Cannabis Report

of the

Swiss Federal Commission
For Drug Issues (EKDF)

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Preface and acknowledgements

In the course of its initial meetings, the Federal Commission for Drug Issues (EKDF) mandated by the Swiss Federal Council in early 1997 drew up an assessment of the situation regarding drugs in Switzerland and of the current need for action. Its predecessor (the Subcommission for Drug Issues attached to the Federal Narcotics Commission which was disbanded in 1996) had always assumed the view all illegal drugs were equivalent, as the basis for its discussions and reports; however, the marked changes that had taken place in the drug scene subsequently called for a more differentiated view of the questions raised by cannabis consumption. The focus on these questions led to a Decision in June 1998 to compile all the information on cannabis relevant to Switzerland in a report which would be submitted to the Federal Council together with recommendations for the future treatment of cannabis during the revision of the Swiss Narcotics Act. This decision by the Commission coincided with the interest expressed by the Federal Department of the Interior in an expert opinion on the same subject.

Although a wide range of disciplines are represented on the EKDF (a list of the Commission's members appears at the end of this report), this extensive project could not have been completed without the involvement of additional experts. The Commission would like to extend special thanks to the many individuals in the Federal Administration who contributed to the specialist sections of the report, the Swiss Institute for the Prevention of Alcohol and Drug Problems (SFA/SIPA), Lausanne), and Professors Martin Killias (Lausanne University), Jakob Tanner (Zurich University) and Ambros Uchtenhagen (Institute for Addiction Research, Zurich). They have all added aspects to the report which go beyond the scope of the usual discussions of cannabis, and have helped to place the problem in a wider context. With this in mind, the Commission also hopes that readers of the report will not focus solely on the conclusions but will also give due attention to the chapters intended more to provide background information, and will in this way contribute to a more objective approach to the discussion.

1. Introduction: Why write a cannabis report?

1.1 Cannabis as the focus of expert opinions and political initiatives

In recent years, cannabis has repeatedly and increasingly become a political topic. The parliamentary initiative put forward by Vermot, a member of the Lower House of Parliament, on 8 October 1997, for example, proposed the decriminalization of cannabis cultivation and use. Cantonal initiatives in Basel-Land (22 October 1997) and Zurich (21 January 1998) proposed deleting cannabis products from the Swiss Narcotics Act, while a cantonal initiative in Solothurn (7 December 1992) petitioned for the legalization of all narcotic substances. This accumulation of political initiatives concerning the legal treatment of cannabis and its derivatives led the Commission to launch a detailed study of the cannabis problem, with special reference to the situation in Switzerland. We should first consider why the Commission is producing a special report on cannabis instead of an all-encompassing report on drugs. Other drugs have been equally in the political spotlight, and cannabis and its derivatives are subject to the same regulations as many other narcotic substances. The Single Convention on Narcotic Drugs put these drugs on a list of prohibited substances with especially dangerous properties (known as Schedule IV) as long ago as 1961[1], and the Swiss Narcotics Act[2] classifies cannabis as a prohibited substance alongside heroin, cocaine and a number of hallucinogens. In the bill submitted to parliament on the amendment of the Swiss Narcotics Act in 1973[3], the Federal Council justified its refusal to accord cannabis a special status with the fear that this substance could become an "entry-level" drug leading to consumption of harder drugs.

This view was contested shortly afterwards in the drug report issued by Federal Narcotics Commission's Subcommission for Drug Issues in 1983[4]. A subsequent report published by the same Commission in 1989 ("Aspects of drug policy")[5] noted in particular: "From a pharmacological viewpoint, cannabis has absolutely no properties that would increase the risk of users switching to other drugs." Although the Commission recommended legalizing the use of all drugs in this report, it saw no reason to accord cannabis a special status.

The Federal Council's bill submitted to parliament on two popular initiatives - "Youth without drugs" and "Towards a rational drug policy - DroLeg" - dated 19 June 1995[6] also made no mention of a special regulation for cannabis. The document pointed to various possibilities for revising the existing legislation and drafting new laws (on addictive behavior, therapeutic approaches, addiction prevention), but did not differentiate between the various narcotic drugs. It stated among other things: "The legislation specifies narcotic substances which it approves for precisely defined uses and the abuse of which it seeks to suppress by means of threats of prosecution". It also emphasized: "This approach will retain its significance in the future and will need to be developed further and adapted in 'substance-oriented' legislation such as the laws governing medicinal products and chemical substances" (p. 28).

The commission of experts charged with revising the Swiss Narcotics Act (the "Schild Commission") in turn observed in its report issued in February 1996[7] with reference to cannabis: "There are factors that speak for, and those that mitigate against, special treatment of cannabis products, such as the permissibility of retail trade, tolerance of certain sales outlets, or the sale of cannabis under a state monopoly." However, the majority view of the Commission was ultimately that "too many questions remain unanswered to justify a different treatment of cannabis to that accorded to the other narcotic drugs".

Finally, the report on "Drug policy scenarios" published by the Swiss Federal Narcotics Commission's Subcommission for Drug Issues (June 1996)[8] should be mentioned. This report comes out unequivocally in favor of the recommendations in the "Schild report"; the majority of the Commission members also recommends the legalization of drugs in the longer term, with differentiated and regulated access. Here, too, cannabis is not accorded a special status.

All the reports quoted here have highlighted the impracticality of differentiating between "soft" and "hard" drugs. The arguments in favor of this position can be roughly summarized by the statement that the risks associated with consumption do not derive from the substance as such but from the concentration of the substance and the regularity and intensity with which it is consumed. The danger of dependence, too, is not a factor of the substance but of the individual and his environment and consumption habits.
Although none of the above-mentioned reports has confirmed the risk of cannabis consumption encouraging use of harder drugs, as surmised by the Federal Council during the revision of the legislation in 1975, fears were expressed that a change in the status of cannabis could suggest tacit approval on the part of the government. Would another legal drug not pave the way to greater consumption – against the background of the considerable problems already associated with alcohol consumption and smoking? It was also pointed out that the negative effects and risks associated with cannabis were not sufficiently understood at that point. Ultimately, it was practical reasons that led the majority of the "Schild Commission" not to recommend a special status for cannabis. "Unimpeded commercial exploitation of the psychotropic properties of cannabis could lead to problems similar to those encountered with alcohol. It would therefore be necessary to suppress industrial mass production and to introduce market regulation" (report, p. 55).

