.	11,078 – 30,000
Purity range (%)	n.a.	n.a.	n.a.	n.a.	n.a.	3.7 – 77.1
New Zealand						
Typical price ($)	26,413	n.a.	23,854	25,050	26,070	n.a.
Price range ($)	21,130 – 31,696	n.a.	16,913 – 29,598	18,330 – 31,880	17,380 – 37,760	n.a.

Source: UNODCCP 2002: 209; 2003: 333; 2004: 385; 2005: 357; 2006: 380

Observations

The clandestine nature of trafficking in and importation of ATS into the countries of Oceania means that the available information about this aspect of the ATS trade is very limited. Existing knowledge stems largely from ATS seizures and little is known about the extent and nature of operations that remain undetected. Consequently, the available, open source information may not adequately reflect the true levels and patterns of ATS trafficking in the region.

On the basis of the existing data and research the following general observation about ATS trafficking in Oceania can be made:

- ATS seizures in Australia and New Zealand have increased since the 1990s, although the number of seizures and the amount of ATS seized varies greatly between individual years.
- Ecstasy seizures have increased rapidly and steadily in Australia and New Zealand. Annual seizures of ecstasy in Australia are among the highest in the world. Ecstasy in Oceania is for the most part imported from Europe and increasingly from southeast Asia. Smaller amounts are also imported from north America.

- There is ample evidence that the Pacific Islands have been used for ATS trafficking and that many island nations have been used as transit points for trafficking operations. The lack of comprehensive law enforcement and border control in the Pacific Islands means that the true levels of ATS trafficking are not known. There is some importation of crystal methylamphetamine into the former US territories in the region including Palau, the Northern Marianas, and Guam.
- Patterns and levels of ATS trafficking in Oceania do not always reflect global trends. Much of the illicit ATS trade is interregional and remains unaffected by developments elsewhere. This is different for ecstasy, where the trade is closely linked to Europe and southeast Asia.
- Trafficking in and importation of ATS into Australia is largely done through cargo and postal shipments. The use of drug mules and couriers or smuggling in personal luggage seems rare. Importation of crystal methylamphetamine into Micronesia, in contrast, is often done by drug couriers.
- Most seizures of ATS are of medium size (trafficable quantities), though seizures of large, commercial shipments of ATS are not uncommon. Ecstasy, particularly, is frequently imported into Australia in very large consignments.
- Organised crime involvement in ATS trafficking in Oceania is not well documented and currently not well understood. There is evidence that the more sophisticated cross-border operations involving large quantities of ATS are facilitated by transnational criminal organisations while some of the purely domestic trade is carried out by amateurs, including locals. European syndicates, sometimes with the help of Asian groups, seem to dominate the illicit ecstasy trade. Outlaw motorcycle gangs have been and continue to be involved in the importation of other ATS, especially in Queensland, Western Australia, South Australia, and New Zealand.
- Profit margins for ATS trafficking are greater for the more difficult operations which involve higher risks of detection and arrests. Patterns of trafficking are more sophisticated for potent ATS such as ecstasy and crystal methylamphetamine. Consequently, the profits made at the trafficking stage of these substances are also higher in comparison with ATS of lower potency and purity.
- The increase in ATS seizures does not seem to have impacted noticeably on availability and wholesale prices for ATS.

Chapter 4:
Demand

Against global trends, the use of ATS, including ecstasy, has grown substantially in Australia, New Zealand, and other parts of the region in recent years. Since 1988, ATS have been, after cannabis, the second most popular illicit drug in Australia and New Zealand (Hall & Hando 1993: 61; Hando & Hall 1997: 84; Yoshida 1997: 14). Ecstasy has become the third most popular substance. Especially among young people, abuse of ATS and ecstasy is much higher than of cocaine and heroin (UNODC 2003a: 2). At least since 1993, ATS use in Australia has been described as 'epidemic' (Hall & Hando 1993: 53–54), although use appears to have stabilised in the past few years.

According to estimates by UNODC, 25 million people worldwide, or 0.6 percent of the population, aged between 15 and 64 used ATS (excluding ecstasy) in 2005 (UNODC 2007: 150). In addition, it is estimated that approximately 9 million people, or 0.2 percent, of the global population between 15 and 64 years used ecstasy during that period (UNODC 2007: 161). Other estimates made by WHO in 1997 suggested that more than 35 million people worldwide were regular users of amphetamine and methylamphetamine (Anglin et al. 2000: 139).

Levels of ATS and ecstasy abuse in Oceania are higher than anywhere else in the world. UNODC has consistently held that 'the prevalence of [ATS] use is highest in the Oceania region' (UNODC 2005: 112). UNODC estimates that 620,000 people or three percent of the population aged 15–64 years in Oceania used ATS in 2005. A further three percent (or 627,000 people) are said to have used ecstasy in that period (UNODC 2007: 151, 161). The problem of ATS and ecstasy abuse is particularly concentrated in Australia which continues to report the highest level of ATS and ecstasy abuse of any country in the world. Methylamphetamine and ecstasy are the second most prevalent drugs in Australia, after cannabis (UNODC 2003a: 58, 107; UNDCP 1996: 114; INCB 2006: para 640). Ecstasy abuse in Australia, too, has increased steadily since the beginning of data collection in 1985 (UNDCP 1996: 114). In New Zealand, levels of abuse of these substances are lower than in Australia but are still above global averages. The following sections explore the levels of ATS consumption in Australia, New Zealand, and the Pacific Islands more closely and analyse the retail market for ATS in the region.

As with other data used in this study, the availability of statistics about consumption and demand is very limited, and these statistics are particularly prone to inaccuracy. UNODC collects and releases information about illicit drug abuse in its annual *World drug report*. The contents of this report and the quality of the data contained therein are dependent on information supplied by individual countries. It is the only international data collection of this kind. Many countries, however, do not provide information about levels of abuse to UNODC or to other international agencies. Frequently, the data are not collected annually or are not collected at all. Some countries are reluctant to disclose information about the levels of drug

consumption and other countries simply do not see ATS and other drug abuse as a problem worth investigating. But even if statistics about ATS consumption are kept, methodologies used to collect that data differ between countries. UNODC remarked that:

> [a]ssessing the extent of drug abuse (the number of abusers) is a particularly difficult undertaking because it involves measuring the size of a hidden population. Margins of error are considerable, and tend to multiply as the scale of estimation is raised, from local to national, regional and global levels. Despite some improvements in recent years, estimates provided by member states to UNODC are still very heterogeneous in terms of quality and reliability. […]
>
> One key problem in currently available prevalence estimates from countries is still the level of accuracy, which varies strongly from country to country. While a number of estimates are based on sound epidemiological surveys, some are obviously the result of guesswork (UNODC 2006: 403, 404, cf 403–416).

Thus, it is difficult, if not impossible, to compare the absolute numbers of drugs users between any two or more countries. It is more useful to look at developments within one country over a period of time and also compare the relative levels of abuse between different countries. With these limitations in mind, the following trends can be observed in relation to ATS consumption in Oceania.

ATS consumption in Australia and New Zealand

ATS (excluding ecstasy)

Amphetamine use in Australia has historically been quite high. Early amphetamine 'epidemics' date back to the 1960s and 70s when medical practitioners frequently prescribed amphetamine in the belief its use was safe (see further Hall & Hando 1993: 59). Once the negative effects of ATS were understood, chemists, medical practitioners, and users stayed away from amphetamine. Once the adverse health and psychological effects of frequent amphetamine use became more popularly known, restrictions were introduced to prohibit availability and prescriptions of amphetamine, causing a decrease in licit consumption levels (Hando & Hall 1997: 82–83).

Research on the early emergence, levels, and patterns of illicit ATS consumption in Australia and New Zealand in the 1960s, 70s, and 80s is extremely limited. During that time, much of the concern of law enforcement activity and scholarly research was with opium, cocaine, and – periodically – with LSD abuse, and many researchers considered the ATS problem as negligible in comparison (Hall & Hando 1993: 61; cf McAllister, Moore & Makkai 1991). There is some evidence that the prohibition of ATS triggered a change in the composition

and characteristics of ATS users. When ATS were available legally over the counter or by prescription, the substances were mostly used orally by middle-aged, middle class women. The closure of licit avenues to obtain ATS was followed by the development of an illicit market for ATS production, distribution, and consumption, and subsequently ATS use shifted to mainly younger men who administered ATS by injection or otherwise (Hall & Hando 1993: 60). It has been argued that the illicit use of amphetamine initially emerged among people who worked long hours or night shifts, truck drivers, and among students who consumed ATS to manage the pressures of academic demands. An article published in 1974 stated:

> They are the plague of industrialised states, the premier drug of students, the middle class, and the military. They include the tranquilisers and stimulants upon which much of society relies in order to cope with the pressures of urban survival (Lessem 1974: 127–128).

ATS, and later ecstasy, also became very popular in nightclubs and at parties. It is for this reason that ATS are often associated with economic development, income growth, and urbanisation (Gordon 2001: 18) and are frequently referred to as party drugs, a term which disguises the illicit nature and harmful effects of the substances. To that end, the image and perception of ATS among consumers and among parts of the wider population are fundamentally different from that of many other illicit drugs such as heroin. This image of ATS and the description of these substances as recreational or party drugs assist significantly in the marketing of these substances and are an important tool to facilitate the sale of ATS by criminal organisations to new and young users.

Comprehensive statistics on the levels and patterns of ATS consumption in Australia and New Zealand are available from the mid 1990s onwards. Table 21 illustrates the prevalence of ATS use in Australia, and in New Zealand between 1996 and 2004. Data for the years not shown here are currently not available.

Table 21: Annual amphetamine use, population aged 15–64 years, Australia and New Zealand, 1996–2004 (percent)

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Australia	2.0	n.a.	3.6	n.a.	2.8[a]	4.0	n.a.	n.a.	3.8
New Zealand	n.a.	n.a.	2.0	n.a.	n.a.	3.4	n.a.	n.a.	n.a.

a: Figure for 2000–01 UNODC 2003a: 63

Source: UNODCCP 2002: 268; UNODC 2004: 401; 2005: 371–372; UNODC 2003b: 107; 2006: vol 2: 389

The data displayed in Table 21, although fragmentary, show a growth in the levels of amphetamine consumption in Australia over the past decade. The annual prevalence of amphetamine use among persons aged between 15 and 64 years doubled within a period of five years, between 1996 and 2001. From the limited information available, it appears that

there has been no further growth in the annual prevalence of abuse since 2001 and UNODC suggests that 'use of amphetamines have shown significant declines over the past four years' (UNODC 2006: 148) although only a slight decrease can be seen between 2001 and 2004. New Zealand has equally, if somewhat belatedly, witnessed relatively high levels of amphetamine abuse. According to UNODC, 3.4 percent of persons aged 15–64 years used ATS in New Zealand in 2001; other studies show that approximately 10 percent of New Zealanders aged 18–29 (or 100,000 people) used ATS in that year (Wilkins et al. 2005).

Table 22: Annual ATS use, population aged 13–45 years, New Zealand, 1998–2004 (percent)

	1998	2001	2004
New Zealand	2.9	5.0	6.0

Source: Wilkins 2002; Wilkins et al. 2005

Research conducted in New Zealand confirms the trends identified by UNODC. Table 22 shows that studies from New Zealand estimated the annual prevalence of ATS consumption in 2004 among persons aged 13 to 45 years to be 6 percent or 114,000 people. Further, it was found that the majority of consumers (90,000 people or 5% of the population in that age group) had used amphetamine (including methylamphetamine); three percent (62,000 people) had consumed ecstasy, and one percent (16,000) crystal methylamphetamine (Wilkins et al. 2005; Wilkins et al. 2004b).

While the annual prevalence of abuse appears to be higher in New Zealand than in Australia, some research suggests that the lifetime prevalence is higher Australia. In 2001, 17 percent of Australians aged 15–45 were said to have tried an ATS during their lifetime in comparison with 12 percent of New Zealanders of that age group (Wilkins et al. 2004b: 49). With consumer rates in New Zealand growing in recent years, lifetime prevalence there has also increased since 2001.

The patterns and consequences of ATS consumption and the treatment of ATS users are beyond the scope of this study. A number of characteristics of ATS use in Oceania are relevant to determine the market for ATS, however, and the involvement of criminal organisations in that market. These characteristics include:

- ATS have become the second most popular illicit drug in Australia and New Zealand (after cannabis; Wilkins, Bhatta & Casswell 2002)
- many amphetamine users show a pattern of poly-drug use (Wilkins et al. 2005; Hando & Hall 1997: 91; Wilkins et al. 2004b: 31; Mouzos et al. 2007)
- levels of ATS use in Australia and New Zealand are especially high among young people in their 20s (Hando & Hall 1997: 84; Wilkins et al. 2004b: 39; cf Mouzos et al. 2007)

- levels of amphetamine use are higher among men than women (Hando & Hall 1997: 84, 85; Wilkins et al. 2004b: 24, 38; cf Mouzos et al. 2007)
- ATS use is more common among tertiary students and people in full-time employment than in other parts of society (Wilkins et al. 2004b: 41)
- methylamphetamine is frequently consumed at nightclubs, dance parties and raves, and in private circles (NDARC 2005: 50, 54)
- ATS purchases are most frequently made in private homes (approximately 58%) and in streets and alleys (around 28%). Purchases in public buildings or by home delivery are less common (AIC 2000–07: Q17c)
- ATS are often perceived by consumers as safe and non-addictive (Wilkins et al. 2005).

Ecstasy

In comparison with amphetamine and methylamphetamine, MDMA and other ecstasy-type stimulants have a much shorter history of abuse in Oceania. Surveys conducted as recently as 1988 suggested that MDMA use in Australia was too low to be reliably measured (Hall & Hando 1993: 63). Ecstasy abuse started to spread from very low levels in the early 1990s. At that time some Australian researchers predicted

> that MDMA use was self-limiting. The euphoric effects which were usually experienced during the first few occasions of use soon disappeared, perhaps because of a rapid development of tolerance to the drug. When larger doses were taken in an attempt to regain the euphoric effects, the unpleasant side-effects overwhelmed the positive effects (Hall & Hando 1993: 64).

One additional difficulty in assessing the levels and patterns of ecstasy abuse stems from the fact that frequently substances are sold as ecstasy even though they are not MDMA, MDA or MDEA, and many users are not aware of this fact. This means that some users may falsely report the use of ecstasy (Degenhardt et al. 2004: 194; McGregor & Makkai 2003; Mouzos et al. 2007: 11).

In 2007, UNODC estimated that 627,000 people or three percent of the population aged 15–64 years in Oceania consumed ecstasy annually in 2005. This is the highest annual prevalence of ecstasy use of any region in the world (UNODC 2007: 161). In recent years, consumption rates for ecstasy have exceeded those for other ATS, demonstrating its growing popularity. The limited data available (shown in Table 23 Figure 10 below) illustrate the steady increase in levels of ecstasy consumption in Australia and New Zealand between 1996 and 2004.

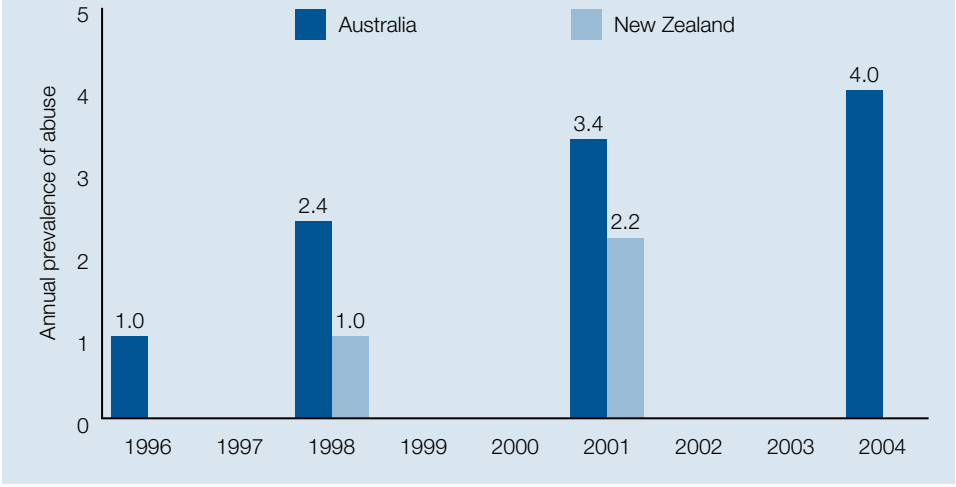
Table 23: Annual ecstasy use, population aged 15–64, Australia and New Zealand, 1996–2004 (percent)

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Australia	1.0	n.a.	2.4	n.a.	n.a.	3.4[a]	n.a.	n.a.	4.0
New Zealand	n.a.	n.a.	1.0	n.a.	n.a.	2.2	n.a.	n.a.	n.a.

a: A survey published in 2004 reported that 2.9% of Australians aged 14 and older used ecstasy in 2001 (Degenhardt et al. 2004: 189)

Source: UNODCCP 2002: 268; UNODC 2003b: 107; 2004: 401; 2005: 371–2; 2006: 390. Similar data can be found in NDARC 2006: 24

Figure 10: Annual ecstasy use, population aged 15–64, Australia and New Zealand, 1996–2004 (percent)



Source: UNODCCP 2002: 268; UNODC 2003b: 107; 2004: 401; 2005: 371–2; 2006: 390. Similar data can be found in NDARC 2006: 24

The increase in ecstasy use between 1996 and 2004 is particularly significant in Australia, which is said to have the highest consumption rate of ecstasy in the world. While data from New Zealand are limited, that country also reports very high levels of ecstasy prevalence. This is confirmed by other research undertaken in New Zealand which suggests that the annual prevalence of abuse as a percentage of the population aged 13–45 years increased from 1.5 percent in 1998 to 3.4 percent in 2001 (Wilkins 2002; Wilkins et al. 2005). The majority of sources anticipate a further increase in MDMA consumption in Australia and New Zealand in coming years, especially if supply from Asia continues to grow (NSW Police 2006: 9).

