



European Monitoring Centre  
for Drugs and Drug Addiction

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# TECHNICAL DATA SHEETS

MONITORING THE SUPPLY OF HEROIN TO EUROPE

## Contents

Foreword	3
Introduction	4
Afghanistan: main producer of illicit poppy	6
Heroin entering Europe: the different routes	8
The Balkan route	9
The 'northern route'	11
European routes	12
Alternative routes and new markets	13
Traffic of acetic anhydride	14
European and international initiatives	15
Conclusion	17
References	18
Acknowledgements	20

## Foreword

Throughout the 1990s, Europe experienced a heroin use epidemic that was accompanied by increasing levels of injecting drug use, together with growing concerns about drug-related HIV and HCV infection. Today, opioid users occupy a major share of the drug problem, although a more stable situation now exists with respect to trends in use of the drug. Nonetheless, opiate problems still predominate in the European drug treatment system, and the cost of treating this population will remain a major burden on health budgets for many years to come.

There are some encouraging signs about opioid use in western and central Europe, although the situation in eastern European countries is less clear, with problems still growing in some areas. Overall, in Europe, however, the population of opioid users appears to be ageing, new recruitment is down, and injecting may be becoming a less acceptable mode of administration. However, any positive statement in this area must be made with caution. The prospect of a future decline in heroin problems in Europe is now being called into question by a number of factors. Historical experience has taught us that drug problems often come in 'epidemic waves', with new generations being exposed to risk, especially when they have no direct experience of the serious health and social problems that the widespread use of a drug, such as heroin, can cause.

Furthermore, Afghanistan's political and social instability, matched with its precarious security situation, has been accompanied by an increase in the estimates of opium production. This is likely to impact on the availability of heroin in Europe. Some, but not all, of the heroin produced from the opium grown in Afghanistan will be destined for the European market. So an increase in future problems caused by heroin use cannot be ruled out. Moreover, changes in the availability of heroin could potentially have a negative impact on the current population of heroin consumers. There is also a risk that increased availability may be reflected in new recruitment to the drug, or adverse problems due to the availability of high purity heroin at street-level.

The EMCDDA is committed to monitoring drug problems in Europe, and is particularly vigilant with respect to opioid use, which is highly damaging in terms of its public health and social impact. This technical datasheet provides an overview of what is known about the way heroin is trafficked into the European Union. It explores the implications of heroin trafficking on drug consumption levels, with a view to informing policymakers about the actors involved, the routes taken, and the scale of the problem in Europe.

## Introduction

The sustainability of a general stable or improving situation seen in heroin use in Europe has been called into question by a series of record opium harvests in Afghanistan. Afghanistan has been Europe's main heroin supplier for more than 10 years. Heroin enters Europe primarily by two major land routes: the long-standing 'Balkan route' through Turkey; and, since the mid-1990s, the 'northern route', which leaves northern Afghanistan through Central Asia and on to Russia (and is sometimes colloquially referred to as the 'silk route').

Estimates suggest that prevalence of opioids<sup>(1)</sup> use is relatively stable in Europe, although some countries report pockets of new users. Conversely, other indicators suggest an increase in heroin availability in Europe. The data available show an increase in seizures of heroin since 2003, accompanied by a decrease in heroin retail prices. In addition, the downward European trend in the number of opioid-related deaths appeared to have levelled out in 2003. Since then, several countries have reported increases (EMCDDA, 2007 and 2008a).

There are a number of possible explanations for these changes. The increase in heroin seizures could be explained by enhanced law enforcement activity, or more targeted action against heroin distribution. The upward trends in opioid-related deaths in some parts of Europe may be attributed to a number of factors: for example, to increased use of synthetic opioids, such as fentanyl; to the concomitant use of opioids and other psychoactive substances (EMCDDA, 2008a); or to increasing vulnerability in an ageing population showing comorbid health problems. Alternatively, a factor could be an increase in the availability of heroin in Europe as a result of increasing opium

### Heroin in Europe at a glance

- Problem opioids use: average prevalence between 4 and 5 cases per 1,000 adult population (aged 15–64)
- Estimated number of problem opioids users: 1.5 million (1.3–1.7 million)
- Around 7,000 acute drug deaths, with opioids being found in around 70 % of them (2005)
- Principal drug in about 50 % of all drug treatment requests
- More than 570,000 opioid users received substitution treatment (2005)
- A minimum of 49,000 seizures resulting in the interception of an estimated 19.4 tonnes of heroin
- Countries reporting the largest number of seizures (descending order): UK (2005), Spain, Germany, Greece, France
- Countries reporting the largest quantities of heroin seized (descending order): Turkey, UK (2005), Italy, France, the Netherlands
- Typical price of brown heroin ranges from EUR 14.5 to EUR 110 per gram (prices declined over the last 5 years); although most countries report EUR 30–45 per gram.
- Typical purity of brown heroin ranges from 15 % to 25 %

Source: EMCDDA, 2008a and 2008b (2006 data, unless indicated otherwise)

(1) EMCDDA data uses the wider term 'opioid' to describe opiate products isolated or chemically derived from opium. In this datasheet, the term 'opioids' is used to refer to opium and to opium-derived and semisynthetic products (including for instance, heroin, morphine, morphine-base, methadone and fentanyl).

production in its principal heroin supplier — Afghanistan — and more intense trafficking activities along the main smuggling routes.