1.2 Why reassess the position of cannabis?

So what led the Federal Commission for Drug Issues to take a different approach from its predecessor and to consider the cannabis question in isolation from other drugs? The discussions surrounding the drug policy initiatives mentioned above showed that some people felt that cannabis should be taken off the list of prohibited narcotic substances. But even some of those who opposed the legalization of cannabis were unhappy about the current situation regarding cannabis, particularly the lack of clarity in the existing policy and the difficulties in implementing it. There are various inconsistencies that need to be resolved, such as the excessive number of people reported for using cannabis, the differences in the ways the different cantons apply the law, and the inequality of the treatment meted out to drug users (severely addicted individuals given heroin legally as part of sanctioned heroin-prescribing programs, as compared with users of less dangerous substances who have to deal with the effects of prohibition).
One of the criticisms leveled at the DroLeg initiative was that it advocated a single, undifferentiated principle which would apply to all substances equally. This implied that differentiation between the various substances would be desirable, an approach that had already been suggested by the Federal Narcotics Commission's Subcommission for Drug Issues in the above-mentioned scenario "Legalization with differentiated access". In these recommendations, the type of access would be determined on the one hand by the risks posed by the substance (toxicity, addiction potential), but on the other hand also by the importance of the substance to certain parts of the population. The assessment needed to implement these recommendations would also include legal drugs.
Further arguments derive from socioeconomic considerations. Switzerland currently has a fairly widespread cannabis production network, encompassing both agriculture and private cultivation. A distribution network with special shops dealing in cannabis products covers the entire country. The fact that cannabis is perceived as the only illegal drug produced locally or on a non-industrial scale accords it a special status in the minds of users and a large part of the population. The relatively recent spread of such production and trade points to ways of enabling legal access to cannabis products and fuels the hope that such products will in this way be kept off the black market. This development is one reason for the growing uncertainty experienced by many people with respect to the justification for and the objectives and application of a policy that prohibits cannabis.
The Commission has also noted that the significance accorded to cannabis consumption, the perception of cannabis as an addictive substance, and its social connotations have also changed considerably. A culture is increasingly coming to the fore in which individuals are

gravitating ever further away from hard drugs; in such a situation there is a danger that the need to obtain cannabis on the black market will create a greater risk of people switching to hard drugs than if cannabis were available through special, regulated channels. Manipulated cannabis containing far higher levels of THC is already available on the black market. It is therefore justifiable to ask whether it is not time to accord a preferential status to local production and "traditional" consumption.
Today there is no doubt that the use of cannabis cannot be prevented by prohibition. It is becoming increasingly clear that cannabis users do not see themselves as drug users. Even where they do perceive themselves as belonging to a kind of subculture, they do not feel that this subculture is associated with any particular problems. This was emphasized in the "Schild report" (p. 55): "Both consumption and public acceptance of cannabis use have increased since the Swiss Narcotics Act was amended in 1975, and both developments have taken place without the individuals involved experiencing any real sense of doing anything wrong." The credibility of the law and the judicial system is increasingly being undermined by the persistence of the repression of cannabis and the fact that behavior which is not perceived as unacceptable is being punished.
Scientific studies carried out to date provide no evidence that cannabis products are toxic to any alarming degree. The risks associated with using cannabis are lower than those of most other illegal drugs. To the extent that a risk comparison is possible at all from a scientific point of view, this comparison should rather be made with legal recreational and addictive substances. There is no doubt that cannabis is not harmless, but any assessment of its risks needs to compare it with the drugs that are already an integral part of our society.

1.3 Structure of the report

This report is intended to form the basis for decisions concerning drug policy in Switzerland. It makes no claims to completeness in terms of scientific findings and considerations; the reader interested in more detail is, however, directed to the relevant literature where available.
The report starts with a survey of the current situation in Switzerland (Chapter 2). Not all chapters will be equally interesting to all readers. Those less interested, for example, in the pharmacology or historical aspects of cannabis can simply leave out these sections; however, all chapters are equally relevant in their contribution to a thorough understanding of the conclusions reached by the Commission. The question of the medical use of cannabis has deliberately been dealt with only in outline. This is an aspect which must be considered separately from the recreational use of cannabis in terms of both the concept applied and the way this concept is pursued, and is not one of the primary concerns of this report.
Chapter 3 considers some fundamental ethical aspects of an addiction policy acceptable to society.
Chapter 4 approaches some of the fundamental legal questions involved. It clarifies a number of terms and models which crop up repeatedly in the drug policy discussion – specifically when comparisons are made with other countries. In particular, the possibilities and limitations of the much-cited expediency principle are discussed in the context of the situation in Switzerland.
Chapter 4 then proceeds to outline a number of possible alternatives to the existing law. A fundamental distinction is made between models which could be implemented within the terms of international agreements (especially the "Single Convention on Narcotic Drugs" dating from 1961) and true models for legalization which go beyond the scope of this convention. These two sections are structured in such a way that they cover the entire spectrum from minor adjustments to full, completely unregulated legalization without evaluating the individual alternatives in any way.
The possible impact of each alternative is discussed in Chapter 5. The focus here is on the effects on consumption and consumption patterns, on willingness to use cannabis, and on the effects of using it. The likely consequences of each alternative on the illegal cannabis

market are also discussed. The chapter concludes with a discussion of the need for regulation and the political implications of the alternatives.
Chapter 6 evaluates the alternatives. The primary objectives of the cannabis policy are examined in order to derive practicable subgoals, and each of the alternatives presented in the preceding chapters is examined to determine its anticipated congruence with these objectives. The chapter concludes by presenting models which the Commission believes are feasible.
Chapter 7 closes with the Commission's recommendations.

References

1 Single Convention on Narcotic Drugs, New York, 30 March 1961

2 Bundesgesetz über die Betäubungsmittel, BetmG, + Änderungen und Verordnungen (EDMZ 812.121 ff)

3 Botschaft des Bundesrates zur Revision des Betäubungsmittelgesetzes, 1973

4 Drogenbericht der Subkommission Drogenfragen der Eidg. Betäubungsmittelkommission, 1983

5 Aspekte der Drogensituation und Drogenpolitik in der Schweiz, Bericht der Subkommission Drogenfragen der Eidg. Betäubungsmittelkommission, Bundesamt für Gesundheitswesen, June 1989

6 Botschaft des Bundesrates vom 19.6.1995 zu den Volksinitiativen "Jugend ohne Drogen" und "für eine vernünftige Drogenpolitik" (Droleg-Initiative)

7 Bericht der Expertenkommission für die Revision des Betäubungsmittelgesetzes ("Kommission Schild"), February 1996 (EDMZ 311.814 d)

8 Drogenpolitische Szenarien, Subkommission Drogenfragen der Eidg. Betäubungsmittelkommission, Bundesamt für Gesundheitswesen, June 1996 (EDMZ 311.813 d)