The magnitude of the ecstasy abuse problem in the region, especially in Australia, has triggered a number of inquiries into the user population of ecstasy, the circumstances that lead to ecstasy abuse, general patterns of abuse, and treatment of users. NDARC, for instance, has published a plethora of research on the consumer aspects of the illicit ATS trade. Table 24 illustrates some of the demographics of regular ecstasy users in Australia in 2003, 2004, and 2005.

Table 24: Demographic data[a] of regular ecstasy users, Australia, 2003–05

	2003	2004	2005
Mean age (years)	25	24	24
First use of ecstasy (median age, years)	18	18	19
Mean years of school education	12	12	12
Tertiary education (%)	46	50	50
Full-time employment (%)	30	37	35
Full-time students (%)	22	21	24

a: national average

Source: NDARC 2004: 10; NDARC 2006: 21

A number of characteristics of ecstasy consumption emerge from NDARC surveys and other research. These characteristics include, *inter alia*:

- Ecstasy use is more common among young people, especially those aged 20–29 years. According to Australian data, the highest levels of abuse are among persons aged 20–29 years, followed by 14–19 year-olds. A survey published in 2004 found that 10.4 percent (or 273,000) of persons aged 20–29 years and 5.0 percent (86,000) of persons aged 14–19 years used ecstasy in 2001 (Degenhardt et al. 2004: 189; NDARC 2006: 15–16). Equally in New Zealand, ecstasy use is most common among persons aged 20–29 years (Wilkins et al. 2004b: 39).
- Ecstasy users are often of middle class background, caucasian, slightly more likely to be male, and frequently have tertiary qualifications or are studying towards them (Degenhardt et al. 2004: 188, 193; Wilkins et al. 2004b: 25, 38, 41). As a result the image of ecstasy is often associated with affluence and success (Wilkins et al. 2005).
- Ecstasy consumption frequently occurs at nightclubs, raves and dance parties, pubs, or in private circles (NDARC 2006: 21; Webb 2003: 82–83).
- As with other ATS, poly-drug use is common among (experienced) ecstasy users; 'ecstasy users can rarely be considered users of this drug only' (Degenhardt et al. 2004: 193; NDARC 2006: 15–16; Wilkins et al. 2004b: 30).

Crystal methylamphetamine

In recent years there has been growing concern in the region about increasing evidence of widespread abuse of crystal (crystalline) methylamphetamine, also referred to as ice, or as P (New Zealand), shabu (Philippines), syabu (Malaysia), and philopon (Korea). Crystal methylamphetamine is of much higher purity (up to 80%) than other methylamphetamine sold on the illicit market (which usually ranges between 1% and 40% purity) (Caldicott et al. 2005: 158). Crystal methylamphetamine is most commonly used by way of inhalation using a glass pipe, although smoking, snorting, oral administration and injection also occur (Topp et al. 2002: 346).

The consumption of crystal methylamphetamine has been relatively common in some parts of east and southeast Asia (Gordon 2001: 18) for some time and has also emerged as a major problem in some parts of the Pacific, especially in Hawai'i and the former US territories of Palau and Northern Marianas. In Japan, Philippines, Brunei Darussalam, Singapore, and Malaysia, crystal methylamphetamine has become the main type of ATS used. Indonesia, too, is experiencing growing levels of crystal methylamphetamine consumption (UNODC Regional Centre for East Asia 2004: 7, 11–12).

Despite growing concern and increased media attention, the demand for, and abuse of, crystal methylamphetamine in Australia and New Zealand are not well documented and not well researched or understood. The situation is complicated by the fact that many studies do not isolate the information on crystal methylamphetamine from other ATS and that frequently, unknown to consumers, low purity methylamphetamine is marketed as ice. The limited research on crystal methylamphetamine suggests that the substance made a first, albeit very limited, appearance on the Australian illicit drug market in 1998. By 2001, availability and use had increased markedly, especially in Sydney (Topp et al. 2002: 342, 346). Today, every state and territory in Australia reports anecdotally of increases in crystal methylamphetamine availability and use (Pieper 2006: 19). The increase of crystal methylamphetamine availability is also documented in increased seizures of ice imports by ACS (see chapter 3). It appears that crystal methylamphetamine consumption was initially more common in private homes and private circles (NDARC 2006: 57). More recently, there have been a growing number of reports of increased crystal methylamphetamine use among 'party drug users' in public places such as nightclubs, raves, and pubs (SA Police 2006), and among police detainees (Mouzos et al. 2007: 16).

Research conducted in New Zealand has shown an increase in use of crystal methylamphetamine starting in the late 1990s. Between 1998 and 2001, annual

prevalence of crystal methylamphetamine abuse among persons aged 15 to 45 years increased from 0.1 percent to 0.9 percent (Wilkins, Bhatta & Casswell 2002: 258).

There is, to date, no comprehensive study of the user population of crystal methylamphetamine in Australia and New Zealand. From the limited research and some media reports it seems that there are two main clusters of crystal methylamphetamine users:

- in the nightclub and party scene (who usually inhale the substance)
- among people (often without employment) with a history of drug addiction, especially heroin (who usually inject crystal methylamphetamine).

As with other ATS, consumption is more common among young people and among men, and poly-drug consumption is also common (Wilkins et al. 2005; Wilkins et al. 2004b: 32, 41–42; The ice age 2006).

ATS consumption in the Pacific Islands

Data and other information about illicit drug use in the Pacific Islands are extremely limited. There are no formal drug abuse monitoring systems in place and many reports are anecdotal, not supported by evidence, and usually only relate to single incidents and countries. There is no comprehensive knowledge on the levels of illicit drug use in the island nations and the countries have not contributed any data to UNODC's annual *World drug report* on this point.

The market for amphetamines and methylamphetamines in the Pacific Islands is very limited given the availability of, tolerance towards, and relative low cost of other locally produced substances. Historically, drug abuse in the Pacific has revolved around substances such as cannabis, and also kava and betelnut in the Melanesian islands (Devaney, Reid & Baldwin 2006b: 15, 300; Halvaksz 2006: 56–58). UNODC has pointed out that '[t]here is little indication of any significant import of drugs to the Pacific Islands' (UNODC Regional Centre for East Asia 2003: 10). As a result, abuse of opium or coca based substances is extremely rare. Equally, the use of ATS is not widespread among the populations in the Pacific Islands (UNODC Regional Centre for East Asia 2003: 16; Devaney, Reid & Baldwin 2006b: 82). The buying power of the local populations is very low and the great majority of people simply cannot afford expensive, imported illicit drugs (Devaney, Reid & Baldwin 2006b: 16, 301). There have so far only been anecdotal reports about ecstasy being sold among tourists in Nadi, Fiji (PIF, pers comm. 3 July 2006), and Papua New Guinea has witnessed some isolated cases of ecstasy abuse (UNODC Regional Centre for East Asia 2003: 16).

An exception to the general view that ATS are not widespread in the Pacific Islands exists in the former US jurisdictions of Palau and Northern Marianas, and also in Guam and Hawai'i. In these territories there is significant evidence of methylamphetamine consumption, especially in the form of crystal methylamphetamine. Consumption started in about 1990 when the substance was first introduced from Korea and the Philippines (Devaney, Reid & Baldwin 2006b: 301, 305, 307; Feizkah 2004: 54; INCB 2005: paras 622, 638; UNDCP Regional Centre for East Asia and the Pacific 2003: 18; UNODC Regional Centre for East Asia and the Pacific 2003: 16). According to some sources, the consumption in the Northern Marianas is concentrated among elite parts of society. The drug situation in the Marianas has been described as 'endemic' and has led to increased levels of violent and other crime in the capital Saipan (Crocombe 2001: 86, 370). There have also been some suggestions that consumption of crystal methylamphetamine among Pacific Islanders on the US west coast and in Hawai'i explains the relatively higher levels of use among ethnic Polynesian and Micronesian groups in New Zealand (Wilkins et al. 2005; Wilkins et al. 2004b: 40; see further Joe 1995). One recent report stated that methylamphetamine consumption can also be found in French Polynesia (Devaney, Reid & Baldwin 2006b: 301), but there is currently no further evidence to support this claim.

The principal problems with ATS in the Pacific, as has been shown in previous chapters, are trafficking in ATS through the region and some evidence of local production. There is growing concern that the production and trafficking of these substances in the region may ultimately result in growing consumption of ATS by local populations (Devaney, Reid & Baldwin 2006b: 16, 304; UNODC Regional Centre for East Asia 2003: 10). For example, Gordon suggested that 'history shows that where any country is used as a conduit for drug smuggling, inevitably some of the product seeps into the local populace' (Gordon c2003). Equally, Shibuya and Smith have argued:

> [w]hile it was once true, due to economic constraints such a low incomes, that there was no viable market for drugs in most island states this is now changing. States that act as transit zones eventually become consumers of these same drugs – a pattern that has emerged in other parts of the world (Shibuya & Smith 2002).

ATS retailing in Oceania

The size and continuing growth of the illicit ATS market in Oceania are direct results of the very high demand for these substances. The level of demand is the most significant factor in determining the size of the market and the profits that can be made in this market. The following sections examine the retail market of ATS and the retail prices of ATS in Oceania.

Retail market

The size of the retail market for ATS and the profits that can be achieved in that market are determined by a variety of factors. Production and supply of ATS, which have been discussed in chapters 2 and 3 of this study, have an important impact on the size of the demand for ATS. Greater availability of ATS and improved trafficking and supply networks contribute directly to a rise in the level of demand and are thus important for market growth (Pietschmann 1997: 279). Furthermore, the nature and level of competition in that market – competition between different suppliers and with other illicit drugs – impact on the size and profits of the retail market. The marketing and image of the substances sold, the health risks associated with drug consumption, and any risks of arrest and seizure are further factors that determine the demand for and use of ATS (Pietschmann 1997: 276).

It has been estimated that the total illicit drug market in Oceania amounted to about US$16 billion in 2005. This estimate is based only on data from Australia and New Zealand. In relation to the population in the region, this means that the average per capita spending on illicit drugs in Oceania is US$502 or 2.6 percent of GDP (2003). This figure is 10 times higher than the global average of US$51 per capita (0.9% of GDP, 2003). UNODC confirms 'that the highest expenditures on drugs per year are found in the Oceania region […]. Expressed as a percentage of GDP, drug sales (at the retail level) seem to be most important in the Oceania region' (UNODC 2005: 139). It is said that Australia has the highest level of spending on illicit drugs of any country in the world (Calvani 2006: 10). Similar observations have been made about New Zealand. Here, research has shown that ATS users spend on average approximately NZ$1,085 per year on amphetamine. Ecstasy users in New Zealand are said to spend on average NZ$592 per year on ecstasy (Wilkins et al. 2004b: 63).

ATS including ecstasy make up about 25 percent of the illicit drug retail market in Oceania. UNODC estimates that the total retailer income for ATS in Oceania amounts to almost US$4 billion, including approximately US$2.3 billion for ATS sales and US$1.55 billion for ecstasy sales (Table 25). Other research published in New Zealand estimated that the domestic retail market for amphetamine in New Zealand was NZ$122.5 million and, for ecstasy, NZ$45.8 million (Wilkins et al. 2004b: 63).

ATS sales in Oceania represent approximately 8 percent of the global ATS retail market (excluding ecstasy). In comparison, the ATS retail market in Europe only accounts for approximately US$2 billion or seven percent of global sales (UNODC 2005: 141). Ecstasy sales in Oceania make up approximately 10 percent of the global market (UNODC 2005: 143); a very significant margin relative to the small population of the region.

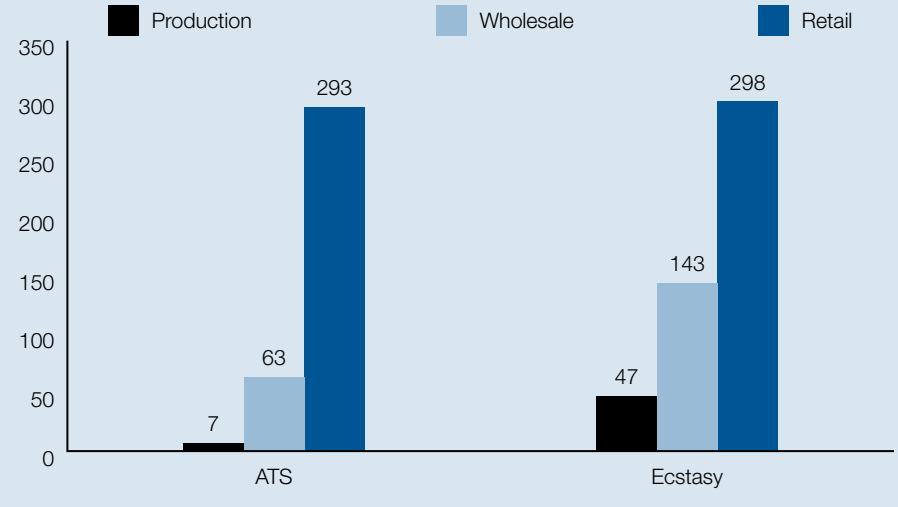
Table 25: ATS and ecstasy supply and demand in Oceania		
	ATS (excl. ecstasy)	**Ecstasy**
Estimated user population	794,000	519,000
Estimated actual annual consumption	7,846 kg	5,192 kg
Implied consumption per user	10 g	10 g
Average retail price per pure gm	US$293	US$298
Retailer income	US$2,296 million	US$1,549 million

Source: UNODC 2005: 140

ATS other than ecstasy

Table 25 and Figure 11 show that profit margins for ATS supply are particularly high at the final retail stage, especially for ATS other than ecstasy. UNODC estimates that the retail price per pure gram of ATS (not including ecstasy) in Oceania is US$293, US$230 more than the wholesale price per gram (see chapter 3 above). Other reports confirm 'that the mark-up between the wholesale and retail value of ATS' can be extremely high (Cherney, O'Reilly & Grabosky 2005: 7). In comparison, profit margins for ATS producers and traffickers are significantly lower than for ATS retailers.

Figure 11: Prices for ATS and ecstasy at production, wholesale, and retail stages, Oceania (US$)



Source: UNODC 2005: 140, 142

The significant difference between wholesale prices and retail prices for ATS may reflect the greater risks of detection, arrest, and seizure associated with ATS sales. These risks are said to translate into a surcharge for retail sales. It has to be noted, however, that, as was mentioned earlier, the production of ATS other than ecstasy is usually carried out in close geographic proximity to end users. Consequently, the persons selling the substances to end users may be closely associated with (or may even be identical to) the persons supplying and producing the substances. As a result, ATS retail profits, wholesale profits, and manufacturing profits may all remain with a closely associated group of people.

The distance between place of production and place of final sale has an obvious bearing on the pricing of, and profit margins for, ATS (UNODC 2003a: 8, 44). The significant difference between wholesale, and retail prices for ATS other than ecstasy has been attributed by UNODC:

> low costs, high profits, easily camouflaged labs and manufacturing close to retailing are incentives for organised crime's involvement in ATS. Small capital investment, ease of manufacturing, low costs for precursors and equipment, and high volumes make the ATS business extremely lucrative, despite the low (unit) prices. Similar economic incentives are unavailable to the producers of cocaine and heroin, for example (UNODC 2003a: 5).

Ecstasy

A slightly different picture emerges for the retail market for ecstasy in Oceania where the profit margin for retailers is relatively smaller. UNODC estimates that retailer income per gram of ecstasy is US$298. That is US$143 or approximately 200 percent more than the wholesale income (chapter 3). Thus, in comparison with other ATS, profit margins in the illicit ecstasy trade are equally high and are more evenly spread between wholesale and retail levels (see Figure 11). This may be explained by the fact that production, wholesale, and retail places for ecstasy are geographically distant and that every stage between manufacturing and final sale involves additional expenses and dangers that are factored into the wholesale and retail prices.

Retail prices

As with goods and services available on the legal market, retail prices for ATS are determined by the demand for and supply of these substances. Profit margins for criminal organisations involved in the ATS trade are high as long as there is a significant demand, and supply is readily available. To ensure high levels of demand it is necessary to keep retail prices relatively low, otherwise substances may be seen by some users as a prohibitively

expensive, thus deterring some of the demand (Pietschmann 1997: 276). In general, higher prices tend to result in lower demand for drugs. Financial restraints bar the majority of a consumer population from purchasing expensive drugs, especially if illicit drugs with similar pharmacological effects are available more cheaply. Only a small segment of consumers, especially those who are heavily drug dependent, may have recourse to criminal activities to overcome the financial restraints to purchase illicit drugs (Pietschmann 1997: 278).

Retail prices for ATS do not automatically reflect the actual costs associated with their production and distribution. Retail prices are also influenced by many other factors, some of which cannot be quantified. For example, ATS sales prices are also determined by the availability of and competition from similar drugs and the competition between different producers and suppliers. A number of studies have shown that illicit drugs with similar pharmacological properties compete in the marketplace and that the retail price for these drugs determines consumer behaviour (Pietschmann 1997: 277). Contributing to the competition between ATS and other illicit drugs such as LSD and cannabis is the fact that these substances can be offered more cheaply than ATS and, in the case of cannabis, also pose fewer health risks than ATS (Wilkins, Bhatta & Casswell 2002: 260–261). Other research has shown that the hazardous health and psychological effects of amphetamine use are a significant deterrent to existing and potential users (Hando & Hall 1997: 83).