This technical datasheet provides a condensed review of the key issues relevant to understanding how heroin manufactured from Afghan opium reaches European consumers. This review is based on the latest data and analysis available from specialised European and international organisations <sup>(2)</sup>. It begins by describing the state of poppy growing and heroin processing in Afghanistan. It then traces the two main routes used to smuggle heroin — and other opium-based products such as morphine before transformation into heroin — before it reaches European consumers. There follows a brief discussion of alternative trafficking routes and the situation of trafficking within Europe. The datasheet closes with a review of the situation concerning acetic anhydride — an indispensable chemical to the manufacturing of heroin — and of selected European and international initiatives that have attempted to address the problem of the Afghan opium boom and its consequences. To set the context, background information has been provided on the chemistry and legal status of heroin, on the impact of alternative development in Afghanistan, and on the European market as perceived through the quantitative data collected by the EMCDDA.

## Heroin

Heroin is a crude preparation of diamorphine. It is a semisynthetic product obtained by acetylation of morphine, which occurs as a natural product in opium: the dried latex of certain poppy species (e.g. *Papaver somniferum* L.). Heroin is an opioid. Opioids are a group of alkaloids isolated or chemically derived from opium, often synonymous with opiates, but sometimes restricted to semisynthetic products (e.g. diamorphine) or chemically-related synthetic substances (e.g. methadone). In this datasheet, the term 'opioids' is used to refer to opium and to opium-derived and semisynthetic products (including for instance, heroin, morphine, morphine-base, methadone and fentanyl).

There are two forms of imported heroin in Europe: brown heroin (a free base), which is commonly available, and white heroin (the hydrate hydrochloride salt), which is less common. Brown heroin, which is mainly produced in south-west Asia — especially Afghanistan — may be 'smoked' by heating the solid on a metal foil above a small flame and inhaling the vapour, a method often referred to as 'chasing the dragon'. Those intending to inject brown heroin must first solubilise it with, for example, citric acid or ascorbic acid. White heroin is produced in south-east Asia (e.g. Myanmar). It is suitable for direct injection as a solution.

Until the late 1970s, nearly all heroin consumed in Europe came from south-east Asia, but now most originates from south-west Asia. Heroin is also produced in certain parts of the Americas (e.g. Colombia, Mexico), but Americas-produced material is rarely seen in Europe.

Heroin is listed in Schedule I of the United Nations 1961 Single Convention on Narcotic Drugs. Diamorphine is also included in a generic sense since the 1972 Protocol, which revised the 1961 Convention, extended control to esters and ethers of scheduled substances. Thus, diamorphine is the diacetyl ester of morphine (Schedule 1). Acetic anhydride, an essential processing chemical in the manufacture of heroin, is listed in Table I of the United Nations 1988 Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances.

Source: EMCDDA, Heroin drug profile  
<http://www.emcdda.europa.eu/publications/drug-profiles/heroin>

<sup>(2)</sup> Data limitations are described in the 'Data and sources' box on page 10.

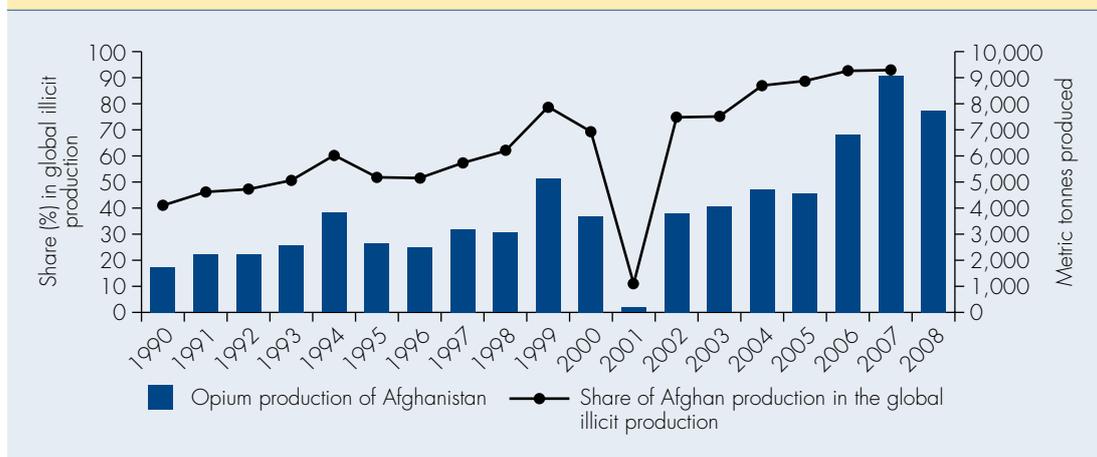
## Afghanistan: main producer of illicit poppy