2. Cannabis in Switzerland: The current situation

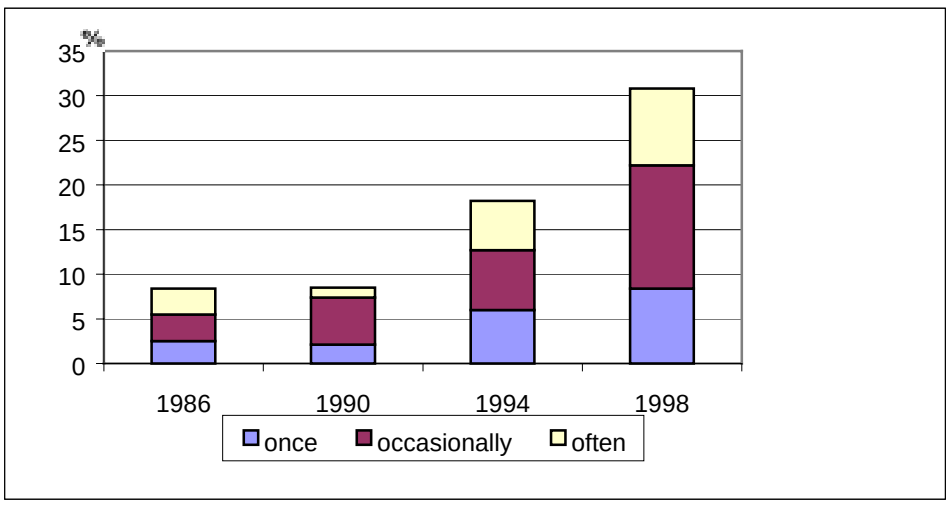
2.1 Prevalence of cannabis use

2.1.1 Development of cannabis use from 1970 to 1998

A number of studies of drug and, more particularly, cannabis use in Switzerland have been carried out since the early 1970s. Not all of them used the same methodology, so the findings are not comparable in strictly scientific terms. However, they do give a good impression of the magnitude of the problem. The term "prevalence" is often used to describe the extent to which a drug is used. It shows how often a drug is consumed during a defined period of time (e.g. the lifetime prevalence is the number of individuals who have used the drug at any time in their life).
The consumption of cannabis by Swiss adolescents is not a new phenomenon. As long ago as 1971, the lifetime prevalence of cannabis consumption among 19-year-old men required to enlist for military service in the canton of Zurich was 23.3 percent, and the figure for a comparison population of women was 13.5 percent. At that time 8.2 percent of the men and 3.5 percent of the women had had frequent experience of cannabis (had used it more than ten times).
In another study in 1978, also carried out in the canton of Zurich among 19-year-olds, the lifetime prevalence of cannabis consumption was only 19.9 percent for men but 17.2 percent for women. Frequent use (more than ten times) had increased to 8.5 percent among the men and 5.7 percent among the women (Sieber 1988).
In a survey of recruits from all parts of Switzerland carried out in 1972/73, the lifetime prevalence of cannabis consumption was 20.1 percent, with 5.7 percent claiming frequent use (more than six times) (Battegay et al 1977).
An evaluation of the pedagogical examinations of recruits carried out in 1993 showed the lifetime prevalence to be around 44 percent, with frequent use (more than ten times) at 18.5 percent (Wydler et al 1996).
A written questionnaire distributed by Wydler et al in 1993 showed a 12-month prevalence of 32.1 percent among young men aged 20 and 16.8 percent among women of the same age.
The most recent data were compiled during a telephone survey commissioned by the Swiss Institute for the Prevention of Alcohol and Drug Problems (SFA/SIPA) in February 1998:
Percentage of respondents (N=1019, excluding Italian-speaking Switzerland) who had used cannabis in the preceding 12 months, February 1998

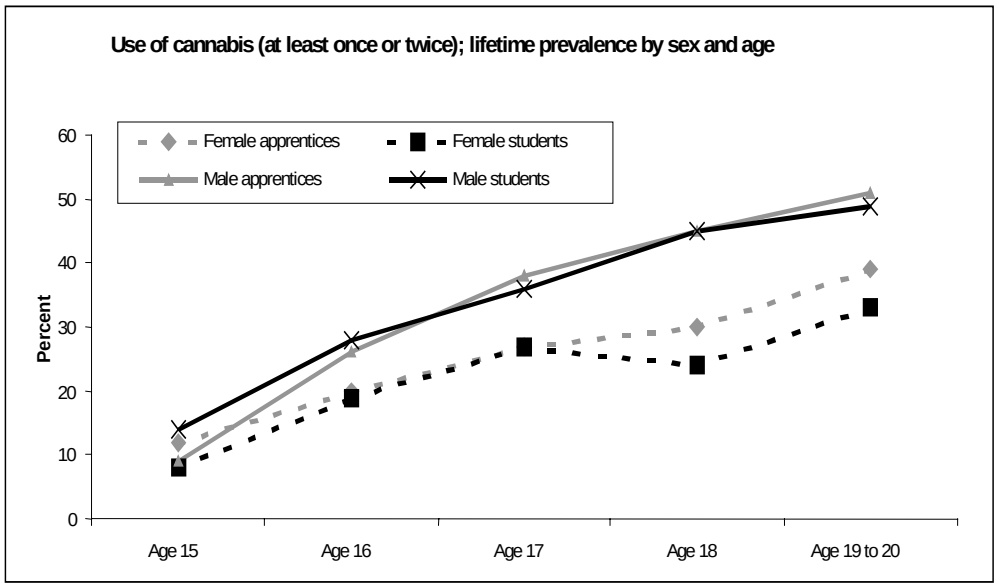
	Men	Women	Total
Ages 15 to 19	37.5	24.0	29.9
Ages 20 to 24	24.3	20.1	22.2
Ages 25 to 29	17.8	16.1	16.9

The written surveys carried out by the SFA/SIPA among male and female students aged 15



show a clear increase in cannabis consumption between 1986 and 1998.
The proportion of 15-year-olds with experience of cannabis more than tripled over the last12-years. In 1986, 2.5 percent reported having used this soft drug once, in 1998 the figure was 8.4 percent. In 1986, 3 percent used hashish or marijuana "occasionally", by 1998 the figure was four-and-a-half times higher (13.8 percent). In 1986, 2.9 percent used cannabis frequently, in 1998, 8.6 percent.
A study by Narring et al in 1992/93 of the health-related behaviors of young Swiss people aged 15 to 20 largely confirmed the findings of the college study of 15-year-olds. The study showed that above age 18, almost half of young men have used cannabis at least once, although 30 percent of them state that they have only used it once or twice. The figures are around 10 percent lower for women.

Lifetime prevalence of cannabis use among people aged 15 to 20 by age and sex, 1992/93 (Narring et al 1994)



Cannabis use is more common among younger people, but a study in 1987 (Fahrenkrug, Müller 1990) showed that 20 percent of people over 34 had used cannabis at some time. As many as 12 percent of those aged 35 to 44 and 5.8 percent of those aged 45 to 54 had also used cannabis at least once in their lifetime. Extrapolated to the entire population, this would mean that some 550,000 people aged between 15 and 74 had used cannabis at that time. According to the Swiss Health Surveys for the years 1992/93 and 1997/98, the lifetime prevalence for the age group 15 to 39 in Switzerland rose from 16.3 to 26.9 percent during this period. Extrapolated to the entire population of the country, some 685,000 Swiss people between the ages of 15 and 39 in 1998 had used cannabis at some time. An increase is also discernible among current users: in the period 1992/93, 4.4 percent of those surveyed were using cannabis products, while in the period 1997/98 the corresponding figure was 7.1 percent.