To compete with other drugs in the illicit market, retail prices for illicit drugs, may, at times, be deliberately deflated to increase demand. For example, there appears to be some interaction between the retail prices for the various ATS and cocaine, which is chemically different from ATS, but shares some pharmacological similarities (except that its effects last for a shorter time than those of ATS; see Chesher 1993: 19–20). It has been observed that ATS sales, which are generally cheaper than cocaine, benefited from high cocaine prices (Pietschmann 1997: 279). There have recently been some allegations that low ATS retail prices forced Colombian drug cartels to reduce the retail price for cocaine, sometimes below wholesale price, to compete with ATS and create interest in and demand for cocaine.

Despite the competition with other illicit drugs, the emergence and growth of the illicit ATS market in Oceania has not substituted the market for other illicit drugs, and will not do so. It has been found that the ATS market emerged alongside existing illicit drug markets; it did not replace them. The illicit ATS trade is closely linked to the trade in other illicit drugs and criminal organisations, especially those that engage in cross-border trade, frequently supply and sell more than one drug and use trafficking and supply channels for a variety of illicit drugs (Gordon 2001: 20).

It was noted earlier that domestically produced drugs are relatively cheaper and have high profit margins at the retail level. In comparison, imported drugs are more expensive and have lower profit margins at the retail level, but higher profit margins at production and wholesale stages. Similar observations have been made by UNODC which confirm that the

distance to the manufacturing site has a direct impact on the retail price. Even locally within one country, there is a clear connection between retail prices and the proximity of the manufacturing site. Concentration of ATS production in one part of the country may result in lower retail prices in that geographical area. This is illustrated in southeast Queensland where concentration of illicit ATS production is particularly high and prices are comparatively low. UNODC observed that in '2001 prices in Queensland (a major source of methylamphetamine) were 1/3 less than those in neighbouring New South Wales, and significantly less than in Victoria or Northern Territory' (UNODC 2003a: 8, 44).

In New Zealand, in contrast, domestic production has only recently been established, which meant that retail prices were comparatively high. As local production continues to grow, it is anticipated that retail prices will decrease in New Zealand (Wilkins, Bhatta & Casswell 2002: 260). Wilkins and his research team (2005) remarked that lower prices in New Zealand indicate that conditions for supply have improved and that supply is becoming less costly.

Information regarding the prices paid for ATS in Australia, New Zealand, and the Pacific Islands is limited and, at times, conflicting. The clandestine nature of the sales transactions and the unwillingness of consumers and suppliers to disclose any information mean that many estimates remain speculative and are frequently based on very small samples.

A further difficulty in establishing and comparing retail prices arises from the lack of information on the quality and purity of the substances sold. As was shown earlier, ATS prices vary significantly depending on the type and purity of the substance of offer (see Section 2 above). Many consumers – and sometimes suppliers, too – do not know the quality of their products and have no opportunity to examine the substances. It has also been observed that ATS sales frequently involve fraudulent and overpriced drugs (Wilkins, Bhatta & Casswell 2002: 261). For example, a common pattern observed in the ecstasy supply in Australia and New Zealand, is that many tablets sold as ecstasy to consumers do not actually contain MDMA. Unknown to the buyer, tablets containing methylamphetamine, sometimes in combination with ketamine, are sold as ecstasy to reap the generally higher prices paid for MDMA (NDARC 2006: 15; Wilkins et al. 2005; Mouzos et al. 2007).

Estimates and surveys of ATS retail prices are only available for Australia and New Zealand and not for the Pacific Islands. Data are currently collected by three main sources: UNODC, the ACC and NDARC. UNODC publishes retail price estimates in its annual *World drug report*. These data are useful to draw comparisons between different years and, more so, between different countries. UNODC, however, relies on the accuracy of data provided to it by countries, and many countries do not provide that information or do not provide it every year. As a result, UNODC information about retail prices has many gaps. More comprehensive datasets are generated annually by the ACC. ACC data are limited to information provided by law enforcement agencies in Australia and cannot be compared with information collected abroad. Starting in 2003, NDARC also began to publish annual

surveys about price estimates for ATS and other illicit drugs. This information is available for all eight Australian jurisdictions but NDARC does not calculate a national average price. Figures are only available for the years 2003, 2004, and 2005 and it has to be noted that the NDARC data are based on very small, non-random samples which may not adequately reflect actual prices and price margins. Given the differences in which the information about retail prices is sourced, processed, and categorised, it is impossible to draw direct comparisons between the UNODC, ACC, and NDARC reports. Furthermore, the data are released in different measuring units and different currencies. However, some common trends and patterns can be observed in all three reports.

ATS (excluding ecstasy)

UNODC data on retail prices for ATS are particularly fragmentary and only available for Australia for the years 1999 and 2003. According to these reports, the per gram street price for amphetamine in Australia dropped from US$118.40 in 1999 to US$95.80 in 2003.

Retail price estimates for ATS published by the ACC show different trends for the six Australian states and there appears to be no common or national trend among them. The variation of retail prices within one jurisdiction in any one year is also very great and average prices are not available.

Table 26: Retail price estimates, ATS, Australia, 1998–2006

	1998	1999	2000	2001	2002	2003	2004	2005	2006
UNODC[a]	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g
Australia	n.a.	118	n.a.	n.a.	n.a.	96	n.a.	n.a.	n.a.
	1997–98	**1998–99**	**1999–2000**	**2000–01**	**2001–02**	**2002–03**	**2003–04**	**2004–05**	**2005–06**
ACC	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g
NSW	100	19–120	40–150	90–120	n.a.	500	90–500	90–500	100–500
Qld	n.a.	n.a.	370	70–90	n.a.	200–250	200–250	200–300	250–350
SA	n.a.	n.a.	50	n.a.	n.a.	200	n.a.	40–250	30–500
Tas	100–120	70–80	70–80	60–70	60–70	400	200–400	n.a.	n.a.
Vic	n.a.	n.a.	50–100	300	200	200–250	200–250	230–280	180–230
WA	100	n.a.	150–300	n.a.	250	250–500	200–400	450	250–600

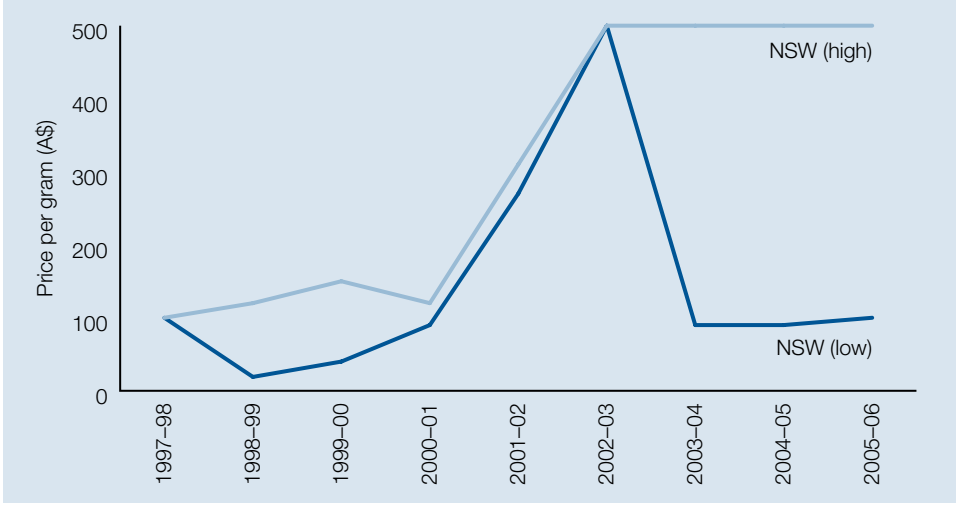
a: Price refers to typical retail price irrespective of range and purity

Source: UNODCCP 2002: 209, 211; UNODC 2004: 385; 2005: 357; ACC and ABCI 1998–2007

In summary, the available information on ATS retail prices in Australia, shown in Table 26, does not show any significant change or trend in the 1997–2006 period. ACC figures seem to indicate that the maximum prices paid for ATS have increased in some parts of Australia but there is no clear indication that average street prices have increased. UNODC data show a modest drop in ATS retail prices between 1999 and 2003. The lack of any significant change in ATS retail prices in recent years is remarkable as the period between 1997 and 2006 saw significant seizures of ATS (see chapter 3). These seizures, however, have been outweighed by growing ATS production during the same period, thus retail prices remained relatively stable.

In examining Australia's three biggest jurisdictions (NSW, Vic and Qld), it appears that in NSW, prices for ATS increased between 1997–98 and 2002–03 and remained stable between 2003–04 and 2005–06. ATS price estimates for NSW show an increasingly great variation between highest and lowest prices paid. This may reflect different purities available on the illicit drug market in that state.

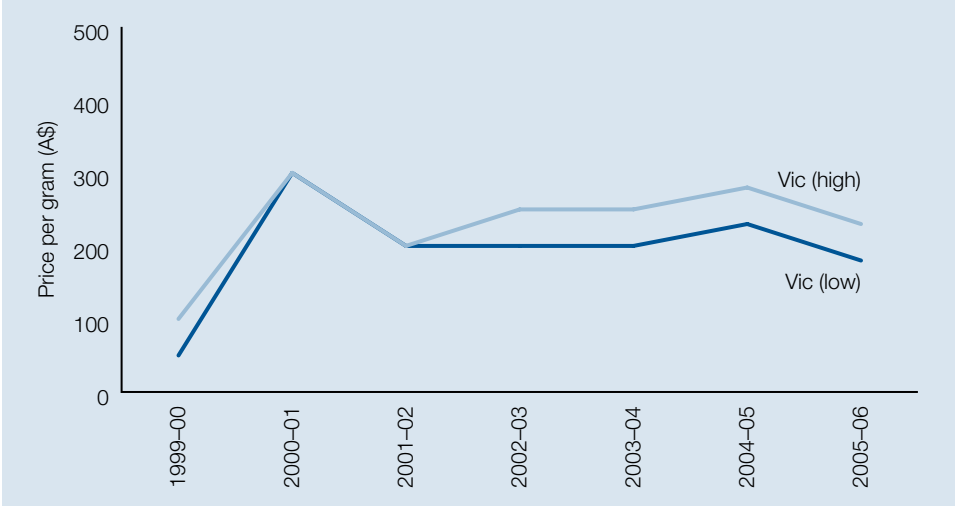
Figure 12: ATS price estimates, NSW, 1997–98 to 2005–06



Source: ABCI and ACC 1998–2007

In Victoria, retail prices for ATS have been more stable in recent years and there is only little variation between maximum and minimum prices. Average prices for ATS are very similar to those reported in NSW, averaging approximately $250 per pure gram.

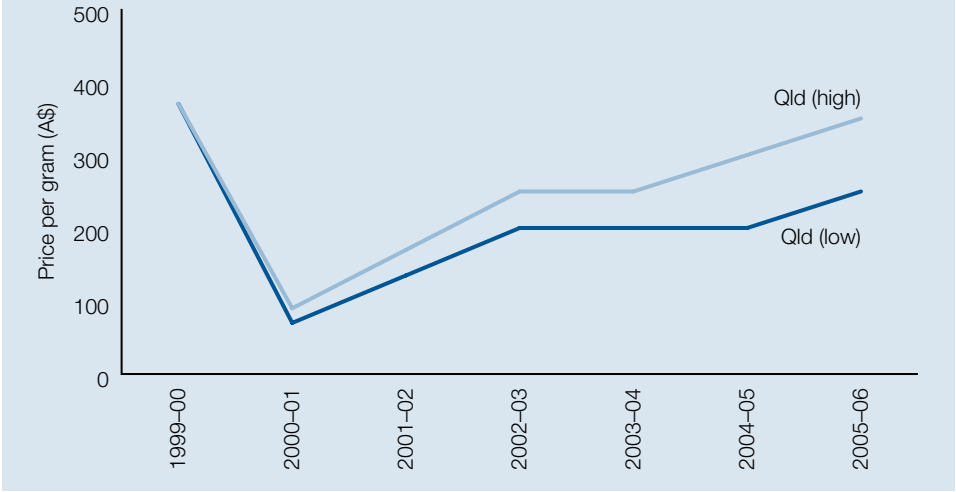
Figure 13: ATS price estimates, Victoria, 1999–2000 to 2005–06



Source: ABCI and ACC 2000–07

Retail prices in Queensland appear to be at the same level as prices in New South Wales and Victoria. In contrast to the southern states, prices dropped after 1999–2000 and have since risen, albeit very slowly (see Figure 14).

Figure 14: ATS price estimates, Queensland, 1999–2000 to 2005–06



Source: ABCI and ACC 2000–07

Retail prices for ATS in New Zealand are not well documented and UNODC reports contain no information on ATS retail prices in New Zealand. Other research estimated that the average price per gram of pure amphetamine in New Zealand was approximately NZ$80–200, averaging about NZ$142 per gram in 2001 (Wilkins et al. 2004b: 34, 63).

Ecstasy

UNODC data on retail prices for ecstasy in Australia are only available for the years 1999, 2001, 2003, and 2004. From the limited information available (Table 27), it appears that retail prices have remained stable, averaging approximately US$30 in most years. As with other ATS, retail prices vary depending on the purity of the substances sold. The figures for 2004 showed that ecstasy of low purity was as cheap as US$18 per gram while more pure varieties could be as expensive as US$60.

Data by the ACC for the six Australian states also do not show any significant changes in the street price for ecstasy in recent years (Table 27). Data collected by NDARC (which relates to prices per tablet rather than per gram) in the years 2003–05 also do not show any noticeable changes in retail prices and largely confirm the information provided by UNODC and the ACC. Prices remained stable in all jurisdictions and there was no great difference in retail prices around Australia. The significant seizures of ecstasy in recent years did not translate into higher retail prices in the illicit drug market. Greater and more effective law enforcement measures adopted in recent years did not disrupt or otherwise affect the ecstasy retail market as levels of demand also continued to be high in recent years. This suggests that seizures and other losses have been offset by greater levels of ecstasy importation and possibly by domestic production.

Table 27: Retail price estimates[a], ecstasy 1998–2006									
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
UNODC	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g	US$/g
NZ	n.a.	n.a.	n.a.	n.a.	n.a.	41	Av: $49 ($40–59)	n.a.	n.a.
Australia	n.a.	30	n.a.	29	n.a.	17[b]	Av: $32 (31%) ($18–60) 1.5–90.6% purity)	n.a.	n.a.
	1997–98	**1998–99**	**1999–2000**	**2000–01**	**2001–02**	**2002–03**	**2003–04**	**2004–05**	**2005–06**
ACC	AU$/t	AU$/t	AU$/t	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g	AU$/g
NSW	50	20–70	20–70	20–70	20–70	60–70	30–70	30–70	30–60
Qld	30–50	35–50	40–60	40–50	35–50	35–60	35–60	–	40
SA	n.a.	50–70	25–50	35–80	25–40	30–80	35	20–50	25–40
Tas	70–80	12–25	12–25	50–60	50–70	30–70	30–70	40–50	25–40
Vic	80	60	40–60	30–50	35	25–35	25–35	–	21–40
WA	40–70	–	25–60	50	35–60	45–50	35–50	40–50	40–50
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
NDARC[c]	AU$/t	AU$/t	AU$/t	AU$/t	AU$/t	AU$/t	AU$/t	AU$/t	AU$/t
Nat'l av. range	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35 (15–80)	35	n.a.
ACT	n.a.	n.a.	n.a.	n.a.	n.a.	35	35	35	35
NSW	n.a.	n.a.	n.a.	n.a.	n.a.	35	35	30	30
NT	n.a.	n.a.	n.a.	n.a.	n.a.	50	50	50	50
Qld	n.a.	n.a.	n.a.	n.a.	n.a.	35	35	32	30
SA	n.a.	n.a.	n.a.	n.a.	n.a.	35	35	30	30
Tas	n.a.	n.a.	n.a.	n.a.	n.a.	50	40	45	40
Vic	n.a.	n.a.	n.a.	n.a.	n.a.	30	30	30	30
WA	n.a.	n.a.	n.a.	n.a.	n.a.	40	50	40	40

a: Price refers to typical retail price irrespective of range and purity

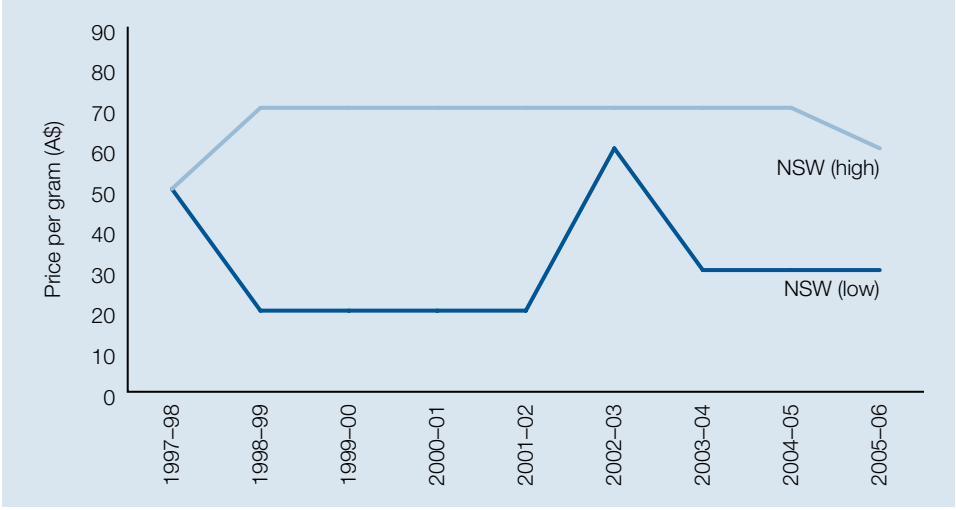
b: Oceania, price per gram, UNODC 2003a: 7

c: Median price per tablet, irrespective of range. NDARC 2006: 25; 2007: 28

Source: UNODCCP 2002: 209, 211; UNODC 2004: 385; 2005: 357; 2006: 380; ABCI and ACC 1998 to 2007

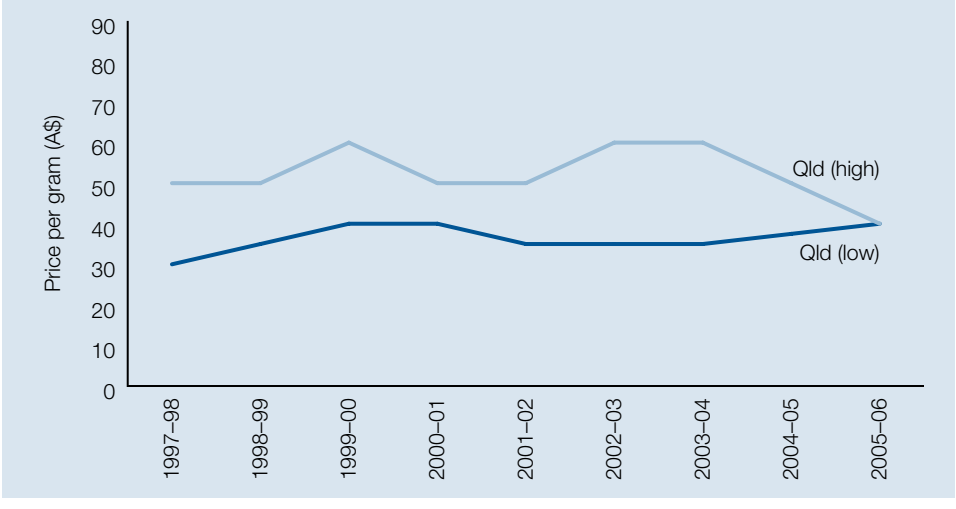
Figures 15 and 16 illustrate that, according to ACC figures, between the 1997–98 and 2005–06 financial years, retail prices for ecstasy remained largely steady in New South Wales and Queensland. Victoria, in contrast, witnessed a slight drop in ecstasy retail prices during that time (Figure 17).