Poppies are grown illicitly in three main world regions: south-west Asia (Afghanistan and Pakistan) supplying south-west Asia, the Middle East and Europe; south-east Asia (Myanmar and Laos) supplying south-east Asia and Oceania; and Latin America (Mexico, Colombia and Guatemala) supplying the Americas. At present, following a sharp decrease in south-east Asian production in recent years, more than 90 % of the global detected illicit opium output comes from Afghanistan (Figure 1), which is estimated to have produced 8,200 metric tonnes of opium in 2007 and 7,700 in 2008, up from 6,100 tonnes in 2006 (UNODC, 2007a; UNDOC, 2008c). Estimates would suggest that the 2007 Afghan opium harvest could potentially allow the manufacture of 733 tonnes of heroin (UNODC, 2008).

A World Bank publication reported in 2008 that in Afghanistan 'the size of the opium economy is around 30 percent of licit GDP, and millions of Afghans benefit directly or indirectly from it', (Ward et al., 2008). Afghan opium production doubled between 2005 and 2008, despite alternative development and eradication efforts. Seventy eight per cent of cultivation is concentrated in five south-west provinces, with Helmand accounting for more than half of Afghanistan's poppy in 2007 (UNODC, 2007b). While favourable weather conditions have boosted harvests, the recurrent conflicts, because of the destruction, poverty and general insecurity that they entail, are likely to be an important factor in explaining the increases in opium production that have been reported in the country.

The insecurity reigning in several regions appears to have resulted in a consolidation of the opium market. Increasingly large quantities of opium are being processed into morphine and heroin inside Afghanistan. UNODC (2007a) reports that 248 heroin laboratories were dismantled in the country between January and August 2006. A study published in 2006 noted that 'complex pyramids of protection and patronage', provided protection to trafficking activities (Shaw, 2006).

**Figure 1. Afghanistan — Estimated opium production and share in global detected illicit production, 1990–2007**



Source: UNODC (2007a); UNODC (2008c).

## Afghanistan — can alternative development measures have an impact?

Regional differences inside Afghanistan point to the potential for economic growth to reduce poppy cultivation. However, they also show how reduction in poppy cultivation can be undermined by the lack of political security, corruption and infrastructure problems. Reductions in cultivation can be achieved quickly, but can also be reversed equally quickly. For example, in Nangarhar province, in the east of the country, the level of opium poppy cultivation fell by 96 % in 2004–05, but returned to previous level in 2007, in part driven by the economic needs of densely populated areas that have been unable to diversify to other high-value crops and non-farm income opportunities (Mansfield, personal communication and 2007). The province has since been reported as poppy free, a 'remarkable accomplishment' according to the UNODC (UNODC, 2008c).