2.1.2 Age at first use

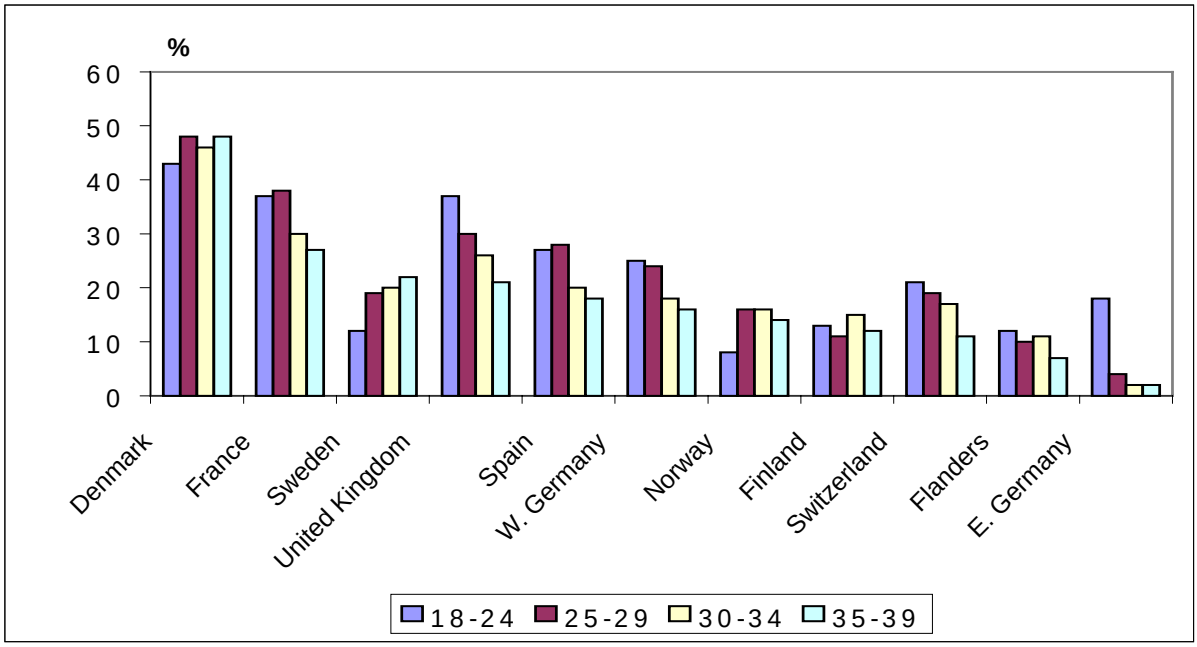
Little information is available on the age at which illegal drugs are first consumed. It is difficult to find such data since most studies provide only data from cross-sectional analyses. Calculations based on survival models for drug users show that the age at which drugs are first consumed has not changed greatly in recent years; it has remained at around 16 (Gmel, Rehm 1996).

2.1.3 International comparison

It is difficult to compare drug use on an international scale because the groups surveyed, the times at which they are surveyed and the types of survey differ so widely between countries. Against this background, the attempt made by Kraus and Bauernfeind (1998) to draw up an international comparison of the lifetime prevalence of cannabis use should be approached with caution.
Switzerland ranges in the middle field among the nine countries for which lifetime prevalences are shown in the illustration below; the Scandinavian countries have lower prevalences, Denmark, France, the United Kingdom and Spain have higher figures. One striking feature is the fairly similar overall figures for Spain, West Germany, Sweden and Switzerland, although the cannabis policy in these countries differs considerably (Cattacin, Renschler 1997).

A European comparison of lifetime prevalences of cannabis consumption by age groups (Kraus and Bauernfeind 1998)

Sources: Reanalysis following correspondence with Pecca Hakkarainen for Denmark 1994, Norway 1993, Sweden 1995, Finland 1993 (Hakkarainen, Laursen and Tigertedt, 1996), Luis de la Fuente for Spain 1995



(Delegación del gobierno para el Plan Nacional sobre Drogas, 1996), Malcolm Ramsey for the United Kingdom 1994 (Ramsey and Percy, 1996), Jean-Michel Costes for France 1995 (Carpentier and Costes, 1996), Paul Quataert for Flanders 1995 (Quataert and Van Oyen, 1995), Gerhard Gmel for Switzerland 1993 (Fahrenkrug et al, 1995).

In most European countries there was a slight to moderate increase in the prevalence of cannabis consumption during the 1980s (Kraus, Bauernfeind 1998). However, the report on Europe issued by the WHO in 1997 gives a mixed picture of the trends in cannabis consumption in this region from the early to mid-90s. The nine western European countries that provided information on trends in cannabis use all reported an increase in consumption, but within these countries the patterns are very different from one region to another.

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2.2 Availability and trade

Cannabis may be used legally as a renewable raw material in the textile, oil, paper, rope and construction industries and in the production of foodstuffs and consumer goods; it is also consumed illegally as a narcotic (marijuana, hashish, hash oil).
There has been a sharp increase in cannabis cultivation in Switzerland recently, with the resulting products destined not only for the legal market but also, and more particularly, for illicit consumption as narcotics ("drug-grade cannabis").

Year	1993	1994	1995	1996	1997	1998
a) ***Renewable raw material***[1]	0	10	11	6	2	60
b) ***Other uses***[2]	1	10	50	150	200	~250

Table 1: Area under cannabis cultivation (ha) in Switzerland and uses

The drug grade has a THC* content in excess of 0.3 percent (see 2.3); the industrial or fiber grade contains less than 0.3 percent THC. Since even experts cannot distinguish "industrial cannabis" from "drug cannabis" with the naked eye, it is not possible to tell what type of cannabis is being cultivated unless the plants are analyzed chemically. The figures for b) in the above table have therefore been classified as "other uses" even though it has to be assumed that these crops are used predominantly to produce "drug cannabis".

*THC: The active principle is tetrahydrocannabinol (cf. Chapter 2.3). In this report only the abbreviation THC will be used (except in Chapters 2.3 and 2.5).

2.2.1 Legal uses

2.2.1.1 Cannabis in agriculture

The cannabis plant is well adapted to the geography, soil and climate in Switzerland. It makes few demands on the soil and can generally be grown without the aid of chemical crop protection agents. As such it is an ideal candidate for integrated production (IP) and ecological cultivation.
From an agronomic point of view, the prospects for the successful reintroduction of industrial cannabis production are excellent. There is major public interest in ecological products derived from sustainable resources. Cannabis is a promising plant which is easy to grow and provides a high quality raw material. This is why the "renewable raw materials" project being run by the Federal Office of Agriculture (BWL) is funding the cultivation of low-THC cannabis (containing less than 0.3 percent THC) for industrial purposes.

[1] Figures from the Federal Office of Agriculture (BLW)

[2] Estimate from BLW documentation

Switzerland has had a type list[1] covering the marketing of cannabis seed for agricultural purposes since 1 March 1998. This list restricts trade in cannabis seeds and plants to varieties containing low levels of THC. The cultivation of cannabis and activities outside the agricultural context (e.g. ornamental plants) are not covered by this regulation.

2.2.1.2 Cannabis for food products, cosmetics and consumer goods

The flowers, seeds, fatty and volatile l oils, and other parts of the hemp plant are currently used to manufacture foodstuffs and cosmetics. A variety of products including hemp oil, biscuits, chocolate, confectionery, pasta, "beer flavored with hemp blossom", and a number of skin and hair care products can be purchased. Food products and cosmetics containing hemp are not permitted to have any pharmacological activity. The revision of the Ordinance on Foreign Substances and Ingredients in Food Products (FIV) dated 30 January 1998 established threshold values for the THC content of various foods[2].
By analogy with the FIV, a limit of 50 mg/kg is applied to cosmetic products which are left on the skin. The situation in the food and cosmetics sector has eased considerably since these threshold values were introduced.
Most of these cannabis products are sold in so-called hemp shops (in 1998 there were around 135 such shops in Switzerland). However, hemp shops sell not only legal products but also illicit cannabis products (cf. 2.2.2 Illegal use and 2.7 Enforcement of the existing legislation).

2.2.1.3 Medical used of cannabis

Chapter 2.5 deals specifically with the therapeutic use of the pharmacological effects of cannabis, or THC, in medicine.