Figure 15: Ecstasy price estimates, NSW, 1997–98 to 2005–06



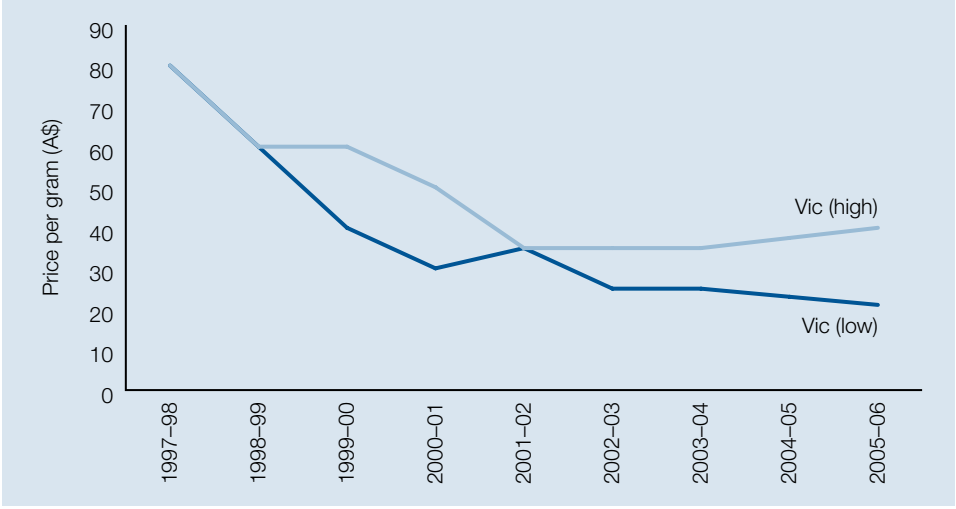
Source: ABCI and ACC 1998 to 2007

Figure 16: Ecstasy price estimates, Queensland, 1997–98 to 2005–06



Source: ABCI and ACC 1998 to 2007

Figure 17: Ecstasy price estimates, Victoria,1997–98 to 2005–06



Source: ABCI and ACC 1998 to 2007

Statistics on ecstasy street prices in New Zealand are limited and UNODC reports only contain information for the years 2003 and 2004 when retail prices averaged approximately US$45.00. In New Zealand's *2001 national drug survey*, respondents reported that the average price per ecstasy tablet in New Zealand was approximately NZ$40–80. Other research published in New Zealand in 2004 found the average price per ecstasy tablet to be NZ$71.90 (Wilkins et al. 2004b: 63). According to these figures, ecstasy is more expensive in New Zealand than in Australia. This may reflect the smaller market and the additional expenses associated with trafficking to New Zealand but it has also been attributed to more effective border control mechanisms in New Zealand. The data are, however, too fragmentary to make any conclusive findings.

Methylamphetamine

UNODC and the NDARC provide some additional, albeit fragmentary, data on the retail prices for methylamphetamine and crystal methylamphetamine (see Table 28 below). According to UNODC figures the average retail price for methylamphetamine in Australia in 2004 was US$188.80, although prices varied greatly depending on the purity of the substance sold.

Methylamphetamine is significantly more expensive in New Zealand than in Australia. UNODC reported a price of US$550.40 per (pure) gram of methylamphetamine for 2003 and US$424.40 in 2004. Data released by local researchers show a decline in methylamphetamine street prices from NZ$250–300 per gram in 1998 to NZ$100–180 in 2001. It has been reported elsewhere that in mid-2002, methylamphetamine was selling on New Zealand streets for about NZ$100–180 per gram (Bellamy & McNab 2003: 8). Much higher prices have been reported for sales of crystal methylamphetamine, referred to as P in New Zealand. It has been estimated that crystal methylamphetamine was selling for NZ$1,000 per gram in New Zealand in 2002 (Bellamy & McNab 2003: 8).

Table 28: Price estimates, methylamphetamine, Australia and New Zealand, 1998–2004

	1998	1999	2000	2001	2002	2003	2004
	$/g	$/g	$/g	$/g	$/g	$/g	$/g
Australia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	Av: US$189 (US$66–295; 0.3–88% purity)
NZ	NZ$250–300[a]	n.a.	n.a.	NZ$100–180[b]	n.a.	US$550[c]	Av: US$424 (US$65–784)

a: Wilkins 2002: 14

b: Wilkins 2002: 14; Wilkins et al. 2002: 260

c: Price refers to 'typical retail price' irrespective of range and purity

Source: UNODC 2006: 378

NDARC surveys differentiate retail prices for methylamphetamine between ice, speed, and methylamphetamine base (Table 29). According to these surveys, street prices for crystal methylamphetamine (or ice) have been stable in most Australian states and territories in the 2003–05 period. New South Wales and Queensland reported slight increases between 2004 and 2005. The price per 0.1 gram unit of crystal methylamphetamine (referred to as point (pt)) averages approximately $40–50 in most parts of Australia. This is supported by other research which placed the average price for a point of crystal methylamphetamine in Sydney at $50 (Topp et al. 2002: 346).

Table 29: Price estimates[a], methylamphetamine type, 2003–05

	Crystal methylamphetamine			Methylamphetamine			Methylamphetamine base		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
	$/pt	$/pt	$/pt	$/g	$/g	$/g	$/pt	$/pt	$/pt
ACT	45	48	35	175	80	80	40	40	40
NSW	50	40	50	55	60	60	40	38	30
NT	65	50	80	60	100	200	50	50	75
Qld	40	40	50	200	180	180	25	28	25
SA	25	25	25	40	50	65	25	25	25
Tas	50	50	50	200	300	325	50	50	50
Vic	40	40	40	180	180	180	33	29	23
WA	50	50	50	200	300	300	50	50	50

a: Median price per point or gram, irrespective of range. Note that these figures are based on very small samples

Source: NDARC 2006: 61

Retail prices for methylamphetamine are measured in grams, not points. Methylamphetamine is cheaper than crystal methylamphetamine because it is of lesser quality and lower purity. Street prices for methylamphetamine are subject to very great variations which may reflect market availability but could also be reflective of the very small sample base and the lack of reliability of the surveys. According to NDARC data, prices for methylamphetamine rose in recent years in all Australian jurisdictions expect the ACT.

In contrast, prices for methylamphetamine base, measured in points (units of 0.1 gram) fell in most parts of Australia in recent years. NDARC surveys show remarkable price drops in New South Wales and Victoria between 2003 and 2005.

Observations

In comparison to other aspects of the illicit ATS trade, levels and patterns of ATS consumption in Oceania are quite well documented and researched, especially in Australia and New Zealand. The available information also identifies very similar trends and developments; the existing literature is, perhaps surprisingly, very consistent on most aspects of ATS consumption in Oceania. The key issues that crystallise include:

- Levels of ATS consumption are very high in Oceania. Australia and New Zealand report among the highest rates of ATS use in the world. Consumption of ATS other than ecstasy seems to have levelled off in recent years while levels of ecstasy consumption continue to rise. There are some indications that consumption of crystal methylamphetamine is increasing in Australia and some Pacific Islands such as the Northern Marianas.

- The number of ATS consumers in Oceania is very large relative to the small population of the region. This means that the region provides a very big customer base for ATS suppliers. Further, research has shown that per capita spending on illicit drugs in Oceania is higher than in any other region of the world.
- For locally produced ATS, such as methylamphetamine, profit margins are particularly high at the retail stage, particularly in comparison with profits at production and wholesale levels. For ecstasy, a substance that is mostly imported into the region, profit margins at wholesale and retail levels are more equal.
- The retail market for ATS including ecstasy increased significantly in Oceania in recent years. Production, supply and demand of most ATS and especially of ecstasy and crystal methylamphetamine continue to grow. This illicit drug market has emerged alongside existing drug markets; it has not substituted the markets for heroin, cocaine, cannabis and other narcotic drugs.
- Retail prices for ATS in Australia are low compared with other parts of the region. Substances of greater quality and purity, such as ecstasy and crystal methylamphetamine are more expensive, also because they are more frequently imported. Locally produced ATS of low purity are cheaper. Retail prices for ATS have largely been stable in recent years. Increased seizures of ATS in Australia have not disrupted ATS supplies and have not caused any noticeable increase in retail prices.
- Retail prices for ATS in New Zealand are slightly higher than in Australia because the size of illicit drug market is smaller and the market is more reliant on imports. The greater geographical distances and tighter border controls also explain the higher street prices in New Zealand.
- There is currently no information on retail prices of ATS or any other drug in the Pacific Islands. Levels of ATS consumption in the Pacific Islands are also insufficiently researched.
- In combination, high levels of demand, stable retail prices, high levels of supply, and significant expenditure on illicit drugs provide a profitable setting for ATS sales in the region and explain the significant and growing involvement of criminal elements in this market. Even local producers of small quantities of ATS can sell their substances profitably, which explains the significant number of so called boxed labs in Australia and New Zealand. Imported ATS, such as ecstasy and crystal methylamphetamine are equally profitable at wholesale and retail levels. Given the greater level of sophistication required for the importation of illicit drugs, the supply and distribution of these substances is more closely associated with large, transnational criminal organisations. There is, to date, no systematic study of the profile of ATS suppliers at the point of final sale.

Chapter 5:
Legal frameworks

International frameworks

ATS and their precursors were placed under international control by the 1971 *Convention on Psychotropic Substances* (1019 UNTS 75) and the 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (1696 UNTS 449). These documents criminalise a range of activities related to the production, trafficking, and possession of ATS and establish a comprehensive framework for law enforcement and judicial cooperation, and for mutual legal assistance. A number of provisions address specific issues associated with the involvement of criminal organisations in the illicit ATS trade. The following sections briefly outline the concept and core contents of the two conventions and then explore relevant offences relating to ATS production, trafficking, and consumption, and analyse provisions relating to ATS precursor control.

1971 *Convention on Psychotropic Substances*

The purpose of the *Convention on Psychotropic Substances* is to restrict the use of psychotropic substances to medical and scientific purposes and prevent and combat their abuse and the illicit traffic in these substances (Preamble). The convention was opened for signature in Vienna on 21 February 1971 and entered into force on 16 August 1976, 90 days after 40 states had signed it, as required by Article 26 of the convention. Today, 179 states are parties to it. Table 30 shows a list of state parties to the convention in Oceania.

Table 30: 1971 *Convention on Psychotropic Substances*, signatories, Oceania[a]		
Country	**Signature/ accession**	**Entry into force/ ratification/accession**
Australia	21 Dec 1971	17 Aug 1982
Cook Islands	see New Zealand	..
Fiji	25 Mar 1993	..
France (incl. French Polynesia, New Caledonia, Wallis and Futuna)	17 Dec 1971	28 Jan 1975
FSM	29 Apr 1991	..
Kiribati	..	..
Marshall Islands	9 Aug 1991	..
Nauru	..	..
New Zealand	13 Sep 1971	7 June 1990
Niue	..	..
Northern Marianas	..	..
Palau	19 Aug 1998	..
PNG	20 Nov 1981	..
Samoa	..	..
Solomon Islands	..	..
Tokelau	see New Zealand	..
Tonga	20 Oct 1975	..
Tuvalu	..	..
United States (incl. Guam, American Samoa)	21 Feb 1971	16 Apr 1980
Vanuatu	..	..

..=not applicable

a: as at 9 September 2006

The development of the 1971 convention was a response to growing concern in the 1960s over the spread of illicit production and abuse of synthetic drugs in various parts of the world and over the diversion of substances such as amphetamine and LSD onto the illicit market. The convention is, for the most part, modelled after the 1961 *Convention on Narcotic Drugs* (520 UNTS 151). This convention established a comprehensive control and penalisation system and a framework for international cooperation but the scope is limited to narcotic drugs such as opium, coca, and cannabis and does not cover synthetic substances (Chatterjee 1981: 457). As the abuse of pharmaceutical and synthetic drugs became more prominent in the 1960s, the UN Commission on Narcotic Drugs responded by developing a comprehensive control and monitoring regime modelled after the 1961 *Single Convention*

on Narcotic Drugs which resulted in the 1971 *Convention on Psychotropic Substances* (Yoshida 1997: 8; Bassiouni & Thony 1996: 921).

The 1971 *Convention on Psychotropic Substances* initially placed 32 synthetic drugs under international control. The current number of internationally controlled substances under this convention is 105. Substances can be added to the schedules of the convention subject to the requirements and procedure set out in Article 2. These substances are divided into four schedules, designed to reflect the heterogeneity of psychotropic drugs and the different risks and hazards associated with their abuse (Lessem 1974: 144). Substances listed in Schedule I are considered the most dangerous and placed under the most stringent control. These substances are prohibited unless their possession, use, etc is specifically approved for medical and scientific purposes by governments (Articles 5(1) and 7). Substances under the remaining three schedules are less stringently controlled. These substances were seen as less dangerous and state parties are free to limit the use of these substances 'by such measures as they consider appropriate' (Article 5(2)). MDMA, amphetamine, and methylamphetamine are listed in Schedules II and IV of the 1971 convention. The classification of ATS is said to reflect the medical use and risks of abuse of these substances and it has been argued that the substances listed in Schedules II–IV ought to be controlled less stringently so that important research is not inhibited (Cabranes 1973: 768). The classification of some substances, however, does not seem to follow this system and does not reflect contemporary patterns of abuse (Bassiouni & Thony 1996: 923–924).

In summary, the 1971 convention requires licensing systems for the manufacturing, trade, and distribution of ATS and other psychotropic substances (Article 8). Further provisions relating to international trade, export and import of psychotropic substances are contained in Articles 12 and 13. Supply and use of ATS is limited to medical prescription (Article 9). Unauthorised manufacturing, trading, and distribution of ATS and other psychotropic substances is criminalised under Article 22(1). Signatories are further required to penalise conspiracies and participation in these offences by Article 22(2)(a)(ii) (see further Boister 2001: 95–96; Chatterjee 1981: 483). To ensure that offenders cannot escape prosecution, countries in which offenders are found are obliged by Article 22(2)(iv)to prosecute offences under the convention or extradite the offender (see further Boister 2001: 224–229). Article 21 calls upon signatories to collaborate in preventing and suppressing the illicit traffic in psychotropic substances (see further Boister 2001: 293–299). Lastly, state parties to the convention are required to report annually to the INCB on their control and enforcement efforts and provide information about changes to domestic law and about major drug cases (Article 16; see further Boister 2001: 476–477).

It was noted earlier that the provisions under the 1971 *Convention on Psychotropic Substances* are modelled, for the most part, after the *Single Convention on Narcotic Drugs*, written 10 years earlier. The separation of narcotic drugs from psychotropic substances has frequently been criticised and many have argued for the combination of both types of illicit

drugs under the same control regime in a single convention. This was, however, prevented by industrialised nations, due to strong lobbying by the pharmaceutical industry in these countries. Unlike narcotic drugs, which are mostly cultivated in developing nations, psychotropic substances generally involve chemicals produced in industrialised nations. Countries with large chemical and pharmaceutical industries were unwilling to accept the stringent control regime imposed over the cultivation of narcotic drugs. A further reason associated with the distinction between narcotic drug and psychotropic substance control relates to the patterns of consumption and the heterogeneity of these drugs. Use of pharmaceutical drugs has become a part of everyday life in most parts of the world, especially in western, developed nations. In contrast to the consumption of narcotic drugs, pill taking is a widely accepted habit which makes social and legal control more difficult (Bassiouni & Thony 1996: 915).