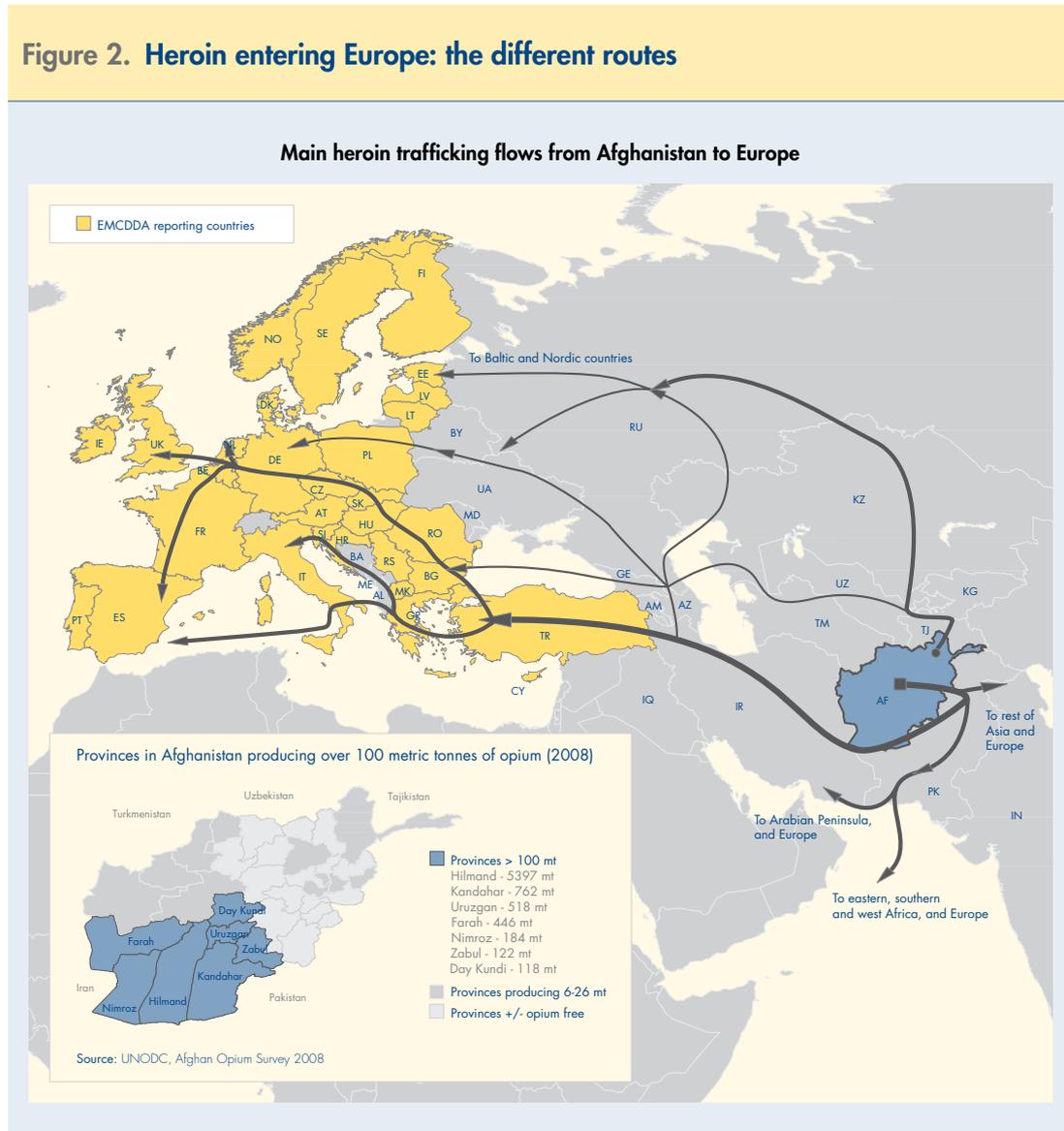
By contrast, in other parts of the eastern region, levels of cultivation are likely to remain negligible, and even in the southern provinces of Kandahar and Hilmand reductions in cultivation can be expected in areas close to the provincial centre. The supporting factors here appear to be greater governmental control and more diversification in agricultural production, factors which have allowed relatively high-value crops to be established together with the introduction of a transportation and marketing infrastructure. In the north and north-east of the country, not only have increasing wage rates and falling opium prices deterred poppy planting, but also some high-value vegetables actually generate greater returns than poppies. In these areas, crop diversification has been supported by counter-narcotics efforts and greater governmental involvement — leading to a general perception that opium prohibition measures will be enforced.

Rising labour costs and falling prices now mean that returns on opium poppy are not unassailable. In some areas, higher incomes can be generated from alternative products, particularly where other non-farm income opportunities also exist. These legal income opportunities are, however, not open to all and, in many areas, farmers' options are limited by high transport costs, poor roads and problems arising from lack of security. In these areas, corruption and insecurity are reducing the opportunities for trading in legal goods and impeding economic growth and efforts to encourage crop diversification, even in areas relatively close to the provincial centres.

Field information from early 2008 confirms to some extent these assumptions. In eastern Afghanistan, insecurity, lack of water, poor roads, and increases in fuel costs combined with declining prices for licit crops (e.g. onions) may make it difficult to sustain reductions in poppy cultivation in the future. Meanwhile, in the south of Afghanistan, poppies grow in abundance. Change is unlikely there in the near future mostly because of the security situation which impacts the profitability of licit crops — but not of opium — negatively (see Figure 2). Indeed, the threat of roadside robbery and the proliferation of government and insurgent checkpoints have resulted in large increases in transportation costs, while making it considerably more difficult — and sometimes impossible — to transport licit crops to urban markets (Mansfield, personal communication 2008). The latest data, while showing an overall reduction in production, point to increasing production in southern Afghanistan, in particular in Hilmand province, where around 70% of opium (5,397 metric tonnes) was produced in 2008 (UNDOC, 2008c).

## Heroin entering Europe: the different routes

Figure 2. Heroin entering Europe: the different routes



**Notes:** Trafficking flows represented on the map are an attempt to synthesise the analysis of a variety of international and national organisations (Reitox national focal points, Europol, INCB, UNODC, WCO). Such analyses are based on information related to drug seizures along the trafficking routes, but also on other intelligence information from other sources, such as law enforcement agencies in transit and destination countries, and anecdotal reports. The main trafficking routes represented on the map should be considered as indicative rather than accurate descriptions of the main flows, based on the knowledge that there may often be deviations to other countries along the routes, and that there are a multitude of secondary sub-regional routes which are not represented on the map. Such 'stopovers' may change very rapidly depending on constraints (e.g. law enforcement control points) and facilitating factors (e.g. commercial routes, corruption).

## The Balkan route

A route linking Afghanistan to Iran then through Turkey represents the shortest distance to European consumer markets (Figure 2). The majority of interdictions along this 'historical' route are made in Iran and in Turkey. Iran has been the world's largest confiscator of opioids for several years. From Turkey, the route then diverges into a southern branch through Greece, the former Yugoslav Republic of Macedonia (FYROM), Albania, Italy, Serbia, Montenegro and Bosnia-Herzegovina and a northern branch through Bulgaria, Romania, Hungary, Austria, Germany and the Netherlands.