2.2.2 Illegal use

The cultivation of drug-grade hemp and the associated sales of products made from this hemp are increasing from year to year in Switzerland. Relevant data from a number of cantons show that a large quantity of products based on drug-grade hemp are already being exported, and that an increasing volume of equipment and other items used in hemp cultivation and to produce marijuana and hashish are being imported intoSwitzerland.
It can be assumed on the basis of a survey covering all cantons that most of the illegal trade in hashish is still carried out on the street, as it always has been. "Hemp shops", on the other hand, are increasingly the channel through which marijuana is sold; most of it is packed into and sold in the form of "aromatic pillows". In Ticino canton practically the entire cannabis market has gravitated towards "hemp shops". The police view is that the vast majority of hemp fields in Switzerland are used to produce cannabis supplied to the drug trade. It can be assumed that in 1998 considerably more than 100 metric tons of drug-grade cannabis were harvested. Today Switzerland has an almost nationwide network of 135 hemp shops. The big increase started in 1996 and led to the creation of major centers in the city and canton of Zurich (a total of 36), in the canton of St. Gallen (18), in Ticino (16) in Basel (7) and in the canton of Berne (6).
Police information shows that between 85 and 95 percent of sales in most hemp shops come from drug products ("hemp pillows", "aromatic bags", "refills for aromatic bags", "hemp coins" etc.) The THC content of cannabis sold in "aromatic bags" is frequently between 8 and 10 percent, for example.
The people who sell hemp products (in hemp shops) claim that their products (such as "aromatic pillows") are not intended for making drugs, and that it is therefore legal to sell them. It is up to the public prosecution agency to gather additional evidence and prove that

1 Ordinance on the Production and Marketing of Seeds and Plants, as revised on 25 February 1998, and Ordinance of the Federal Office of Agriculture on the Varieties Catalog for Cannabis, 26 February 1998.

2 A limit of 50 mg THC/kg applies to oils for culinary use; the maximum content in pasta, biscuits and cereal bars is 5 mg THC/kg dry mass, and in beverages (including teas) 0.2 mg THC/kg.

the cultivation of hemp or the product in question is intended for making illegal narcotic substances or for consumption as an illegal drug. Chapter 2.7 deals with the difficulties faced by the prosecution authorities in distinguishing between legal and illegal use when inspecting areas used to cultivate cannabis and hemp shops.

2.2.3 Hemp cultivation

The cultivation of hemp for consumption has reached industrial proportions in Switzerland in the last few years. In 1997, 7.2 metric tons of hemp products and 313,258 hemp plants were impounded. Although reliable data are difficult to come by, it can be assumed that Switzerland has become a hemp-exporting country and is one of Europe's two major producers, the other being the Netherlands.
Hemp is also being cultivated increasingly in private gardens and on balconies. This may be partly because hemp is an attractive ornamental plant; in many cases, however, this cannabis is no doubt intended for consumption.
This report will not look at hemp cultivation in greater detail. The current situation and the related problems are described in the relevant documentation compiled during the amendment of the Swiss Narcotics Act, which was scheduled for distribution to the cantons for comment during the summer of 1999. Models which the Commission feels could be suitable for hemp cultivation are described in Chapters 3 and 6.

2.3. Pharmacology and toxicology of cannabis

***Note on this chapter**: In some places the following text goes into far more detail than the other chapters in this report. This exhaustive approach was taken deliberately, since an understanding of the complex effects of cannabis is vital for an objective discussion of the subject in hand, and very little summarizing literature is available on the aspects portrayed here. The reader not familiar with the biological terminology can omit the paragraphs printed in italics and smaller type without losing the essence of the text.*

2.3.1 Introduction

According to the current system of botanical classification, hemp belongs to the genus Cannabis which, together with the genus Humulus – hops, are included in the Family Cannabidaceae (Hagers Handbuch [...] 1992). Although the wide variety of characteristic features would suggest that there are several species of cannabis, today only one collective species is recognized, Cannabis sativa (Lehmann 1995). The other species commonly referred to, Cannabis indica – Indian hemp, is in fact a subspecies of Cannabis sativa (Fankhauser 1996).
Cannabis sativa is a dioecious, green, leafy plant with characteristic opposite, usually seven-fingered, lance-shaped leaves; on dry, sandy, slightly alkaline soil it can grow to more than 7 meters in height. Glandular hairs develop, usually on the female flower, which secrete a resin. The greatest density of glandular hairs is found on the sepals and on the underside of the last leaves to form (Geschwinde 1996). The female plants are more important than the male plants for commercial purposes: their fibers are thicker, they form the nutritious seeds, and they contain the psychoactive principle tetrahydrocannabinol (THC) which is much sought after by producers of marijuana and hashish.
Unlike most of the substances used in our western culture to induce an intoxication, cannabis is not a single substance but contains a large number of different components; over 420 have been identified to date. The cannabinoids, of which there are over 60, are the most important class containing the active principle responsible for the psychotropic effects of the plant, (-)-trans-δ^9-tetrahydrocannabinol (referred to in the following as δ^9-THC).
Basically all the parts of the Cannabis sativa plant can contain cannabinoids, not just the seeds, but the quantity varies from one part to another. The resin secreted by the female glandular hairs contains up to 90 percent cannabinoids, the bracts of the flowers and fruits contain an average of 3 to 6 percent, and the leaves contain only 1 to 3 percent (Geschwinde 1996). The fiber grade of cannabis is cultivated for industrial purposes, and the legislation in the European countries requires this type to contain no more than 0.3 percent THC (see also 2.2.1).
The most important cannabis products in the drug trade are marijuana and hashish. Marijuana consists of all the dried parts of the plant; it is sold either loose or pressed and contains up to 2 percent THC. The THC content is increased (up to 6 percent) by using only the flowering tops of the female plants. Hashish is a particularly resinous form of cannabis, and good quality hashish contains between 10 and 20 percent THC (Lehmann 1995).
The THC content of cannabis plants can be increased by selective breeding and optimal growing conditions. The ”Sinsemilla” type of marijuana, for example, had a THC content of 1 percent in the 1960s, 8.5 percent in the early 1980s, and as much as 17 to 22 percent in the 1990s (Adams, Martin 1996; Geschwinde 1996).

2.3.2 Cannabis in the body

2.3.2.1 Absorption, metabolism and excretion

Cannabis is usually smoked as a "joint", a variable mixture of hashish (or marijuana) and tobacco. The dosage depends on the desired effect (generally one cigarette containing 2 percent THC). The active principle is absorbed very rapidly via the respiratory tract and lungs, with an onset of action just a few minutes later. The effect peaks at 15 minutes,

subsides gradually after 30 to 60 minutes, and is largely finished after 2 to 3 hours (Geschwinde 1996). The bioavailability (proportion of substance active in the body) depends greatly on the smoker's technique and varies between 10 and 25 percent (with a maximum of 56 percent).
THC is absorbed by the body much more slowly after oral intake (eating or drinking) and then has a lower bioavailability of 4 to 12 percent because of the poorer absorption, catabolism in the liver and the fact that the inactive tetrahydrocannabinolidic acids in natural cannabis products cannot be transformed into psychoactive δ^9-THC unless they are heated first, as is the case when they are smoked (Lehmann 1995). In contrast to absorption through the respiratory tract, in which peak plasma concentrations of THC may be achieved while the product is being smoked, the plasma concentration increases constantly over a period of 4 to 6 hours when cannabis is ingested; a state of intoxication is reached later and is of a different quality.
The high solubility of δ^9-THC and its active metabolite 11-OH-δ^9-THC in fat mean that they are bound almost completely to protein in the plasma, cross the blood-brain barrier with ease, and are eliminated only slowly from lipid-containing tissue. This slow elimination gives the substances a biological half-life of one day (Lehmann 1995); other authors have reported half-lives of three to five days (Adams, Martin 1996). The substances are thought to be metabolized twice as quickly by chronic users of cannabis as by first-time users (Adams, Martin 1996; Maykut 1985).