As a result, the regime instituted under the 1971 convention is less stringent than the *Single Convention on Narcotic Drugs* and provides more loopholes for countries that produce and trade psychotropic substances. Boister observed that because the 1971 convention 'was aimed at drug manufacturing states rather than agricultural states, its provisions are not as rigorous as those of the 1961 Convention' (Boister 2001:47). Still, many industrialised nations initially refused to ratify the 1971 convention, to protect their pharmaceutical industries and some of the major synthetic drug producing states continued to resist accession to the convention until very recently (Bassiouni & Thony 1996: 915–915).

1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*

The 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* is aimed at combating the involvement of criminal organisations in the illicit drug trade (Preamble, para 3) and has been described as 'the most comprehensive international drug policy to date' (Gardner 1993: 288). During the 1970s and 80s it became obvious that the existing international drug control regime could not reduce the demand for and supply of illicit drugs and that the criminal elements engaged in the illicit drug market had become more and more sophisticated in disguising and organising their illicit trade and circumventing the international control measures which were increasingly seen as 'insufficiently robust' (Gilmore 1996: 2; cf Bassiouni & Thony 1996: 921–922).

Concern over the rise, spread, influence, and economic power of criminal organisations led to the development of the *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*, initiated by the Government of Venezuela in 1984 (Roucherau 1988: 601). The convention is the first international legal instrument to recognise the economic dimension and high profitability of the illicit drug trade. As its title suggests, the convention is aimed predominantly at suppressing illicit drug trafficking and, to that end,

focuses specifically on law enforcement, controlled delivery, tracing and forfeiture of proceeds of drug trafficking. The convention was opened for signature in Vienna on 20 December 1988 and entered into force two years later on 11 November 1990, 90 days after the 20th country acceded (Article 29(1)). Today, the convention has 180 parties around the world. Table 31 sets out the state parties to the convention in Oceania.

Table 31: 1988 *Convention on against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*, signatories, Oceania[a]

Country	Signature/ accession	Entry into force/ ratification
Australia	14 Feb 1989	14 Feb 1993
Cook Islands	see New Zealand	..
Fiji	25 Mar 1993	..
France (incl. French Polynesia, New Caledonia, Wallis and Futuna)	13 Feb 1989	31 Dec 1990
FSM	6 July 2004	..
Kiribati	..	..
Marshall Islands	..	..
Nauru	..	..
New Zealand	18 Dec 1989	16 Dec 1998
Niue	..	..
Northern Marianas	..	..
Palau	..	..
PNG	..	..
Samoa	19 Aug 2000	..
Solomon Islands	..	..
Tokelau	see New Zealand	..
Tonga	29 Apr 1996	..
Tuvalu	..	..
United States (incl. Guam, American Samoa)	20 Dec 1989	20 Feb 1990
Vanuatu	January 2006	..

..=not applicable

a: as at 9 September 2006

The principal purpose of the 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*, as stated in Article 2(1), is 'to promote cooperation among the Parties so that they address more effectively the various aspects of illicit traffic in narcotic drugs and psychotropic substances having an international dimension'. To that end, Article 3 requires signatories to comprehensively criminalise a range of activities associated with the

production, trafficking, supply, and possession of illicit drugs, criminalise the laundering of proceeds deriving from these activities, and equally penalise any incitement, conspiracy, and participation in these activities. Article 3 represents 'a major extension and elaboration of drug related crimes beyond the limited provisions of the […] 1971 Convention' (Boister 2001: 98). The requirement to criminalise the conduct identified in Article 3 is an absolute one; failure by signatories to enact adequate domestic offences constitutes noncompliance under the convention.

The 1988 convention applies to all those illicit narcotic drugs and psychotropic substances listed in the schedules of the 1961 *Single Convention on Narcotic Drugs* (Article 1(n) 1988 Convention) and the 1971 *Convention on Psychotropic Substances* (Article 1(r)). In addition, its application also extends to a range of precursor chemicals listed in the annex of the convention. The annex consists of two tables which include many of the key ingredients used in ATS and ecstasy production, including ephedrine, lysergic acid, 1P2P, and pseudoephedrine. Article 12 of the 1988 convention calls upon state parties to prevent the diversion of precursor chemicals 'used for the purpose of illicit manufacture of narcotic drugs or psychotropic substances, and [to] cooperate with one another to that end'. The convention specifically criminalises the possession of these substances 'knowing that they are being or are able to be used in or for the illicit cultivation, production or manufacture of narcotic drugs or psychotropic substances' (Article 3(1)(c)(ii)).

The 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* further contains extensive measures relating to the laundering of proceeds of drug crimes and for the interdiction and forfeiture of these assets (see further Gardner 1993: 297). Articles 6–10 seek to strengthen international cooperation by providing a range of mechanisms for extradition (see further Boister 2001: 252–274; Sproule & St-Denis 1989: 277–280), controlled delivery (see further Sproule & St-Denis 1989: 287–288), mutual legal assistance, and other forms of law enforcement and judicial cooperation (see further Boister 2001: 299–344; Sproule & St-Denis 1989: 285–287). Articles 15–19 contain specific measures relating to the transportation of illicit drugs by commercial carriers, by sea, through ports, and by use of mail. The remaining articles are largely concerned with reporting requirements, and with the administration and implementation of the convention (Gurulé 1998–99: 80–84).

ATS production

The 1971 *Convention on Psychotropic Substances*, unlike the 1988 convention, does not itself criminalise particular activities. Instead, Article 22 renders any conduct illegal that is not lawful in terms of the convention. It is left to state parties to specify particular forms of criminal conduct. While the 1971 convention does not enumerate specific offences, Article 22 is generally understood as criminalising 'illicit traffic' in psychotropic substances. This

term is further defined in Article 1(j) and explicitly includes the manufacturing of psychotropic substances (Boister 2001: 91–92). The 1971 convention, however, does not limit the cultivation of plants, such as ephedra, from which ATS and other psychotropic substances are made (Boister 2001: 46).

With regard to ATS production, the 1988 convention requires state parties to criminalise 'the production, manufacture, extraction, [and] preparation' of psychotropic substances contrary to the provisions of the 1971 convention, Article 3(1)(a)(i). It further prohibits the possession or purchase of psychotropic substances for the purpose of manufacturing, etc. (Article 3(1)(a)(iii)). The 1988 *Convention on Illicit Drugs and Psychotropic Substances* also places restrictions on equipment and other material used in the manufacturing of ATS. This includes, for example, precursor chemicals and machines used for the encapsulation of tablets (Article 3(1)(a)(iv), (c)(ii)). Article 12 regulates the diversion of precursors and Article 13 the trade and diversion of other equipment and material to the illicit traffic.

The financing of ATS production and the concealment and conversion (or laundering) of funds deriving from ATS production are criminalised under Article 3(1)(a)(v), (b)(i), (ii) (Boister 2001: 107–121). In order to adequately target the involvement of criminal organisations in the illicit drug trade, criminal responsibility is expanded under Article 3(1)(a)(v) to include organisers, managers, and financiers (Boister 2001: 106–107). This 'facilitates the identification and arrest of the principals in the criminal scheme in question rather than merely those with a lower level of involvement' (Gilmore 1996: 7; Roucherau 1988: 604). Liability for all convention offences extends to attempts, participation, incitement, and conspiracy (Article 3(1)(c)(iii), (iv)) (Boister 2001: 121–123). Under Article 3(5) the convention further requires state parties to provide aggravated offences or more severe penalties for crimes that involve criminal organisations, offenders who are engaged in other international organised crime activities, that involve the use of violence, or offences that are committed to facilitate other criminal acts (Bassiouni & Thony 1996: 928–929).

To further dismantle the illicit production of ATS and other illicit drugs, Article 13 of the 1988 convention requires state parties 'to prevent trade in and the diversion of materials and equipment for illicit production or manufacture of narcotic drugs and psychotropic substances'. This provision seeks to ensure that equipment such as laboratory materials, glassware, tanks, and encapsulating machines, which are commonly used in the licit drug industry, are not purchased for or diverted to clandestine drug laboratories (Gardner 1993: 296).

ATS trafficking

As mentioned in the previous section, Article 22 of the 1971 convention is generally understood as criminalising the illicit trafficking in psychotropic substances. This includes

all forms of unauthorised trade and distribution (Boister 2001: 92). In relation to ATS trafficking, the 1988 convention requires state parties to criminalise the 'offering, offering for sale, distribution, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transportation, importation or exportation' of psychotropic substances contrary to the provisions of the 1971 convention (Article 3(1)(a)(i)). It further prohibits the possession or purchase of psychotropic substances for the purpose of trafficking (Article 3(1)(a)(iii)). The financing of ATS trafficking and the concealment and conversion of funds deriving from ATS production are criminalised under Article 3(1)(a)(v), (b)(i), (ii). Liability for all of these offences extends to attempts, participation, incitement, and conspiracy (Article 3(1)(c)(iii), (iv)). Higher penalties or special offences apply to cases of trafficking that involve criminal organisations, offenders who are engaged in other international organised crime activities, that involve the use of violence, or offenders who hold a public office (Bassiouni & Thony 1996: 928–929).

ATS consumption

The ambiguity arising from the lack of any specific conduct prohibited in the 1971 convention is particularly evident in relation to abuse and consumption of psychotropic substances, including ATS. In essence, it is unclear whether the convention criminalises possession of psychotropic substances, especially if the possession is only intended for personal use. There appears to be general consensus that there is no obligation for state parties to criminalise possession of substances set out in Schedules II–IV, which includes ATS and ecstasy. Only substances listed in Schedule I are placed under more stringent control, and possession of Schedule 1 substances without 'special licence or prior authorisation', including possession for personal use, is said to be unlawful, Article 7(b) 1971 convention. There is no obligation to make possession of Schedule II, III and IV substances unlawful, although the convention notes in Article 8 that it would be 'desirable' to do so (Lessem 1974: 144–145; Boister 2001: 93–95).

The initial drafts of the 1988 convention did not include offences for personal possession for purchase for personal consumption as these offences were considered 'unconnected to the main target of the Convention, the illicit traffic' (Boister 2001: 101; Sproule & St-Denis 1989: 269). The preamble of the 1988 convention now states in paragraph 7 that the convention, *inter alia*, seeks 'to eliminate the root causes of the problem of abuse of narcotic drugs and psychotropic substances, including the illicit demand for such drugs and substances and the enormous profits derived from illicit traffic'. Further, Article 14(4) of the 1988 convention calls upon state parties to 'adopt appropriate measures aimed at eliminating or reducing illicit demand for narcotic drugs and psychotropic substances, with a view to reducing human suffering and eliminating financial incentives for illicit traffic'. The 1988 convention differentiates between possession for commercial and for personal use. Possession for the purpose of production, manufacturing etc. is an offence under Article 3(1)(a)(iii) (Boister 2001: 104). Possession of illicit drugs for personal consumption, in contrast, is not included

in the list of criminal offences in Article 3(1). Instead, Article 3(2) of the 1988 convention requires state parties 'to establish as a criminal offence under its domestic law, when committed intentionally, the possession […] of psychotropic substances for personal consumption'. Personal consumption of illicit drugs, such as ATS, is seen as less serious than possession for commercial purposes and the offence under paragraph (2) is not subject to the same extensions and aggravations as the offences relating to production and trafficking set out in paragraph (1) (Boister 2001: 123–130).

Precursors

In contrast to plant-based narcotic drugs such as heroin, cannabis, and cocaine, ATS are based on chemical ingredients. In the case of narcotic drugs, the 1961 *Single Convention on Narcotic Drugs* provides the same control regime for plants, raw materials, intermediates, and end products. For example, the convention criminalises the cultivation and possession of coca bush in the same way as it criminalises the possession and sale of the end product cocaine. For ATS and many other synthetic drugs the key ingredients or precursors are, however, not regulated in the same way as the end product.

Until recently, precursors were not subject to any control at all. International law also did not address the issue of precursor control until 1988. The provisions of the 1971 *Convention of Psychotropic Substances*, for instance,

> do not list substances which have been included because they are capable of conversion into psychotropic substances, but only those which have the defined dangerous properties themselves. The […] Convention also does not explicitly confer upon the Commission the authority to place under international control substances which are 'convertible' into psychotropic substances (Commentary 1976: 32).

The institution of stringent control regimes over 'finished' ATS and other psychotropic substances beginning in the 1970s triggered a shift in trafficking patterns. Rather than trafficking the end product, criminal organisations shifted to trafficking the precursor substances which were subject to lesser, if any, control.

Precursor control is based on the 'assumption that, by exercising better controls over the movement of precursors from the stage of production to disposal by the end-user, it will be possible to restrict access to them by illicit drug manufacturers, thus reducing the quantity of illicit drugs manufactured' (Jayasuriya 1998: 272). The control of specific ATS precursors was first introduced in 1955 in Japan which experienced high rates of methylamphetamine abuse at that time. A number of other countries introduced precursor control in the 1970s. The United States followed in 1980.

In international law, precursor chemicals used in ATS production were largely legal and their trade uncontrolled until the late 1980s. The initial proposals by Latin American nations to control the trade in precursor substances were met by fierce resistance from the main producers of these chemicals China, Japan, and Europe (Roucherau 1988: 610). After years of negotiation, the 1988 convention introduced a monitoring, control, and prohibition system for precursors used in the illicit manufacture of ATS and other synthetic drugs in order to 'limit the access of traffickers to the indispensable materials of their industry and enable authorities to detect, track, and identify the precursors when traffickers are trying to obtain them' (Bassiouni & Thony 1996: 927). Although the convention is much weaker and more selective than earlier proposals for precursor control, the inclusion of precursors into the international drug control regime marks an important shift in international law as the criminalisation of the illicit precursor trade impacts particularly on industrialised nations with large chemical industries. The convention attempts

> to strike an appropriate balance between the desire of the law enforcement community to exploit an obvious area of relative vulnerability for the trafficker with the real commercial needs of the chemical and pharmaceutical industries and other private sector participants (Gilmore 1996: 4, 10; cf Roucherau 1996: 610–611).

In relation to precursor chemicals, the main concern of the convention is with the prevention of the diversion of these substances from the legitimate into the illegitimate trade. The convention intends to criminalise the supply of essential chemicals used to produce psychotropic substances and Article 12 regulates the diversion of precursors if (and only if) they are used for the cultivation, production or manufacture of illicit drugs. State parties are further obligated to monitor suspicious shipments, provide proper labelling and documentation for lawful export shipments, maintain adequate records, and give advance notification of international shipments for certain chemicals (Cherney, O'Reilly & Grabosky 2005: 14–15; Gardner 1993: 296; Gilmore 1996: 8–10; Jayasuriya 1998: 272–273).

The precursor control under the 1988 convention extends to 22 substances, including eight ATS precursors. Individual countries have placed additional precursors under the control regime. In some countries the regulations that apply to the finished ATS also extend to precursors; in others, precursors are regulated separately. As a result, there is a significant discrepancy between jurisdictions and in some countries, between end product and precursors (UNDCP 1996: 53–54; Bassiouni & Thony 1996: 922, 927). To ensure greater uniformity in precursor control, the UNDCP in 1993 issued *Guidelines for use by national authorities in preventing the diversion of precursor and essential chemicals* which were endorsed by the UN Economic and Social Council in the same year (Gilmore 1996: 13), but this initiative did not have the desired effects and precursor control remains very diverse around the world and throughout the Oceania region.

Ephedrine, for example, is a substance that has widespread pharmaceutical use but is also abused as a stimulant and as a precursor of methylamphetamine. Ephedrine supply is only controlled as a precursor under the 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*. The more stringent 1971 *Convention on Psychotropic Substances* does not regulate the manufacturing and distribution of ephedrine (UNDCP 1996: 41, 53).

Research has also shown that illicit manufacturers of ATS frequently shift between precursors and substitute precursors in response to availability, control, regulation, enforcement, price, and demand. In particular, UNDCP observed 'the use of alternates not yet under international control […] in the manufacture of structurally related new drugs' (UNDCP 1996: 65).

In addition to the obligations under international law, a further initiative to control the supply and availability of ATS precursors was launched by the INCB in 2003 under the name Project Prism. This worldwide project aims to prevent the diversion of ATS precursors specifically by launching backtracking investigations into interceptions and seizures of ATS precursors and manufacturing equipment and into the use of the internet for precursor trading. Further, the project seeks to obtain an overview of the production and trade of safrole and safrole-rich oils used in illicit ecstasy production and to enhance supply of and response to pre-export notifications (INCB 2005: Annex X; Cherney, O'Reilly & Grabosky 2005: 15–16).

Observations

In combination, the 1971 *Convention on Psychotropic Substances* and the 1988 *Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances* provide a comprehensive regime for the international control of ATS and their precursors. The conventions establish a range of criminal offences for activities associated with ATS production, trafficking, importation, and consumption, including specific provisions directed against the involvement of criminal organisations in this trade and the laundering of proceeds of such crime.

The illicit drug trade is a global problem which requires global solutions. 'The internationalisation of crime' argues Roucherau, 'requires concerted international suppression but more so it requires a conscious effort to fight the consumption as well as the production' of illicit drugs (Roucherau 1988: 602). The current regime of international drug conventions has frequently been criticised for overburdening those countries in which illicit drugs are produced and, in return, for being unfairly lenient towards the main consumer countries.

As many producer nations of illicit drugs are developing countries, this imbalance is often perceived as a manifestation of imperialistic attitudes of industrialised nations that are the principal consumer countries (Sproule & St-Denis 1989: 266–267). The separation between developing producer states on the one hand, and developed consumer states on the other is less significant in the contemporary illicit ATS trade, as many ATS are manufactured in the country of consumption or originate from other industrialised countries. But the principal focus of many obligations under the international drug conventions remains on the production and supply of ATS and not on the demand for these substances. This is reflected, for example, in the 1988 convention, which does not criminalise possession for personal use in the same stringent manner it penalises production and distribution of illicit drugs (Sproule & St-Denis 1989: 269–270). It is, however, the demand for ATS and other illicit drugs which is fuelling this trade and which is seen by many as the root cause of the problem (Roucherau 1988: 612).