According to Europol (2005), Turkey 'plays a central role' in the trafficking of heroin to Europe due to its geographical location. Heroin seizures reported by Turkey to the EMCDDA amounted to 10 tonnes in 2006, which represents over half of the total amount seized in Europe (EMCDDA reporting countries: EU Member States, Norway, Croatia and Turkey). Turkey ranked second in the world after Iran for quantities of heroin seized in 2006 (UNODC, 2008) and fourth for quantities of morphine seized worldwide. In addition, in 2006, Turkey confiscated about four tonnes (3 800 litres) of acetic anhydride (INCB, 2008b). The availability of large quantities of morphine and acetic anhydride in Turkey suggests the presence of illicit heroin processing laboratories in the country. Although no laboratory was discovered in Turkey in 2005, Turkish authorities reported the destruction of one laboratory in 2004 and 10 in 2002 (UNODC, 2007a). Europol notes that the heroin trade to Europe 'continues to be dominated by Turkish and associated criminal groups'. Turkish criminal organisations involved in the heroin trade are also active in other forms of criminality, including illegal immigration networks, arms trafficking and the smuggling of cigarettes.

The attention of European law enforcement is also focused on other groups, including Albanian-speaking traffickers, which reportedly buy heroin from Turkish wholesalers, and are suspected of being the main suppliers of some Scandinavian heroin markets. They also are active in countries such as Greece, Italy (Europol, 2005) and Switzerland, although a recent UNODC study suggested a 'declining role for ethnic Albanian heroin traffickers in Europe' (UNODC, 2008b). Yet overall, an increasingly diverse range of players are involved in the European heroin trade (Europol, 2006).

Typically, drugs on the Balkan routes are transported in trucks and buses, although some are smuggled through ports and by car. Consignments are often 'bought and sold by different groups along the route, the mode of transport is changed, and loads are split and merged as they move westward' (Europol, 2005). Europol (2006) reports that traffickers use countries along the Balkan routes, including some EU Member States, to stockpile heroin.

Unlike the countries along the 'northern route', where some of the heroin trafficked appears to be fuelling an increase in local consumption, it seems that so far there has been limited spillover to local markets along the Balkan routes. This may indicate that Balkan-route trafficking networks are well-organised and focused on reaching the high-value Western European markets. The Balkan smuggling itineraries are also used in the opposite direction, with heroin processing chemicals (acetic anhydride especially) and sometimes ecstasy travelling eastward.

## Data and sources

It is challenging to monitor systematically the trends in the trafficking of opioid drugs from south-west Asia to European markets. Two sources of available information are routinely used for this purpose, but both of them provide only partial information, and both require careful interpretation. Cultivation estimates of opium which can be used to generate production estimates for heroin are available. These are regularly updated by the United Nations Office on Drugs and Crime (UNODC), and are obtained from fieldwork that utilises both ground and aerial or satellite surveys. Issues of extrapolation may arise here, for example yield figures vary significantly. A second source of information is drug seizures statistics, and these are to some extent the most-used indicator. Seizures are usually considered as an indirect indicator of drug supply, trafficking routes and availability, although seizure data is also influenced by law enforcement resources, priorities and strategies, and reporting practices. Data on price and purity of heroin may also be used to understand the dynamics of heroin supply in Europe, and may indirectly indicate potential links to events in Afghanistan and along the trafficking routes. However, major issues of data availability, reliability and comparability exist with price and purity data. Lastly, law enforcement intelligence, where available, may usefully complement other more routine sources of data. However, this is difficult to verify and needs to be sensitively reported.

Collecting information in this area is difficult, and sometimes data can be reported with misleading precision or without acknowledging the caveats that need to be taken into account if sound analysis is to be made. However, a number of both international and European data sources are available, and conclusions can be drawn from these sources, albeit with caution. For this paper, sources of information include reports from the UNODC, which is the major information supplier for many of the important analyses in this area, such as the estimates of potential heroin production. UN sources are complemented here by insights drawn from Europol and other police sources. As far as essential chemicals are concerned, information is based on the International Narcotics Control Board (INCB)'s analysis, drawn from its involvement in international initiatives set up to prevent the diversion of precursor chemicals used in the manufacture of illicit drugs. In addition, data on seizures, prices at street level and purity collected by the EMCDDA provide information on the European situation. Finally, a number of qualitative studies have been used to complete the overall picture.

It is essential to underline that there are difficulties in compiling information of this sort and, in many parts of the world, information systems are poorly developed. Therefore these data should be viewed as best approximations possible from the often limited information resources currently available.

## The 'northern route'

Some opioids leave Afghanistan through the central Asian states to the north, particularly Tajikistan (accounting for 60 % of heroin seizures in central Asia), primarily bound for the Russian Federation. UNODC suggests that approximately 20 % (about 100 tonnes in 2005) of the heroin produced in Afghanistan uses this 'northern route' (2007a). However, it is likely that some of this heroin eventually also reaches European consumers. That said, the available evidence suggests that most of this heroin is consumed in central Asian countries (Tajikistan, Uzbekistan, Turkmenistan, Kazakhstan and Kyrgyzstan), and above all in the large consumer market of the Russian Federation. According to what UNODC describes as the 'best estimates' available, the heroin using population in Russia would amount to 1.6 million people, consuming up to 80 tonnes of the drug each year (UNODC, 2007a).