The relationship between plasma concentrations and the degree of intoxication is discussed in Chapter 2.3.5 (Cannabis and driving).

The cannabinoids are metabolized rapidly in the liver. To date, some 80 different, mostly inactive metabolites have been identified (Agurell et al 1986). No major metabolic differences between male and female users of cannabis have been observed (Wall et al 1983).

2.3.2.2 Pharmacodynamics

Specific research into the mode of action of cannabis was not possible until 1964 (Agurell et al 1986), when δ^9-THC was isolated and its structure was elucidated. It then became possible to develop substances with an action similar to THC, some of them highly potent. During the 1980s, various scientific findings removed any lingering doubt about the existence of specific cannabis receptors (Bidaut-Russel et al 1990; Dewey et al 1984; Howlett, Fleming 1984; Howlett et al 1986).

A cannabinoid receptor (CB1) located predominantly in the cerebellum, the hippocampus and the cerebral cortex was finally discovered and cloned in 1990 (Axelrod, Felder, 1998). A further, peripheral, receptor (CB2) was found in certain parts of the immune system (e.g. the spleen) in 1993 (Abood, Martin, 1996; Lehmann, 1995). Investigations carried out to date would seem to confirm that these receptors are capable of affecting neurophysiological processes in the brain (Axelrod, Felder, 1998). Future research will reveal the extent to which processes of this type involving cannabinoid receptors are linked to the complex effects of cannabis in humans.

In 1992 the endogenous ligand (linking substance) anandamide was discovered; it is thought to be synthesized and released on an ad hoc basis (Abood, Martin 1996; Axelrod, Felder 1998; Di Marzo et al 1994).

The discovery of the cannabinoid receptors, endogenous ligands, and the development of specific agonists and antagonists in the past and the future, are making a major contribution to scientific understanding of the effects of cannabis, of the neurophysiological role played by thes receptors, and of the possible effects on the human brain and its functions in the context of chronic cannabis use. New knowledge will perhaps enable us to develop an active principle which is therapeutically highly active but has none of the psychoactive properties.

2.3.3 Acute effects of cannabis on the central nervous system

The psychotropic (affecting the central nervous system and the mind) action of cannabis is one of the reasons why cannabis products are used so widely. As mentioned above, cannabis starts to act more rapidly and more intensively when it is smoked, and the intoxication lasts a shorter time, than when it is absorbed through the digestive system. The effect of cannabis depends not only on its composition, dosage and mode of consumption; much also depends on the mood of the individual, on the individual's

expectations and on the atmosphere and setting. These factors explain why the altered state of consciousness, which may amount to pronounced intoxication, is experienced so differently by different people. At a low to moderate dose, cannabis produces a largely pleasant feeling of relaxed euphoria, perhaps even with dreamy elements, which may be accompanied by heightening or alteration of the senses (Hagers Handbuch [...] 1992). The sense of time shifts markedly, and the individual perceives periods of time as being considerably longer than they really are. Short-term memory is impaired (Lehmann 1995), although recall of previously acquired knowledge is impaired only slightly if at all. It is uncertain whether other higher functions of the brain, such as the organization and integration of complex information, are affected (Adams, Martin 1996).
Higher doses produce a general reduction in spontaneity, drive and involvement in the surroundings. Anxiety, confusion, aggressive feelings, (pseudo) hallucinations, nausea and vomiting have all been reported but are not usually experienced. They may, however, develop even in experienced users (Hagers Handbuch [...] 1992; Lehmann, 1995). As the effects of THC subside, the individual often becomes drowsy and tired, but there is no "hang-over" comparable to the effect experienced after heavy alcohol consumption.

2.3.4 Acute side effects and toxicity of cannabis

The physiological effects observed immediately after consumption are reddening of the conjunctivae, a reduction in body temperature, a dry mouth and throat, hunger, a slightly elevated heart rate and blood pressure when lying down, and a drop in heart rate and blood pressure when standing (Adams, Martin 1996; Dewey 1986; Hagers Handbuch [...] 1992).
The acute toxicity of cannabis is generally thought to be low. If the dose of cannabis lethal in rhesus monkeys is extrapolated to man, a human would have to smoke 100 grams of hashish to achieve the same effect. No fatality has ever been reported in connection with acute cannabis intoxication either in Switzerland or elsewhere. Deaths overall are very rare following cannabis consumption, and are generally a consequence of the potentially increased inclination to suicide associated with an atypical course of intoxication (Hagers Handbuch [...] 1992).
Use of high-dose cannabis products can lead to psychotic states which manifest as a combination of emotional symptoms, such as fluctuating mood, disorientation and schizophrenia-like states, and depression, anxiety, visual and auditory hallucinations and paranoid persecution mania. Panic reactions are often due to the individual's fear of losing control or his/her mind. The treatment of such states often involves nothing more than reassuring the person. Drug therapy is generally unnecessary because the calming effect of the drug in any case comes to the fore as the intoxication subsides (Hagers Handbuch [...] 1992; Hollister 1986).
When evaluating the significance of the potential negative effects of cannabis consumption mentioned above, it should not be forgotten that similar effects may also occur in patients using many of the psychoactive medications prescribed today.

Relationship between plasma concentration and degree of intoxication

A number of studies have attempted to correlate plasma concentrations of δ^9-THC and its metabolites with the psychoactive effects of cannabis in order to deduce the extent of the intoxicated state currently being experienced by an individual, or to determine when cannabis was last used. However, this is far more difficult than with alcohol because of the many factors that affect the pharmacological action of cannabis. Peak plasma concentrations do not correspond to the point of maximum intoxication when cannabis is inhaled (smoked), injected intravenously or ingested (eaten or drunk) (Cochetto et al, 1981). More recent mathematical models are thought to permit more accurate assessment of the time that has elapsed since cannabis was last consumed (WHO 1997).

2.3.5 Cannabis and driving

Of particular interest in view of the widespread use of cannabis is its effect on the individual's ability to drive and operate machinery. Numerous studies of the effects of cannabis on psychomotor function and analysis of road traffic accidents following which THC and/or alcohol have been detected in the plasma have produced inconsistent results.
The most important aspect is how long cannabis is likely to affect the ability to drive after it has been taken. The reduced reaction speed and altered perception, alertness and ability to process information mean that cannabis is likely to impair the ability to drive as much as two to four hours after being smoked (up to a maximum of eight hours) (Adams, Martin 1996; Hollister 1986; Iten 1994; WHO 1997).
It has been reported that cannabis users often overestimate the effect of cannabis on their ability to drive, and often drive slowly with great concentration, while individuals under the influence of alcohol tend to overestimate their driving skills (Adams, Martin 1996). However, it has also been noted that in 80 percent of road traffic accidents involving THC in the plasma alcohol had also been consumed (WHO 1997).

2.3.6 Medical uses of THC and cannabis

The therapeutic use of the pharmacological effects of cannabis and THC in medicine is the central theme of Chapter 2.5.