The principal weakness of the existing international drug conventions is their reliance on the voluntary cooperation of the state parties, which is often less than forthcoming. In many instances, countries have been unable, reluctant, or simply unwilling to comply with the obligations under the conventions. Many authors see the emphasis on domestic criminalisation and enforcement as the principal failure of the international drug conventions (see, for example, Gurulé 1998: 78; Lessem 1974: 143). It allows countries to construe criminal offences according to their own needs and political agendas. The loose terminology of many provisions in the international drug conventions inhibits uniformity at the domestic level (Boister 2001: 132). There has been criticism of the international drug conventions for failing to provide appropriate and clear guidance in respect of the suppression of the illicit drug problem. Instead, many view the drug conventions as mere regulatory frameworks for a highly profitable, licit drug industry, rather than as measures against the illicit trade (Boister 2001: 543).

A further problem of the existing system is the lack of any obligation to prevent the overproduction of drugs for medical and scientific use and the oversupply of precursors. There is currently no set production quota, no estimate system, and the conventions do not prohibit the production of substances and quantities that are medically and scientifically unnecessary (Bassiouni & Thony 1996: 917, 920; Cabranes 1973: 768; Lessem 1974: 145; cf Gardner 1993: 297–299).

The current system also lacks appropriate mechanisms to ensure State Parties live up to their obligations. Sproule and St-Denis note that '[t]he insertion of safeguard clauses in many articles and the weakness of monitoring and supervisory mechanisms will allow recalcitrant parties to avoid their Convention obligations with relative impunity' (1989: 291). The INCB may create some peer pressure by identifying those countries with particular drug problems, but neither the Commission nor the INCB have any coercive powers to enforce the conventions in countries that fail to live up to their obligations (see further Sproule & St-Denis

1989: 288–290). To close this gap in international drug control, some authors have called for the institution of penalties 'for non-compliance by participating states. Since, as a practical matter, nations seem unwilling to enforce an embargo, perhaps a system of fines, levied by the Commission with appeals to the Council and the International Court of Justice (ICJ), would serve the same purpose' (Cabranes 1973: 768).

As with most other UN conventions, the ICJ is the final arbiter for disputes between signatories to the 1971 and 1988 conventions. Article 31(2) of the *Convention on Psychotropic Substances* and Article 32(2) of the *Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances* specifically provide that disputes over convention obligations may be referred to the ICJ if they cannot be resolved by way of negotiation, mediation etc. In theory, this allows state parties to ask the ICJ to take legal action against signatories that violate or ignore convention obligations, for example, by allowing major drug production or by turning a blind eye to large scale trafficking, money laundering, or other organised crime activities. The ICJ may then issue a declaratory judgment confirming noncompliance, which may create some pressure on the country to act appropriately. Otherwise, failure to adhere to an ICJ judgment constitutes a violation of Article 94 of the *Charter of the United Nations* and may be referred to the UN Security Council. Some authors have argued that

> in extreme cases, where government officials have not only failed to comply with the express terms of the Convention, but also have actually facilitated or condoned narcotics trafficking and money laundering within their territory, the complainant-party might seek recourse with the UN Security Council. The authority of the Security Council could be brought to bear on the offending nation to force compliance [and] the non-complying party could suffer Security Council sanctions (Gurulé 1998: 115).

Political and economic considerations have so far prevented any country from referring to the ICJ any case in which signatories did not live up to convention obligations or in which governments were collaborating with drug cartels. Some countries reject the jurisdiction of the ICJ altogether, thus preventing the court from seeking convention adherence. In addition, Article 32(3) of the 1971 convention and Article 32(3) of the 1988 convention specifically allow a country to 'declare that it does not consider itself bound by' the ICJ jurisdiction over convention obligations. Among the countries in Oceania, France, and Papua New Guinea have declared their reservation to Article 32(1) of the 1971 convention. France and the United States have filed their declaration that they do not consider themselves bound by Article 32(2) of the 1988 convention (Gurulé 1998: 116–117). The presence of escape and safeguard clauses in almost every article of the drug conventions, remarks Boister (2001: 68), 'indicates that states are still wary about international drug control and jealous of their sovereignty' (see also Sproule & St-Denis 1989: 290–291).

Domestic laws

Australia

Australia is a signatory to the 1971 *Convention on Psychotropic Substances* (1982 AuTS 14) and the 1988 *Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (1993 AuTS 4). Both conventions have been ratified and implemented into domestic law, in the *Psychotropic Substances Act 1976* (Cth) and *Crimes (Trafficking in Narcotic Drugs and Psychotropic Substances) Act 1990* (Cth). In Australia, relevant drug offences can be found in federal criminal law and in the criminal laws of Australia's six states and two territories (see Bronitt & McSherry 2005: 809–830; Brown et al. 2006: 935–966; Schloenhardt 2006: 269–304).

Federal offences

Federal drug offences in Australia are, for the most part, concerned with conduct that relates to the import and export of illicit drugs. Until 2005, the offences could be found in the *Customs Act 1901* (Cth) and the *Crimes (Trafficking in Narcotic Drugs and Psychotropic Substances) Act 1990* (Cth). The most significant federal drug offences were in Section 233B(1) of the *Customs Act 1901* (Cth) which included offences such as importing prohibited imports in para (b) and possessing prohibited imports in para (c).

In 2005, federal drug offences underwent a major reform with the *Law and Justice Legislation Amendment (Serious Drug Offences and Other Measures) Act 2005*. The purpose of this reform was to bring all federal drug offences together in the federal *Criminal Code* in a new Part 9.1 entitled *Serious drug offences* (new Sections 300.1–314.5). This new part was specifically designed 'to create offences relating to drug trafficking and to give effect to the *United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*' (s 300.1(1)). The new drug offences under the *Criminal Code* include:

- Division 302: trafficking controlled drugs
- Division 303: commercial cultivation of controlled drugs
- Division 304: selling controlled drugs
- Division 305: commercial manufacture of controlled drugs
- Division 306: pre-trafficking controlled precursors
- Division 307: import-export offences
- Division 308: possession offences
- Divisions 309, 310: drug offences involving or harming children.

The new federal drug offences mark a significant expansion of federal jurisdiction. While the offences coexist with state and territory drug laws, the new legislation allows federal agencies to engage in purely local investigations and prosecutions (Brown et al. 2006: 956). The enactment must also be seen as a significant step towards harmonisation and uniformity between the drug laws at federal and state levels (Norberry 2005: 2).

The seriousness of and penalties for drug offences under federal criminal law are determined by the quantity of illicit drugs involved. The offences provide different penalties for offences involving commercial quantities (life imprisonment or 7,500 penalty units or both), marketable quantities (imprisonment for 25 years/5,000 penalty units), and for offences that do not specify a minimum quantity (imprisonment for 10 years/2,000 penalty units). There are no aggravating elements for offences committed by criminal organisations, but some special provisions exist if certain offences are committed 'for a commercial purpose'.

In federal drug laws, narcotic drugs and psychotropic substances are listed in different schedules and are differentiated depending on their natural or chemical ingredients and/or their 'seriousness' (Section 300.2 *Criminal Code*). The new *Criminal Code* offences use the terms 'controlled drug', 'controlled plant', 'border controlled plant', and 'border controlled drug'. The terms are defined in Section 300.2. The new legislation also makes specific reference to precursors. The lists of controlled drugs are set out in Section 314.1 and include amphetamine, methylamphetamine, MDA, and MDMA. The precursors listed in Section 314.3 include all the relevant ATS and ecstasy precursors: ephedrine, ergometrine, ergotamine, isosafrole, lysergic acid, 3,4-methylenedioxyphenylacetic acid, 3,4-methylenedioxyphenylacetic-2-propanone, phenylacetic acid, phenyl-2-propanone, piperonal, pseudoephedrine, and safrole.

ATS PRODUCTION

The federal *Criminal Code* contains a number of offences relating to the manufacturing of ATS and other drugs and also contains specific offences to prohibit the illicit trade in precursors.

Division 305 contains three offences relating to the manufacture of controlled drugs. These include:

- manufacturing commercial quantities of controlled drugs (Section 305.3)
- manufacturing marketable quantities of controlled plants (Section 305.4)
- manufacturing controlled drugs (Section 305.5).

These offences have been specifically designed to suppress commercial ATS production in Australia; their purpose

> is to target the illicit commercial manufacture of controlled drugs. Although occasional instances of the manufacture of heroin and other narcotics are reported, the majority of offences falling under this [new] Division will involve synthetic drugs, such as legitimate uses in industry (Norberry 2005: 32).

The terms 'manufacturing' and 'manufacturing a substance' are defined in Section 305.1. The application of the offence is limited to manufacturing 'for a commercial purpose'. In simple terms, it is an offence to manufacture ATS for the purpose of selling or distributing these substances (Section 305.2). The requisite intention to manufacture for a commercial purpose is deemed to exist when the offence involves trafficable quantities (Section 305.6; Brown et al. 2006: 962–963). Manufacturing for other purposes, especially for personal consumption, is not criminalised under federal law, but liability may arise under relevant offences in state or territorial drug laws.

ATS IMPORTATION AND TRAFFICKING

The new drug offences under the *Criminal Code* (Cth) contain a range of 'import–export offences' in Division 307 (see further Brown et al. 2006: 964–965). These offences are differentiated depending on the quantity involved. They include:

- importing and exporting commercial quantities of border-controlled drugs or border-controlled plants (Section 307.1)
- importing and exporting marketable quantities of border-controlled drugs or border-controlled plants (Section 307.2)
- importing and exporting border-controlled drugs or border-controlled plants (Sections 307.3, 307.4).

Under new Section 300.2, 'importing includes bringing into Australia'. Importation is, depending on the quantity involved, an offence under Sections 307.1, 307.2 or 307.3. Importing precursors is criminalised in Sections 307.11 – 307.13.

Until 2005, trafficking offences stemming from the 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* were included in the *Crimes (Traffic in Narcotic Drugs and Psychotropic Substances) Act 1990* (Cth) (see further Schloenhardt 2006: 287–288). The 2005 reform of federal drug offences substituted these offences with new provisions under Division 302 *Criminal Code* entitled 'trafficking controlled drugs'. A new comprehensive definition of the term 'trafficking' is set out in Section 302.1 (see

further Norberry 2005: 21–22; Brown et al. 2006: 959). The explanatory memorandum to the legislation states:

> [t]he trafficking offences target dealings in controlled drugs. The range of conduct covered by the exhaustive definition of trafficking is broad: the trafficking offences are proposed to extend beyond sale to the ancillary activities of transport and delivery, as well as preparatory conduct such as preparation for supply, packaging and possession with intention to sell a drug (Norberry 2005: 20).

The new offences include:

- trafficking commercial quantities of controlled drugs (Section 302.2)
- trafficking marketable quantities of controlled drugs (Section 302.3)
- trafficking controlled drugs (Section 302.4).

ATS CONSUMPTION

Federal drug laws in Australia do not have separate offences for the consumption or use of ATS or other illicit drugs. Instead, the *Criminal Code* contains a comprehensive regime of possession offences in Division 307 and 308 (see further Brown et al. 2006: 963–966). The offences penalise the possession of natural and manufactured drugs, as well as possession of plants, equipment and precursors. For offences in Division 308 it is irrelevant whether the drug or plant has been imported into Australia or whether it was manufactured locally. Under Division 308 it is an offence to:

- possess a controlled drugs (Section 308.1)
- possess a controlled precursor (Section 308.2)
- possess plants, material, equipment, or instructions for commercial cultivation of controlled plants (Section 308.3)
- possess substances, equipment, or instruction for commercial manufacture of controlled drugs (Section 308.4).

The offences in Sections 307.5 – 307.10 of the *Criminal Code* relate specifically to the possession of drugs or plants that have been unlawfully imported into Australia or that are reasonably suspected of having been unlawfully imported. The offences and penalties vary depending on the quantity involved. They include:

- possessing commercial quantities of unlawfully imported border-controlled drugs or border-controlled plants (Section 307.5)

- possessing marketable quantities of unlawfully imported border-controlled drugs or border-controlled plants (Section 307.6)
- possessing unlawfully imported border-controlled drugs or border-controlled plants (Section 307.7)
- possessing commercial quantities of border-controlled drugs or border-controlled plants reasonably suspected of having been unlawfully imported (Section 307.8)
- possessing marketable quantities of border-controlled drugs or border-controlled plants reasonably suspected of having been unlawfully imported (Section 307.9)
- possessing border-controlled drugs or border-controlled plants reasonably suspected of having been unlawfully imported (Section 307.10).

PRECURSORS

Division 306 *Criminal Code* (Cth) contains three 'new federal offences targeting illicit dealings in precursor chemicals for the purpose of manufacturing controlled drugs' (Australia 2005: 37). The offences include pre-trafficking commercial quantities of controlled precursors (Section 306.2); pre-trafficking marketable quantities of controlled precursors (Section 306.3); and pre-trafficking controlled precursors (Section 306.4).

The new offences introduce the

> central concept of pre-trafficking which covers a range of conduct involving precursors. The term pre-trafficking reflects the fact that the precursor offences target conduct that is preparatory to the actual trafficking of a controlled drug (Norberry 2005: 37).

Under Section 306.1(b) and (c) pre-trafficking includes the manufacture of precursors with intention to use them to manufacture drugs, to sell them to a manufacturer, or to sell them believing another person will use them to manufacture drugs. Importing precursors is a separate offence under Sections 307.11 – 307.13.

State and territory drug laws

The Australian states and territories, pursuant to their constitutional power over criminal law, have enacted a variety of offences relating to cultivating or manufacturing, selling, supplying, and possessing illicit drugs. The offences, their scope and penalties vary remarkably between the eight different jurisdictions. The following section highlights the most relevant provisions relating to the illicit production, trafficking, and possession of ATS and their precursors.

The substances covered by the drug offences in the various states and territories are, for the most part, identical throughout Australia. Narcotic drugs and psychotropic substances are listed in different schedules of the relevant drug laws and are differentiated depending on their natural or chemical ingredients and/or their seriousness. The terminology used to describe banned substances varies between jurisdictions (for example, prohibited drug (NSW, WA); controlled drug (NT, Tas); dangerous drugs (Qld); or drug of dependence (SA, Vic)). All Australian jurisdictions have included ATS in their lists of illicit drugs: Schedule 1 *Criminal Code* (ACT); sch 1 *Drugs Misuse and Trafficking Act 1985* (NSW); sch 2 *Misuse of Drugs Act 1990* (NT); sch 1, 2 Drugs Misuse Regulations 1987 (Qld); sch 1 Controlled Substances (Prohibited Substances) Regulations 2000 (SA); sch 1, pt 2 *Misuse of Drugs Act 2001* (Tas) [Note: MDEA is not included in the Tasmanian legislation]; sch 11, pt 3 Drugs, *Poisons and Controlled Substances Act 1981* (Vic); s 6(2) *Misuse of Drugs Act 1981* (WA).

ATS PRODUCTION

The production and manufacturing of ATS and other illicit drugs is penalised in all Australian jurisdictions: ss 607, 609 *Criminal Code* (ACT); s 24 *Drugs Misuse and Trafficking Act 1985* (NSW); s 8(1) *Misuse of Drugs Act 1990* (NT); s 8 *Drugs Misuse Act 1986* (Qld); s 32(1) *Controlled Substances Act 1984* (SA); ss 6, 21 *Misuse of Drugs Act 2001* (Tas); s 6(1)(b) *Misuse of Drugs Act 1981* (WA). In Victoria manufacturing is included in the definition of trafficking, ss 71(1), 71AA–71AC *Drugs, Poisons and Controlled Substances Act 1981*.

In addition to the production offences, all Australian jurisdictions criminalise the possession of equipment used in the manufacturing of ATS and other drugs: ss 613, 614 *Criminal Code* (ACT); ss 8B(1), 8C(1) *Misuse of Drugs Act 2001* (NT); s 9A *Drugs Misuse Act 1986* (Qld); s 31(1)(c) *Controlled Substances Act 1984* (SA); *Misuse of Drugs Act 2001* (Tas); s 71A *Drugs, Poisons and Controlled Substances Act 1981* (Vic); s 6(2) *Misuse of Drugs Act 1981* (WA). Some jurisdictions include extensive lists of controlled equipment in their drug laws. For example, Schedule 8B Drugs Misuse Regulations 1987 (Qld), introduced in 2006, includes equipment such as condensers, distillation heads, heating mantles, pill presses, rotary evaporators, reaction vessels, and splash heads.

ATS TRAFFICKING

Supplying ATS and other illicit drugs is an offence in all jurisdictions: ss 603, 628–630 *Criminal Code* (ACT); s 25 *Drug Misuse and Trafficking Act 1985* (NSW); s 5(1) *Misuse of Drugs Act 1990* (NT); s 6 *Drugs Misuse Act 1986* (Qld); s 32(1)(c)–(e) *Controlled Substances Act 1984* (SA); ss 12, 14, 26, 27A *Misuse of Drugs Act 2001* (Tas); ss 71–71B *Drugs, Poisons and Controlled Substances Act 1981* (Vic); ss 6, 7 *Misuse of Drugs Act 1981* (WA). These offences are generally kept quite broad in their application, to penalise any type of distribution, sale, and transportation of illicit drugs, including ATS. The offences also extend to preparatory acts such as possession for the purpose of selling or otherwise supplying

illicit drugs (cf s 3 *Drug Misuse and Trafficking Act 1985* (NSW); s 4 *Drug Misuse Act 1986* (Qld)). Purchase for mere personal use, however, is usually not enough to establish supply or trafficking (*R v Quaille* [1988] 2 Qd R 103 at 113, 116).