The available data suffer from numerous limitations. However, it seems that the quantity of opioids reaching the European Union via these northern itineraries is low. Indeed, the bulk of the heroin consumed in Europe still travels via the Balkan routes. Nonetheless, it is highly probable that the amount of heroin smuggled via the 'northern route' has increased significantly due to the production boom in Afghanistan. According to Europol, trafficking along the 'northern route' involves different means of transport. Opioids may be smuggled by foot or on the backs of animals from Afghanistan into neighbouring countries, then by air, rail, road or by sea to the Russian Federation and to a lesser extent Europe.

Some European countries, particularly northern, central and eastern European countries (including the Baltic States, some Scandinavian countries, Germany and Bulgaria), also receive opioids via the 'northern route'. There is also a small crossover between the 'northern route' and approaches to the Balkan routes in the countries of the Caucasus and southern Ukraine.

Unlike the Balkan routes, where Turkish traffickers play a major role along the entire supply chain to Europe, the trafficking in opioids along the 'northern route' — at least the part of it that can be monitored through seizures and police arrests — appears to be 'relatively disorganised' (UNODC, 2007a). No single national group or organisation seems to be able to handle the traffic from production sites to consumer markets. Opioids seem to be sold and re-sold en route with different small national groups involved in each transaction. Yet corruption is a major problem in all the countries along the 'northern route', including Russia, and it is possible that large heroin consignments travel under 'protection', and remain undetected by law enforcement (UNODC 2007a). While this problem of 'selective blindness' is affecting monitoring activities everywhere in the world, it seems to be especially acute as far as the 'northern route' is concerned.

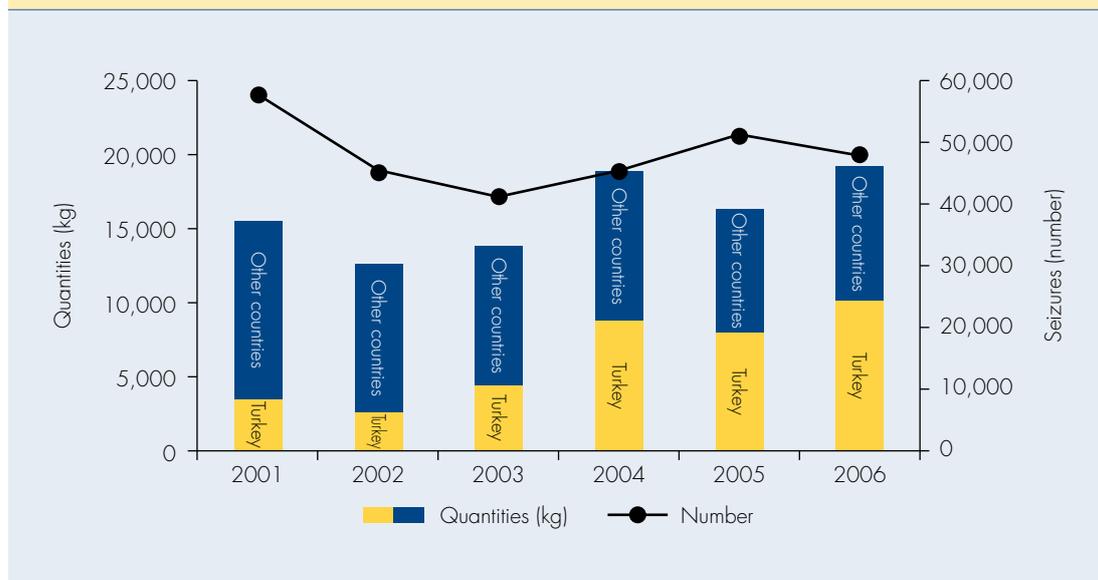
Like the Balkan routes, the 'northern route' has been used in reverse to smuggle processing chemicals with multi-tonne quantities of acetic anhydride seized in the past, however seizures have remained at a low level since 2002 (INCB, 2008a).

## European routes

An estimated 49 000 seizures made in the European Member States, Norway, Turkey and Croatia amounted to over 19 tonnes in 2006, and quantities seized have been generally on the increase in the last ten years. Most of the heroin bound for the western and central European consumer markets is transported overland towards the Netherlands and, to a lesser degree, Belgium. Both countries play an important part in distribution of heroin across western EU countries, especially to the United Kingdom (transiting south coast ports), probably the largest consumer market in Europe. Seizure data show that the United Kingdom is the second-largest confiscator of heroin in Europe (after Turkey). Italy is also a major market and a transit point, with most of the heroin arriving by ferry. Since 1999, Italy has been the second largest confiscator of heroin in the EU, after the UK (EMCDDA, 2008b). In addition, smaller quantities of heroin are imported directly into European consumer markets via commercial flights.