2.3.7 Effects of chronic cannabis use

Opinions differ, in some cases widely, on the effects of chronic cannabis use, and the results obtained from research to date leave room for assumptions and speculation. It appears to be practically impossible to demonstrate effects due solely to cannabis.
It is difficult to extrapolate from animal experiments, some of which use high doses of pure substance and whose duration is too short to be comparable with chronic use of marijuana, to man. Even in clinical trials with chronic cannabis users, the results will be falsified for example, if the individuals studied have been consuming alcohol and tobacco for the same length of time. For this reason it is not possible to attribute the results solely to the use of cannabis with any degree of certainty. Moreover, the number of other possible causes of the effects observed grows as the duration of use gets longer (WHO 1997).

2.3.7.1 The Amotivational syndrome

Acute, reversible psychotic states have been documented in exceptional cases following cannabis use, but the existence of "the amotivational syndrome", first described in the literature in 1968, has never been confirmed. The term was used to describe the changes in attitude and personality, the neglect of appearance and general disinterest displayed by chronic users of cannabis, although nowadays it is considered to be obsolete and not typical of cannabis consumption (Huw 1993; WHO 1997).
It is exceptionally difficult – if not impossible – to establish a direct and exclusive causality between speculative consequences of chronic cannabis use and the drug itself. For example, studies attempting to link dropping out of school at an early age with cannabis use have tended to show that it was in fact the family background, the child's relationship with its parents during its school years, social values, etc. which led the child to stop going to school (Hollister 1986).

2.3.7.2 Dependence and tolerance

Cannabis consumption can lead to psychological dependence; it is estimated that around half of heavy users develop dependence of this type (WHO,1997). In a German study, one in five respondents admitted to frequently or very frequently consuming more cannabis than they had intended to (Kleiber et al 1997).
The tendency to develop physical dependence is only weak. It has been demonstrated in animal experiments by administering an antidote (the receptor antagonist SR 141716A) following chronic administration of cannabis and observing withdrawal symptoms (Aceto et al

1995). Abrupt withdrawal in humans following heavy daily consumption produces autonomic withdrawal symptoms such as nausea, perspiration, trembling, insomnia and loss of appetite (Hollister 1986; Wiesbeck et al 1996). These symptoms regress following renewed administration of cannabis, an observation that corroborates the development of dependence (Adams, Martin 1996). The the dependence profile is classified by the World Health Organization as a distinctive type of dependence, known as cannabis-type dependence.

The development of tolerance is associated with pharmacodynamic changes. Chronic administration of THC has been shown to reduce the number of receptor binding sites (Rodriguez de Fonseca et al 1994), although this appears to be reversible (Westlake et al 1991). The tolerance to the functional and psychological effects of THC observed in animal experiments has also been demonstrated in man, but does not lead the individual to increase the dose of cannabis (Beardsley et al 1986; Hollister 1986). Clear tolerance development has been demonstrated with respect to mood swings, elevated heart rate and impairment of psychomotor functions. The conditions under which tolerance and dependence develop – high doses of THC over a long period – do not correspond to the widespread recreational use of cannabis, and this is why these properties of cannabis do not present a serious problem.

2.3.7.3 Carcinogenic effect

Cannabis is probably the most widely smoked substance in the world after tobacco. In addition to the nicotine in tobacco and the cannabinoids in cannabis, the matter inhaled from both substances contains a large number of other compounds which irritate the respiratory tract and have carcinogenic (cancer-causing) properties (Julien 1997).

The effects of tobacco and cannabis on the respiratory system are very probably not additive (WHO 1997), or in other words they cannot simply be added together. However, the cannabis smoker inhales more deeply than the tobacco smoker, allowing four times the quantity of tar to enter the lungs (Hagers Handbuch [...] 1992). Bronchial irritation and inflammation, reduced macrophage and cilia activity (making the removal of particles from the lungs more difficult) and changes to the mucous lining of the respiratory tract have been observed in heavy users of hashish (Hollister 1986; Julien 1997). In general, studies of long-standing cannabis smokers have demonstrated damage to the mucosa in the trachea and bronchi (WHO 1997).

Smoking cannabis products is therefore assumed to be associated with an increased risk of lung and bronchial cancers. However, it is difficult to consider the carcinogenicity of cannabis in the lung in isolation because hashish and marijuana smokers are usually also cigarette smokers as well – quite apart from the fact that these two cannabis products are generally smoked in a mixture with tobacco anyway (Hagers Handbuch [...] 1992).

2.3.7.4 Genetic effects and effects on reproduction and pregnancy

An increased rate of chromosomal abnormalities, mainly chromosome breaks and translocations, has been observed among marijuana smokers (Hollister 1986). Changes at the cellular level were reversible in clinical trials (WHO 1997). The clinical significance of these observations is disputed, not least because similar changes can occur in individuals taking commonly prescribed drugs on a daily basis (Hollister 1986; Maykut 1985).

The effects on the concentration of testosterone, estrogen and prolactin in plasma observed in animal experiments have not been reproduced unequivocally in clinical trials with humans (WHO 1997). In women, cannabis consumption leads to lower levels of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), and may affect the menstrual cycle, although these effects are evidently reversible and disappear once the drug is discontinued (Hollister 1986; Maykut 1985).

The good lipid solubility of the cannabinoids allows them to cross the placenta with ease, and they can be recovered from the fetus after just a few minutes. Animal experiments investigating the effects of cannabis consumption during pregnancy have produced varying results. A major study of 12,000 women, 11 percent of whom used marijuana, found shorter gestation periods, longer deliveries, lower birthweights and a higher rate of deformities (Hollister 1986; WHO 1997). However, the impact of cannabis on birthweight is minor compared to the effect of cigarette smoking during pregnancy. Apart from these physical aspects, the possibility cannot be excluded that cannabis may affect the behavior and

cognitive functions (e.g. learning ability) of the child. Accordingly, the use of cannabis during pregnancy should be restricted as systematically as the consumption of alcohol and smoking (Hagers Handbuch [...] 1992; Hollister 1986).

2.3.7.5 Effects on the immune system

Animal experiments and cell cultures have shown cannabinoids to affect B and T lymphocytes (e.g. increased susceptibility to infection), although these effects were not pronounced, were fully reversible, and were induced only by very high concentrations in excess of those used by individuals to achieve psychotropic effects (Adams, Martin 1996; Hollister 1986; WHO 1997).

The human immune system is relatively resistant to the immunosuppressive effects of the cannabinoids, and the research carried out so far supports the therapeutic use of δ^9-THC even in patients whose immune system has been compromised by other diseases (AIDS, cancer).

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2.4 Historical and sociocultural aspects

Hemp is an old crop that has been used by man for centuries in many and varied ways. It was native to Switzerland for hundreds of years, and in fact was indispensable in many areas of agriculture and for commercial and industrial products. This background has largely been forgotten since hemp developed a stigma as a "narcotic substance" in the 1920s. During the 1960s and 70s, this very versatile traditional fibrous plant was increasingly perceived as nothing more than a substance capable of inducing hallucinations and other abnormal states of mind – worshipped by a minority and rejected categorically by the majority. It was only recently that the image of hemp has been rehabilitated through awareness that it is a renewable raw material with many ecological advantages. However, the contradiction between two apparently irreconcilable components persists: hemp as a valuable and ecologically friendly crop on the one hand, and cannabis as an exotic drug on the other.