Some jurisdictions, such as Queensland and New South Wales, have additional offences for trafficking. These refer to commercial supply of illicit drugs, not to cross-border operations: s 29 *Drug Misuse and Trafficking Act 1985* (NSW); s 5 *Drugs Misuse Act 1986* (Qld) (*R v Quaille* [1988] 2 Qd R 103 at 113; Colvin et al. 2005: para 8.15; Schloenhardt 2006: 282–284). New South Wales has a further offence for supplying a prohibited drug on an ongoing basis, s 25A *Drug Misuse and Trafficking Act 1985* (NSW; see further Brown et al. 2006: 953; Boyden 2001: 34–35).

POSSESSION OF ATS

Unlawful possession of ATS is criminalised in all Australian jurisdictions: s 169 *Drugs of Dependency Act 1989* (ACT); s 9(1) *Misuse of Drugs Act 1990* (NT); ss 10, 26 *Drug Misuse and Trafficking Act 1985* (NSW); s 9 *Drugs Misuse Act 1986* (Qld); s 31(1)(a) *Controlled Substances Act 1984* (SA); s 24(a) *Misuse of Drugs Act 2001* (Tas) s 73 *Drugs, Poisons and Controlled Substances Act 1981* (Vic); s 6(2) *Misuse of Drugs Act 1981* (WA). Liability for possession arises for any person who has illicit drugs, including ATS, under his or her control; the offence is not limited to consumers. Some jurisdictions have a separate offence for the self-administration of illicit drugs and for administration of drugs to or by another person (for example, ss 12–14 *Drugs Misuse and Trafficking Act 1985* (NSW)).

PRECURSORS

Precursor chemicals necessary for the production of ATS and other illicit drugs are covered by the drug laws in all Australian jurisdictions. Controlled precursors are set out in the relevant acts or subordinate legislation: sch 3 Criminal Code Regulations 2005 (ACT); Drugs Misuse and Trafficking Regulations 2000 (NSW; see further Brown et al. 2006: 945); sch 2 *Misuse of Drugs Act 1990* (NT); sch 6 Drugs Misuse Regulations 1987 (Qld); s 33, sch B Controlled Substances (Poisons) Regulations 1996 (SA); sch 1, pt 4 *Misuse of Drugs Act 2001* (Tas); sch 11 *Drugs, Poisons and Controlled Substances Act 1981* (Vic); sch 3, 4 Misuse of Drugs Regulations 1982 (WA). Minor variations aside, the lists of controlled precursor substances in each state and territory are largely identical and include all the principal chemical ingredients used in ATS production. Victoria and Western Australia have particularly comprehensive lists of controlled precursors, while the lists in Tasmania and the ACT are comparatively short (Caldicott et al. 2005: 157).

All states and territories criminalise the possession and/or storage of ATS precursors: ss 610–612 *Criminal Code* (ACT); s 24A *Drug Misuse and Trafficking Act 1985* (NSW); ss 8A(1), 8D(1) *Misuse of Drugs Act 1990* (NT); ss 9A, 10B *Drugs Misuse Act 1986* (Qld); s 31(1)(a)

Controlled Substances Act 1984 (SA); ss 32–34 Controlled Substances Regulations 1996 (SA); ss 10,11, 20 *Misuse of Drugs Act 2001* (Tas); s 71A *Drugs, Poisons and Controlled Substances Act 1981* (Vic); s 14 *Misuse of Drugs Act 1981* (WA). Queensland has an additional, aggravated offence for possession of certain combinations of precursor substances, s 10B *Drugs Misuse Act 1986* (Qld), schedule 8C Drugs Misuse Regulations 1987 (Qld). Western Australia has special offences in ss 15, 17 *Misuse of Drugs Act 1981* for the sale and supply of precursors.

In an attempt to further limit the availability of ATS precursors and curb the sale of otherwise legitimate substances through pharmacies and other outlets (sometimes referred to as pseudo-runs, see chapter 2), some states have introduced regulations to monitor and restrict the control of medicines containing pseudoephedrine: s 23 Poisons and Therapeutic Goods Regulation 2002 (NSW); ss 277, 285A Health (Drugs and Poisons) Regulation 1996 (Qld); s 33(1), (3) Controlled Substances (Poisons) Regulations 1996 (SA). The introduction of these measures is the result of Project STOP, an initiative of the Pharmacy Guild of Australia and the Australian Government, which created an electronic database to monitor, *inter alia*, purchases of cold and cough medicines containing pseudoephedrine and to prevent people from obtaining excessive amounts (Cherney, O'Reilly & Grabosky 2005: 17). It is anticipated that jurisdictions that have not already done so, will soon introduce similar regulations.

Observations

In summary, Australian drug laws at federal and state/territory level comprehensively criminalise a broad range of activities associated with the production, trafficking, and consumption of ATS. Further offences exist for the possession of equipment commonly used in the manufacturing of illicit drugs.

In recent years, additional legislation has been introduced to target more specifically the illicit trade in precursors, including the purchase of legitimate substances through pharmacies and other outlets. Some jurisdictions, such as Queensland, introduced these measures as recently as 2006 (for example, *Drug Legislation Amendment Act 2006* (Qld), *Drugs Misuse Amendment Regulation (No 1)* 2006 (Qld), No 71 of 2006), so the effect of the new provisions remains to be seen. Other states, such as New South Wales, have criminalised the precursors trade for several years (*Crimes Legislation Further Amendment Act 2000*), but the figures shown earlier demonstrate that penalisation of the precursor trade has done little to stem the production and flow of ATS or to raise the retail price for these substances.

The main emphasis of Australian drug offences, especially at the federal level, is on commercial producers and suppliers of illicit drugs, including ATS. The harshest penalties are reserved for individuals and organisations who manufacture, traffic, import, or supply

illicit drugs in great quantities or who do so on a continuing basis. In contrast, the consumption and the possession of illicit drugs for personal use do not attract very high penalties. Australian drug laws are particularly concerned with manufacturing and trafficking stages of the illicit drug trade. The demand for and consumption of illicit drugs are not criminalised equally.

A particular feature of illicit drug control and enforcement in Australia is the division of drug laws into eight separate criminal jurisdictions in addition to federal laws. While the differences between the jurisdictions in suppressing the illicit ATS trade may only be subtle, they add to the impression that some jurisdictions are 'soft' or 'tough' on drugs. The division may also be seen as unnecessarily confusing and bureaucratic for a country of only 21 million people. For some time, there has been academic debate about the development of a single national criminal law to remove the existing differences. A single, uniform drug law would indeed be a powerful mechanism in the war on drugs, but this proposal is at present unrealistic and opposed by too many states and territories. Instead, it is hoped that the recent introduction of new federal drug offences, which place much greater emphasis on controlling the precursor trade and criminalise individuals and criminal organisations who engage in the drug trade for commercial purposes more heavily, will eventually lead to a harmonisation of drug offences around Australia and set a new, higher standard for the prevention and suppression of the illicit ATS trade and of the organised crime elements involved in it. The governments of the Australian territories and states have expressed their commitment to follow the model of new Commonwealth *Criminal Code* offences, although reform at the state and territory level has been slow in forthcoming in the first year since their introduction (Norberry 2005: 2; Brown et al. 2006: 966).

New Zealand

New Zealand has signed the 1971 and 1988 conventions. In New Zealand, drug offences are consolidated in the *Misuse of Drugs Act 1975*. Drugs are classified 'based on the risk of harm the drug poses to individuals, or to society, by its misuse' (s 3a, as introduced by *Misuse of Drugs Amendment Act 2000*). ATS such as methylamphetamine and MDA are seen as posing a very high risk of harm and are listed as Class A Controlled Drugs in Schedule 1 of the Act (s 3A(a)). Amphetamine and MDMA are seen as posing a high risk of harm (s 3A(b)) and are classified as Class B Controlled Drugs under Schedule 2. Amphetamine analogues such as MDEA are classified as Class D drugs (Wilkins 2002). Precursors were placed under control in 1998 with the *Misuse of Drugs Amendment Act 1998*. Today, all major ATS precursors are included in Schedule 4 of the *Misuse of Drugs Act 1975*.

Relevant drug offences are included in *Misuse of Drugs Act 1975*, s 6 under the heading 'dealing with controlled drugs'. The section criminalises production and manufacture of any

controlled drug (s 6(1)(b)), the import and export of controlled drugs (s 6(1)(a)), and the supply and administration, including offer to supply or administer, any Class A or Class B controlled drug (s 6(1)(c)). Under subsection (6) the Act establishes a 'presumption of supply' in cases in which an accused is found in possession of 56 g or more amphetamine, or 5 g or 100 doses of MDMA, MDEA, and MDA. This presumption reverses the burden of proof to the accused, who has to demonstrate that they were not intending to sell substances found in their possession (Wilkins 2002).

An additional offence for drug possession and consumption is contained in s 7(1)(a) of the Act. Supply, production and manufacturing of equipment, material, and precursors capable of being used in the production of illicit drugs are offences under s 12A. Separate offences exist for importing and exporting precursors under ss 12AB, 12AC.

Pacific Islands

The ATS control system and the criminalisation of activities associated with illicit ATS production, trafficking, and consumption are less developed in the Pacific Island nations than in Australia and New Zealand. Many countries in the region lack comprehensive and up-to-date drug laws and do not have adequate laws addressing the involvement of criminal organisations in the illicit ATS trade. Among the principal reasons for this situation are the lack of accession and adherence to international drug treaties and the fact that many domestic drugs laws are out of date, as they have not been adequately updated to criminalise contemporary patterns of the illicit ATS trade in the region.

Pacific Islands and international law

Many countries in the region have not signed the 1971 or 1988 conventions (see Figures Tables 30 and 31 above) and, as a result, have not implemented relevant criminal offences and enforcement measures at domestic levels. Only three Pacific Island nations, Fiji, Federated State of Micronesia, and Tonga have acceded to or signed both conventions. The two conventions also apply in the French territories New Caledonia, French Polynesia, and Wallis and Futuna, and in the US territories of Guam, Northern Marianas, and American Samoa. New Zealand's signature to the conventions extends to Cook Islands and Niue, both self governing territories in free association with New Zealand, which retains foreign affairs powers, and Tokelau, a self administering territory of New Zealand. Kiribati, Nauru, Solomon Islands, and Tuvalu have not signed either convention. The Marshall Islands, Palau, and Papua New Guinea signed the 1971 convention, but had not signed the 1988 convention by September 2006 (INCB 2006: paras 624–626).

Domestic laws in Pacific Island nations

The lack of comprehensive drug laws in many countries along with weaknesses in the regulation of the financial markets make the Pacific Islands particularly vulnerable to ATS trafficking and to the laundering of proceeds of ATS and other drug-related crime. This problem is well illustrated in the prosecution and trial that followed the seizure of the clandestine mega-lab in Suva, Fiji in 2004. Despite the magnitude of this operation and the available evidence against the defendants, the maximum penalty available for these criminal activities at that time was only eight years imprisonment, as Fijian drug laws did not contain specific provisions to criminalise large scale ATS production and the possession of precursors (*State v Yuen Yei Ha* [2005] FJHC 165; cf former reg 3 Dangerous Drugs Regulations, *Dangerous Drugs Act 1985*, s 41(1)). Fijian drug laws have since been repealed with the introduction of a new *Illicit Drugs Control Act* in 2004.

A primary problem is the fact that some countries currently do not include ATS and ecstasy in their lists of controlled and prohibited drugs, either adequately or at all. ATS are, for example, not covered by the drug laws of Solomon Islands (*Dangerous Drugs Act 1997*: under this Act the Minister may provide for the inclusion of ATS as a dangerous drug, but as yet ATS have not been included), Vanuatu (*Dangerous Drugs Act 1988*), and Kiribati (*Dangerous Drugs Ordinance1980*). Amphetamine is not explicitly included in the list of narcotic substances in s 902(e)(iii) *Narcotic Drugs* under the Marshall Islands Code (*Code of the Republic of the Marshall Islands 2004*, Title 7: Narcotic Drugs), and ecstasy and ecstasy-like substances are not currently covered by Samoa's *Narcotics Act 1967*. Elsewhere, ATS and ecstasy are included in the relevant lists of controlled drugs (*State Code 1999* (Micronesia), Title 11: Controlled Substances s 1121(3); *Illicit Drugs Control Act 2004* (Fiji) sch 1, pts 2, 5; *Misuse of Drugs Act 1998* (Niue) sch 1, 2; *Dangerous Drugs Act 1952* (PNG); *Crimes, Procedure and Evidence Rules 2003* (Tokelau) s 49(1)(ii); *Illicit Drugs Control Act 2003* (Tonga) sch 1. Current legislation from Cook Islands, Northern Marianas, Nauru, and Palau were unavailable at the time of writing.

Precursor control and regulation in the Pacific Islands is, for the most part, nonexistent. Currently, only four jurisdictions, Federated States of Micronesia, Fiji (*Illicit Drugs Control Act 2004* sch 2 and s 6(a), (b)), Niue (*Misuse of Drugs Act 1998* (Niue) sch 5. Sections 12(2)(a), (2)(b), 12AB, and 12 AC of the Act provide offences for the possession etc of precursors), and Tonga (*Illicit Drugs Control Act 2003* sch 2 and s 5(a), (b)), have included precursors in their drug laws. The FSM list of precursors is limited to substances relating to narcotic drugs and does not include any of the major ATS precursors (*State Code*, Title 11: Crimes, ch 11: Controlled Substances s 1112). All four countries are state parties to the 1988 convention and thus obliged to control precursors accordingly. Samoa and Tokelau, although parties to the convention, have not yet extended their legislation to include precursor control. Countries in Oceania that have not signed the 1988 convention do not currently control and criminalise the illicit trade in ATS and other precursors.

All Pacific Island jurisdictions criminalise the production of illicit drugs: *Commonwealth of the Northern Mariana Islands Code* (6) s 2141(a)(1) [production is included in the definition of trafficking]; *State Code 1999* (Micronesia) Title 11: Crimes, Chapter 11: Controlled Substances s 1141(1)(a), [production is included in the definition of trafficking]; *Illicit Drugs Control Act 2004* (Fiji) s 5(a); *Dangerous Drugs Ordinance 1980* (Kiribati) s 17 and *Dangerous Drugs Regulations* (Kiribati) s 3; *Code of the Republic of the Marshall Islands 2004*, Title 7: Public Health, Safety and Welfare; Chapter 9: Narcotic Drugs s 903(a), (d); *Misuse of Drugs Act 1998* (Niue) s 6(1)(b); *Dangerous Drugs Act 1952* (PNG) s 3(1)(b); *Narcotics Act 1967* (Samoa) s 18(2)(a) [production is included in the definition of dealing under s 2]; *Laws of the Solomon Islands 1997, Chapter 98: Dangerous Drugs* s 15(1); *Illicit Drugs Control Act 2003* (Tonga) s 4(a). Current provisions from Cook Islands, Nauru, Tokelau, Tuvalu, and Vanuatu were unavailable at the time of writing. The offence extends to the manufacturing of ATS and ecstasy, except in Kiribati, Solomon Islands, and Vanuatu where ATS are not included in the list of controlled substances. Fiji, Niue, and Tonga, all signatories to the 1988 convention, also have special offences for the possession of equipment relating to illicit drug production (*Illicit Drugs Control Act 2004* (Fiji) s 6(a), (b); *Misuse of Drugs Act 1998* (Niue) ss 12A(1)(a), (2)(b); *Illicit Drugs Control Act 2003* (Tonga) sch 3 and s 5(a), (b)). Supply of and trafficking in illicit drugs are offences throughout the region (*Commonwealth of the Northern Mariana Islands Code* (6) s 2141(a)(1); *State Code 1999* (FSM), Title 11: Crimes, ch 11: Controlled Substances s 1141(1)(a); *Illicit Drugs Control Act 2004* (Fiji) ss 4(a), 5(a), (b); *Dangerous Drugs Ordinance 1980* (Kiribati) s 17 and Dangerous Drugs Regulations (Kiribati) s 5(1); *Code of the Republic of the Marshall Islands 2004*, Title 7: Public Health, Safety and Welfare s 903(b); *Misuse of Drugs Act 1998* (Niue) ch 9: Narcotic Drugs; *Narcotics Act 1967* (Samoa) ss 6(1)(a), (c), (d), 7(1)(b); *Laws of the Solomon Islands 1997, ch 98: Dangerous Drugs* s 18(2)(b); s 15(1); Crimes, Procedure and Evidence Rules 2003 (Tokelau) s 49(2)(i); *Illicit Drugs Control Act 2003* (Tonga) ss 3, 4(a), (b); *Laws of the Republic of Vanuatu 1988, ch 12: Dangerous Drugs* s 2). Papua New Guinea criminalises the importation of drugs (s 3(1)(c) *Dangerous Drugs Act 1952*) but the Act has no separate offence for supply or trafficking. Current provisions from Cook Islands, Nauru, and Tuvalu were unavailable at the time of writing.