Inside Europe, the organisation of heroin supply becomes more diverse and complex as a multitude of organised crime groups and other actors are involved. Liaisons are made with traffickers of other illicit drugs as heroin tends to change hands at multiple points along the main routes (Europol, 2006). For instance, according to the European police office, South American traffickers may swap cocaine for heroin with Turkish traffickers who 'in turn liaise with indigenous wholesalers of amphetamine type stimulants' (Europol, 2006). As a result, heroin can be smuggled in polydrug consignments together with cocaine and synthetic drugs.

**Figure 3. Number of heroin seizures and quantities seized (kg) in the EU, Norway, Turkey and Croatia 2001–2006**



**Notes:** The total amount of heroin seized is based on data from all EMCDDA reporting countries (27 EU Member States, Croatia, Turkey), whereas 5 EU Member States (Italy, Cyprus, the Netherlands, Poland and Romania) were not included in the total number of heroin seizures due to unavailability of data. For countries included in the totals per year, missing data have been extrapolated from adjacent years.

## Alternative routes and new markets

The opioids production boom in Afghanistan, by increasing the overall availability of heroin, may have augmented the traffic on secondary routes and led to the development of new outlets, multiplying possible transit points towards the European consumer markets. To the north and south of Afghanistan there are numerous hubs where opioids are purchased and smuggled to destinations in Africa, Asia and the Middle East, and sometimes onwards to Europe or North America. According to the UNODC (2007a), a new route developed in 2005 and 2006 from Pakistan to India and China. China, which was previously supplied almost exclusively with heroin from south-east Asia, now appears to be a consumer of Afghan heroin. INCB (2007a, 2008a) also reports that China and Bangladesh may be transit points for Afghan heroin to Europe.

In addition, previously minor routes may have grown in significance. For at least 15 years, south-west Asian heroin has been used in and has transited through east Africa (especially Ethiopia, Kenya, Mozambique and Tanzania) to Europe, sometimes via west Africa. Since the early-to-mid 1990s, heroin en route to Europe has been seized in southern Africa (OGD, 1997). A rise in the use of opioids has been reported by the UNODC (2007a) in South Africa, parts of east Africa and west Africa, probably indicating spillover from growing amounts of transiting Afghan opioids.

Increased quantities of Afghan opioids flowing west may have led to an increasing use of routes through the Middle East, in particular via the Arabian Peninsula, where traffickers may also take advantage of the security situation, for example by transiting Iraq. A similar phenomenon has been noted with processing chemicals. Information reported by the INCB (2007c) could indicate that Iraq serves as a transshipment point for acetic anhydride.

## Traffic of acetic anhydride

Acetic anhydride is the principal chemical used in the manufacture of heroin, and is subject to international control. More than 300,000 tonnes of acetic anhydride are transported annually in licit international trade and it has a multitude of uses particularly in the pharmaceutical industry (e.g. to manufacture aspirin) (INCB, 2002).

An increasing number of opioid processing laboratories were dismantled in recent years in Afghanistan. In the past, Afghan opium was turned into morphine and heroin mainly in Iran, Pakistan and above all in eastern Turkey (Europol, 2005). The UNODC (2007b) estimates that at present about 60 % of Afghan opium is processed in Afghanistan itself. This requires large quantities of acetic anhydride (for which there is no licit use in Afghanistan): at current production levels as much as 1,500 tonnes annually (and about 9,000 tonnes of other chemicals) (UNODC, 2007c). Yet, relatively small amounts of acetic anhydride have been seized in Afghanistan and no confiscation was reported in bordering countries, except China, in 2005 and 2006. The Russian Federation and India all made seizures of the processing chemical in 2004. China, India and the Russian Federation are potential origins of the acetic anhydride used in Afghanistan, but there may be other sources, both nearby and further afield. However, at this point in time, the source — or sources — and the itineraries of the acetic anhydride used in Afghanistan are unknown.

## European and international initiatives

In order to respond to the upsurge of opioids production in Afghanistan and the concomitant perceived increase in trafficking in countries located along the Balkan and the 'northern' routes, the European Union and the international community at large are implementing a number of multilateral initiatives, summarised below.

The EU drug strategy (2005–2012) <sup>(3)</sup> underlines in its Point 30, the importance of cooperation with countries on the eastern border of the Union, the Balkan States, Afghanistan and its neighbours in order 'to be more effective in both drugs demand and drugs supply reduction, both through closer cooperation among EU Member States, and by mainstreaming drugs issues into the general common foreign and security policy dialogue and development cooperation'. This main point is translated into several specific objectives of the EU drugs action plan (2005–2008) <sup>(4)</sup> endorsed in June 2005, under the headings *Coordination, Supply Reduction and International Cooperation*.

The European Commission and several Member States have been involved in Afghanistan for many years. Between 2002 and 2006, the EC contributed EUR 250 million to develop sustainable alternatives to poppy cultivation for farmers in the north and north-east of Afghanistan. The approach was one of integrated rural development, addressing a range of factors that encourage poppy production rather than focusing narrowly on poppy crops. Thus, rural roads were built to facilitate access to markets, and small business and community development initiatives were supported. In addition, the EC and several Member States funded programmes to strengthen Afghanistan's law enforcement forces and justice system <sup>(5)</sup>.

Under the Tacis drug action programmes, the EC and Member States are funding a number of technical assistance projects to fight drugs and reinforce customs and border controls in the countries of Central Asia, the Caucasus, and Eastern Europe. One of the long-term objectives of Tacis is to set up a system of 'filters' between opioids production sites in Afghanistan and western European heroin consumer markets.

The Paris Pact initiative is a concerted strategic approach against the trafficking of Afghan opioids, their consumption and related issues in selected 'priority countries' (Afghanistan, Central Asia, Iran, Pakistan and the Russian Federation). The pact was launched in November 2003 and involves more than 50 countries and international organisations under UNODC coordination, with funding from the EU, six Member States, Russia, Turkey and the United States. The pact has three components: consultative mechanisms for experts and policy-makers aimed at identifying priorities and implementing concrete measures; the Automated Donor Assistance Mechanism (ADAM), an internet-based tool helping donors to coordinate assistance; and actions to strengthen data

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<sup>(3)</sup> Council of the European Union, CORDROGUE 77, 2004, <http://www.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nNodeID=6790&sLanguageISO=EN>

<sup>(4)</sup> Official journal of the European Union, 2005/C 1 168/01, <http://www.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nNodeID=10360&sLanguageISO=EN>

<sup>(5)</sup> For more details see the Action-Oriented Paper Increasing EU support for combating drug production in and trafficking from Afghanistan, including transit routes, Council of the European Union, CORDROGUES 42, 2006.

collection and analysis capabilities through a network of UNODC analysts based in the priority countries <sup>(6)</sup>.

Lastly, Project Cohesion is an international initiative running since 2005 <sup>(7)</sup>. It is run under the auspices of the INCB, and aims at preventing the diversion of precursor chemicals used in the illicit manufacture of heroin (acetic anhydride) and cocaine (potassium permanganate). It maintains the system of Central National Authorities (CNAs) for the use of the Pre-Export Notification (PEN) system for licit trade of both of these substances. The system also allows the reporting of shipments stopped and seizures made when suspicious transactions occur. Project Cohesion also aims at increasing arrests and seizures of chemicals, and at fostering intelligence sharing.

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<sup>(6)</sup> [https://www.paris-pact.net/index.php?action=home\\_page&section=43&mm=mm2](https://www.paris-pact.net/index.php?action=home_page&section=43&mm=mm2)

<sup>(7)</sup> Project Cohesion has been set up to substitute Operation Topaz which was addressing acetic anhydride and Operation Purple addressing potassium permanganate.

## Conclusion

Although EMCDDA data collection is in place to report the prevalence of opioid use in Europe, robust indicators are lacking to conclude what consequences the increase of Afghan opioids production might have on European consumer markets. Further analytical perspectives would be needed to better understand the impact of the Afghan situation in Europe. In particular, answers are needed to questions of where opioids production is going; whether stockpiles are being constituted; whether there are signs of increased availability of heroin from Afghan origin in European consumer markets; whether the purity of heroin is being influenced; and whether consumer markets may be emerging or expanding along trafficking routes and elsewhere. However, there is a lack of information on how much heroin these markets may be consuming, and on how this aggregated consumption may compare with the estimated opioids output from Afghanistan. Developing a sound methodology to assess the size of the European consumer market for heroin would be a first step towards such an analysis.

For a variety of reasons, it is difficult to draw a clear picture of heroin supply and trafficking in Europe, based on traditional quantitative indicators such as seizures, prices and purity data. Indeed, these need to be streamlined so that comparability and reliability issues can be addressed and more detailed data may be analysed <sup>(8)</sup>. Furthermore, there is also a need to develop innovative alternative monitoring strategies which may be based on sources other than law enforcement, and which may rely on more qualitative data.

Another obstacle to accurate monitoring activities is the lack of information on the supply of precursor chemicals used to process Afghan opium into heroin. Better and more systematic information on illicit sources and trafficking routes of acetic anhydride, and other chemicals necessary to manufacture heroin, would contribute to a clearer picture of potential production sites, in particular in Afghanistan and surrounding countries. Such information would also help design adequate responses to counter such production. Although increasing efforts to intercept opioids at source and to limit quantities being exported to consumer countries is an important task, it is also essential to continue and enhance the current actions of the international community to relieve poverty and generally foster economic development in Afghanistan, with a view to provide alternative livelihoods to Afghan opium farmers.

Overall, improving our understanding of the dynamics of opioids and precursors trafficking inside and outside Europe is essential in order to focus supply reduction efforts in the appropriate direction.

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<sup>(8)</sup> See the Council of the European Union document 12411/1/01 STUP 26 on a draft Council recommendation on the alignment of law enforcement drug and diverted precursor statistics.

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