The possession of illicit drugs is penalised in every jurisdiction (*Commonwealth of the Northern Mariana Islands Code* s 2141(a)(1); *State Code 1999* (Micronesia), Title 11: Crimes, ch 11: Controlled Substances s 1141(1); *Illicit Drugs Control Act 2004* (Fiji) s 5(a); *Dangerous Drugs Ordinance* (Kiribati) s 17 and Dangerous Drugs Regulations (Kiribati) s 6(1); *Code of the Republic of the Marshall Islands 2004*, Title 7: Public Health, Safety and Welfare s 903(a); *Misuse of Drugs Act 1998* (Niue) ch 9: Narcotic Drugs; ss 6(1)(f), 7(1)(a); *Dangerous Drugs Act 1952* (PNG) ss 3(1)(d), 4(3)(d); *Narcotics Act 1967* (Samoa) ss 7, 18(2)(a); *Laws of the Solomon Islands 1997, Chapter 98: Dangerous Drugs* s 15(1); Crimes, Procedure and Evidence Rules 2003 (Tokelau) s 49(2)(ii); *Illicit Drugs Control Act*

2003 (Tonga) s 4(a); *Laws of the Republic of Vanuatu 1988*, ch 12: Dangerous Drugs s 2). Current provisions from Cook Islands, Nauru, and Tuvalu were unavailable at the time of writing).

In summary, there are great discrepancies between the countries of the Pacific Islands in the regulation and criminalisation of the illicit ATS and precursor trade. Fiji and Tonga, as well as the French, US, and New Zealand territories in the region have the most up-to-date laws, and comprehensively control and penalise all aspects of the illicit ATS market. In contrast, the laws of the Solomon Islands and Vanuatu are particularly outdated. In Papua New Guinea the current drug laws were enacted in 1952, 33 years before PNG's independence, and the laws do not adequately address many aspects of the contemporary illicit drug trade. In 1997, the PNG Government proposed the introduction of a new *Controlled Substances Bill* to increase penalties and criminalise drug trafficking more appropriately (PNG Parliamentarian … 1997; cf UNODC Regional Centre for East Asia and the Pacific 2003). Significant loopholes also remain in the drug laws of Kiribati. In addition to gaps in the criminalisation of ATS and ATS-related offences, many jurisdictions do not have adequate laws to authorise law enforcement officials to carry out sophisticated, high level investigations into drug trafficking cases (UNODC Regional Centre for East Asia 2003: 7).

In general, the principal reason for inadequate and out-of-date legislation in some countries appears to be the lack of accession and adherence to international drug conventions. Those countries that are state parties to the 1971 and 1988 conventions have more appropriate laws to prevent and suppress the illicit trade in ATS and their precursors. Those that have not signed the relevant treaties lag in their criminalisation and enforcement efforts and may be seen as easy staging posts for the operations of transnational drug trafficking rings.

But while the countries with the weaker drug control laws may be seen as more vulnerable to organised crime, there is, to date, little evidence to support the view that these countries are actually and deliberately targeted by criminal organisations in the Pacific Islands. The case of the Fijian ATS laboratory, however, has shown that if and when large scale cases of ATS production or supply are detected, countries with outdated laws lack the ability to adequately investigate, prosecute, and sentence offenders. In the absence of international treaties, some countries also lack the ability to appropriately engage in bilateral and multilateral law enforcement and judicial cooperation, thus further hampering the effectiveness of the criminal justice system.

Observations

The illicit trade in ATS in Oceania is not regulated evenly throughout the region. Many countries have not signed relevant international treaties and, accordingly, their domestic laws do not prevent and suppress the illicit production, trafficking, and use of ATS adequately, if at all. Major discrepancies exist in the ways different countries criminalise the illicit ATS trade and enforce their laws. On the one hand, Australia, Fiji, New Zealand, Niue, and the US and French territories in Oceania have very comprehensive and up-to-date legislation, criminalising every aspect of ATS production, trafficking, consumption, precursor trading, and the laundering of proceeds of ATS and other drug-related crime. On the other hand, the laws in Papua New Guinea, Solomon Islands, and Vanuatu are particularly out-of date and ill-suited to deal with large scale operations of transnational criminal enterprises. The Pacific Islands Forum recently addressed this issue by developing a range of model laws on transnational organised crime for adoption by Forum member countries. Among these model laws is an *Illicit Drugs Control Bill 2002* which, it is understood, formed the basis for the reform of drug laws in Fiji in 2004 (PIF 2002; cf Spillane 2006). These model laws, however, are best practice guidelines and the Forum has no power to force countries to adopt them.

At the international level, the 1971 *Convention on Psychotropic Substances* and the 1988 *Convention against Illicit Traffic in Narcotic Drugs on Psychotropic Substances* provide a comprehensive set of rules to control the licit trade in ATS and suppress the illicit ATS industry. The regime established by the international conventions is not without flaws, but it is currently the best available and most universal weapon in the war on illicit drugs, including ATS. Thus, it is desirable that more countries in Oceania sign up to this body of law and bring their domestic laws into line with international obligations.

While greater acceptance of the international drug control regime in the region is desirable and necessary to fight the activities of transnational organised crime more effectively, it will not make the ATS problem completely go away. It should be noted that the countries with the most comprehensive drug laws in the region, notably Australia and New Zealand, also have the greatest incidence of ATS production, trafficking, and abuse. Greater suppression of the ATS trade and tighter law enforcement in the region may displace some of the industry and temporarily change some of the patterns of the illicit trade, but will not alter one of the key contributors to the problem: the seemingly insatiable demand for ATS in the industrialised parts of the region.

Chapter 6:
Conclusions

This study demonstrates that the economic incentives for involvement in the illicit market for ATS in Oceania are considerable at the production, trafficking, and retail levels. The manufacture, trafficking, and sale of ATS are financially extremely lucrative and tend to be more profitable than the markets for narcotic substances such as heroin or cocaine. Given the high profitability of the ATS trade in Australia, New Zealand, and the Pacific Islands, further expansion of the market can be expected. It is anticipated that more criminal entrepreneurs, whether small and isolated, or large and ongoing, will try to exploit this lucrative market, resulting in greater production and availability of ATS in the region. Some parts of the illicit ATS production and trade are already dominated by large criminal organisations. Organised crime is also moving into other aspects of the illicit ATS trade, such as precursor production, diversion, and trafficking, and is increasingly spreading the ATS industry into the smaller and more remote markets of the Pacific Islands.

ATS production, trafficking, and consumption

At the production level, the illicit manufacturing of ATS is particularly lucrative given the ease with which most ATS can be produced, the availability of many precursor substances, the flexibility with which ingredients and manufacturing processes can be changed, and the low level of skill and expertise required to produce the basic varieties of ATS. This study has shown that ATS production ranges from low scale, local laboratories, to large scale operations with international links. Organised crime features more prominently in the more sophisticated types of ATS production and there is growing evidence that the production of ATS such as ecstasy and crystal methylamphetamine, which are more difficult to manufacture, is slowly but steadily being shifted towards and into the region.

Contributing to the high levels of ATS production in the region are the availability and diversion of ATS precursors. While some countries have recently introduced measures to suppress the illegal precursor trade, it remains largely uncontrolled in many others. Further, some jurisdictions only control and prohibit some, but not all principal ATS precursors. Although ATS and precursor control have become tighter in many parts of the region, this has not been followed by any significant reduction in ATS availability and supply. Even in places where precursors are comprehensively regulated, ever changing patterns of ATS production with different ingredients pose a challenge to legislators and law enforcement agencies who are generally slow in catching up with new methods of ATS production and supply.

Criminal organisations have responded to more comprehensive control by making the trafficking of ATS more sophisticated so that it becomes more difficult to intercept and eliminate with traditional enforcement techniques. There is general consensus that

> [i]ncreased arrests, prosecutions, and penalties have had little deterrent value in the wake of the vast profits that derive from drug trafficking. While the prosecution of drug lords certainly captures headlines as victories in the war on drugs, these traffickers are quickly replaced by others in order to meet the seemingly insatiable demand for drugs (Bassiouni & Thony 1996: 947).

In reviewing the available evidence on the nature and the scale of the illicit ATS trade in Oceania, it becomes apparent that the existence and magnitude of the problem is, for the most part, caused by the extremely high demand for ATS, especially in Australia and New Zealand. The demand for ATS is further fuelled by their retail prices, which are relatively low in Australia and New Zealand compared with most other illicit drugs of similar pharmacology. This creates economic incentives for consumers to choose ATS over other illicit drugs. If, as anticipated, the supply of ATS continues to grow in the region, retail prices can be expected to decline further, thus attracting new users and causing existing users of other drugs to switch to cheaper ATS. Research has shown that the illicit ATS market has developed alongside existing illicit drug markets and has not completely substituted the demand for other narcotic and synthetic drugs. It has also been observed that poly-drug use is particularly common among ATS consumers, especially those using crystal methylamphetamine. Consequently any strategy to reduce the illicit ATS trade must go hand in hand with measures suppressing the illicit market for other drugs (Wilkins et al. 2005).

Essential to any strategy against ATS trafficking and organised crime is the emphasis on attacking the economic aspects and market factors of the ATS trade at production, supply, and, in particular, at the demand level (cf Gurulé 1998: 120). The 'immense production of drugs is a direct result of the tremendous demand. Until demand is eliminated, ingenious traffickers will continue to find innovative methods to infiltrate borders' (Bassiouni & Thony 1996: 947). Demand reduction for ATS, however, does not feature prominently in existing international drug conventions, which are more concerned with regulating the licit trade in psychotropic substances and suppressing the illicit industry. Equally, the focus of domestic laws, especially in the main consumer countries, is on ATS production and supply, and not on consumption and abuse. Consequently, many scholars have called for the 'development of guiding principles on demand reduction' and for 'commitment by all states to implement an approach which is balanced more adequately between suppression of illicit suppliers and reduction of demand for ATS' (Bassiouni & Thony 1996: 947).

Precursors

Recent initiatives to reduce the illicit production and supply of ATS focus specifically on the control of precursor chemicals and on the diversion of substances from the licit market for use in illicit ATS manufacturing. The control of precursor chemicals and equipment used in ATS production has arguably been ignored for a long time. This is in part because of the difficulties of separating the legal industry from the illicit trade. Since the introduction of the 1988 *Convention against Illicit Trafficking in Narcotic Drugs and Psychotropic Substances*, a greater number of countries have regulated ATS precursors and have criminalised illicit precursor supply and sale, but many countries in the region have not yet addressed this issue comprehensively.

The increasing control and criminalisation of ATS precursors was followed consistently by alterations in illicit ATS production. Chemicals that were placed under control were simply substituted by new ingredients. Precursor control has not led to a significant decline in illicit ATS production, even in those countries where precursors are regulated comprehensively. Moreover, a new trade in pre-precursor chemicals has emerged and some manufacturers have been found attempting to produce their own precursors (Cherney, O'Reilly & Grabosky 2005: 17–18; Wardlaw 1993: 97). In this context, Wardlaw remarked as early as 1993 that:

> As with other supply reduction strategies, authorities should be careful not to expect precursor control schemes to do more than limit the uncontrolled expansion of chemical drug manufacture. It is important, too, to monitor the impact of such schemes to ensure that their negative consequences do not outweigh their positive attributes. For example, production of more dangerous drugs using alternative chemicals, the manufacturing of amphetamines containing dangerous impurities as a result of new chemical processes or combinations, and an increase in theft of precursors (some of which would almost certainly involve violence and corruption) could well produce an overall situation which is as bad or worse than that which now faces us (Wardlaw 1993: 98).

Legislation and enforcement

Despite the fact that over 150 countries participate in the 1971 and 1988 conventions, international drug control efforts appear to be lagging behind the phenomena of increased ATS production, trafficking, and consumption. The international instruments and their enforcement have had little effect in stemming the flow of ATS in the face of increased demand and supply (Bassiouni & Thony 1996: 905). '[T]he strategy to extinguish the illicit drug problem, at least thus far, failed' (Boister 2001: 69).

According to Gardner:

> [t]he prosperity of an international drug control policy will primarily depend on three factors: whether party states to an international convention have incentives to follow the treaty's provision; whether adequate enforcement mechanisms exist to ensure that parties are meeting their treaty obligations; and whether the terms of the treaty do not impose an unfair burden on party states (Gardner 1993: 308).

One of the difficulties in regulating the illicit ATS trade is that domestic laws and international conventions dealing with ATS are trying to achieve two competing goals. One is to regulate and enable the licit supply of ATS by the pharmaceutical industry. The second goal is to suppress the illicit supply by criminal organisations. Boister remarked that:

> These goals may be irreconcilable and it may be that the system has served more to keep drug companies in business than to put illicit traffickers out of business. Enactment of severe laws and tighter law enforcement has always tended to be followed by a surge in the illicit traffic and a rise in illicit drug prices (Boister 2001: 69).

Although domestic and international drug regulations may not always achieve their stated objectives, there is ample evidence and general consensus that without strict control of narcotic drugs and psychotropic substances under international and domestic laws, drug production, trafficking, and consumption would rise and pose a far greater menace than it does already (Boister 2001: 69). Consequently, the international drug regime is the best available and most universal tool to fight the illicit ATS trade and the criminal organisations engaged in that trade.

Many countries in Oceania have not yet signed the relevant international drug conventions because the obligations under international law pose significant challenges to small island nations. Many, if not most countries will need to amend their laws, including drug laws, penal codes, and procedural legislation. The criminal justice and law enforcement systems of some countries also require adjustment to put in place the provisions under the international instruments.

In addition to the legislative requirements to meet obligations under the conventions, many of the international measures require substantial financial, material, and human resources. This creates particular difficulties for smaller and economically less developed nations. Many countries in Oceania simply do not have the resources to commit themselves to the international drug control regime. The costs associated with the control, monitoring, and enforcement of international drug laws add 'less and less to the benefits achieved and more and more to the cost to society. Ultimately, the costs outweigh the benefits' (Gardner 1993: 308).

International conventions and drug policies are frequently seen as unduly harsh on agricultural, producer, developing countries and unduly favourable to developed, consumer countries. The earlier analysis showed that international drug control focuses more heavily on production and trafficking and much less on the problem of consumption. However, the problem of ATS use is one shared by Australia, New Zealand, other parts of the Pacific region, and indeed most parts of the world. Consequently, adjustments to the international drug control regime are needed to address the issues of demand and consumption and their role in the illicit ATS trade more appropriately. Many studies confirm that policies directed at reducing the demand for illicit drugs are more cost-effective than those aimed at supply reduction. It is thus not surprising that some authors see 'the development of an international convention that focuses on the social and psychological realities that underpin drug use' as 'the next appropriate step' for international law to take (Boister 2001: 545).

To enable greater recognition of the international drug control regime, argues Lessem (1974: 147), 'the agreement must be acceptable to as many states as possible. If it is too restrictive or if it demands too much, then it will fail to attract the general support necessary for successful implementation.' The danger inherent in this argument is, however, that the common denominator acceptable to a majority of states is of such a low standard that it fails to equip the international community with adequate tools to fight the activities of sophisticated criminal enterprises. Thus, international agreements must combine the desire to find universal acceptance with a clear determination to prevent and suppress the illicit ATS trade rigorously and vehemently.

The way ahead

Although the growth of the illicit ATS market in Oceania 'seems to be only a question of time' (Pietschmann 1997: 288), the speed and level of this expansion can, to some extent, be determined by the level of law enforcement and the effectiveness of legislative and policy mechanisms at domestic, regional, and international levels. This study shows that comprehensive legislative and enforcement strategies to prevent and suppress the production, trafficking, and sale of ATS do have a direct impact on this illicit trade. These strategies may never completely eradicate the illicit trade in ATS but, in combination with policies to address the demand aspect of ATS, can significantly reduce the profitability and thus the size of the illicit ATS market.

The single most important obstacle to more effective suppression of the illicit ATS trade is the reluctance by many, if not most countries, to openly engage in mutual cooperation. Bassiouni and Thony note that a 'global problem requires global solutions in which international solidarity must supersede national interests. However, if this postulate is correct, then the expectations of success are dim because states are not likely to rise above

selfish national interests' (Bassiouni & Thony 1996: 948). Gurulé remarks that '[e]mphasis on domestic investigations and prosecutions at the expense of international cooperative efforts is a prescription for failure and will ensure the continued growth and proliferation of international drug trafficking and organised crime' (Gurulé 1998: 78).

The international drug control regime has frequently been criticised as ineffective because success is not always immediate. As a result, some countries have bypassed the international system and declared their own 'war on drugs'. Immediate success, total suppression of the ATS trade, and total eradication of crops are, however, unrealistic goals. 'Accordingly', argues Gardner 'drug policy goals must reflect realistic expectations' (Gardner 1993: 292).

In the short and medium term, it is desirable that the international conventions addressing the trafficking in narcotic drugs and psychotropic substances including ATS obtain more recognition, further support, and greater enforceability. It is crucial that more countries in Oceania ratify the existing conventions and amend their domestic laws accordingly, thus ensuring greater uniformity among law and law enforcement in the region.

In the long term, the international community should work together to address the shortcomings of the existing drug control regime and alleviate the burden of developing countries in acceding to and enforcing this body of law. Escape and safeguard clauses in the existing system need to be removed and the role of supervisory bodies, international and regional forums in this field need to be strengthened to make their work more effective and, as far as possible, enforceable. The harmonisation of criminal law and criminal justice systems should go hand in hand with closer judicial and law enforcement cooperation as well as with greater recognition of the root causes of drug abuse.

As Gardner noted (1993: 317)

> [a]s the world is realising, overnight success is neither a guarantee nor a reality. Consistency, persistence, and optimism towards the testing of new drug control approaches are the only arsenal against slick international drug networks that are often too slippery to catch.

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Oceania is believed to account for around 10 percent of the global ATS market, a disproportionately large share in relation to the population of the area. This illicit trade is of concern to contemporary criminal justice and poses a challenge to law enforcement agencies, governments and communities. This report explores patterns of ATS production, trafficking and demand in the region, analyses the involvement of organised crime, and reviews international and domestic legislative frameworks to control and penalise these activities.