Sources date cannabis as one of the oldest and most widely cultivated crops in the world (Katalyse-Institut 1995; Herer 1993). It had an enormous range of uses (Katalyse-Institut 1995; Scheerer 1989). In China, for example, it was used 6,000 years ago to make food, clothing, fishing nets, oil and medicines (Scheerer 1989; Emboden 1982). Cannabis spread from central Asia and subsequently featured in all the cultures in the Middle East, Asia Minor, India, China, Japan, Europe and Africa. Hemp was introduced to the American continent by Spanish seafarers in 1545; the English later brought their European knowledge to the colonies (Katalyse-Institut 1995). The hemp plant was used widely to provide fiber and oil and was processed into food and medicines; its consciuosness-altering properties were used both in religious rituals and on an everyday basis (Herer 1993). At a slightly later date hemp was used to make paper: China started in the 1st century BC, Europe around 1200. At the end of the 19th century, 75 percent of all the paper produced in the world was made from hemp (Bröckers 1988).

This varied and widespread use – hemp growing was made compulsory in some parts of America in the 17th and 18th centuries – is contrasted starkly with the decline of cannabis from the 19th century onward (Katalyse-Institut 1995). Hemp cultivation was still pursued in the early part of the industrial era in continental Europe, but competition from Russia was already having a serious impact, and cotton imports were increasingly destroying the market for hemp fiber. In western Europe more and more arable land was given over to cereals and animal fodder (Bischof 1994). In Switzerland, hemp was grown for domestic use only from the mid-19th century, and by the start of the 20th century it had practically disappeared from the landscape. Many authors in the 19th and 20th centuries lamented the decline of hemp cultivation, blaming it on the population's lack of diligence and inadequate processing methods. Social and agrarian reformers praised hemp as a possible source of income for the impoverished classes. It is particularly clear from the writings of the time that hemp cultivation was seen as a means of underpinning a traditional way of life and values, and was thus thought to have a stabilizing function.

In Germany, too, hemp cultivation started to decline before the First World War, although interest surged again during both World Wars since Germany was largely cut off from the world fiber market and was dependent on hemp to meet its needs (Katalyse-Institut 1995). An interesting feature in this connection is the "jolly hemp book" issued by the National Socialists, which portrayed hemp as a reliable native raw material indispensable in industry and the home. But America also stylized hemp as the savior of the nation, not least in a hemp propaganda film entitled "Hemp for Victory" (Bröckers 1988). In Switzerland, a "cultivation campaign" was announced in 1940 under the auspices of Federal Councilor Wahlen; the objective was also to promote the production of hemp, although the area under cultivation was in fact small (Tobler 1950).

After the Second World War hemp fibers were replaced by synthetic fibers, hemp oil by mineral oil, lamplight by electric light. Synthetic drugs proved to be more effective than cannabis, the petrochemical industry obviated the need for hemp as a pressing material, and wood fiber replaced hemp in paper manufacture. The significance of this once indispensable

source of fiber declined in the face of the difficulties associated with mechanizing the harvesting and processing of the plant (Tobler 1950). It was by no means chance that the materials competing against hemp were easy to integrate into the industrialization process. One of the aims of competitors was most certainly to stigmatize hemp. The economic decline of hemp was accompanied by an increase in prohibition worldwide. After the inter-war period, hashish, marijuana and people who used these substances were increasingly criminalized. In the 1930s the American timber industry sponsored a financially motivated campaign against marijuana, culminating in 1937 in the passing of the Marijuana Tax Act in the USA (Scheerer 1989). Before this, in 1925, the Second Opium Conference had placed hashish on a controlled list of narcotic substances. In 1929 it became illegal under German law to trade in or use "Indian hemp and more specifically its resin" (Katalyse-Institut 1995); Switzerland followed in 1951, incorporating a ban into its amendment of the Swiss Narcotics Act (Länzlinger 1997).

The point at which cannabis also started to be used in central Europe as a hallucinogen, and the extent to which it has been used, is still unclear (Scheerer 1989). Scheerer claims that the overriding purpose of hemp cultivation in this geographical region has always been to provide fibers and oil (Scheerer 1989). This view is upheld by Swiss sources from the 19th and 20th centuries. Descriptions of Swiss agriculture portray hemp as a source of fibrous raw material which was processed mainly into textiles. Some sources mention that the plant emitted an intoxicating odor, although this was in no case perceived as dangerous. It was known that a different type of hemp, Cannabis indica, with narcotic properties existed in the "Orient", but the native species, Cannabis sativa, was not associated with such effects. The use of the plant as a hallucinogenic, mind-altering substance was considered as behavior typical of "Orientals". This perception resulted from a general trend of the era: since the 18th century, the Orient had been perceived as the incarnation of everything that was "different" from the west, as an alternative to the sober rationality of the "Occident" that stimulated the western imagination. In the early 20th century the Pharmacological Institute in Berne carried out a series of experiments which showed that the effects of Cannabis sativa and Cannabis indica were certainly comparable, but this finding did not give rise to any concern. The native plant seemed to be safe from "abuse".

Hemp was also used in Europe and America for medicinal purposes; this aspect will be considered in Chapter 2.5.

If we consider the typology of cannabis users at various points in time, we find that cannabis has been, and continues to be, used by very different groups for different purposes. For a long time, hemp was associated with the poor; those who couldn't afford tobacco smoked hemp (Kessler 1984). Solidarity within a subculture and working and smoking together were elements important to those who used hemp (Tanner 1996); hemp was an expression of a traditional way of life which may also have been viewed as a form of resistance against the imperatives of economic modernization and commercialization.

In the 1840s, the Club des Hachichins in Paris embodied the use of hemp, associated with an alternative, oriental culture, as a positive contrast to the regular, bourgeois way of life. This gave hemp a new image; it was no longer seen as a way of upholding tradition but as rejection of normality. The narcotic substance decried by regular citizens was thought to transport users to a new level of consciousness and perception and to stimulate artistic productivity (Tanner 1996). In this way the Bohemians' defense of hemp involuntarily provided the arguments that were used to make the "drug" taboo, although this was by no means their intention (Rudgley 1993). The users of the substance at the time formed a relatively homogeneous group, although subsequently the group came to be larger, heterogeneous and difficult to define (Bröckers 1988).

The criminalization of cannabis in Switzerland from 1951 did not have the desired effect. With hindsight, it is much more likely to have contributed to making the plant and its use into a symbol of peace and tolerance. The stigmatization of cannabis served to highlight its existence and to popularize it in subcultural settings (v. Wolffersdorff-Ehlert 1989). The use of cannabis was initially centered on the so-called beat generation and was not particularly widespread (v. Wolffersdorff-Ehlert 1989); from about 1964 it became more common in

industrial countries, reaching its first high point in the legendary "summer of love" in 1967. In Switzerland there has been a marked increase in the number of offenses involving narcotic substances since 1970, although this was probably due more to the low level of tolerance by the police and the courts than to a sudden surge in consumption. The media reported a "wave of drugs" said to be submerging the country. A "war" or "crusade" was mounted against the dangerous substances in an attempt to kill demand, but the number of users increased unabated. Harder drugs such as heroin and cocaine started to make more of an appearance, and from about 1974 the focus shifted away from hashish users to people dependent on hard drugs and "drug fatalities". Cannabis use expanded into a mass phenomenon in the shadow of this new focus. However, this more widespread consumption also gave rise to a tendency for people to individualize their use of cannabis in order to forget their personal frustrations, leaving the collective experiment behind them (v. Wolffersdorff-Ehlert 1989). The consumption of hemp, although outlawed in 1975, has normalized and become a commercial proposition, resulting in a growing disparity between the legal norm and judicial practice.

Twenty years ago, using cannabis products was exotic and something of an adventure for the adolescents of the day, but in recent years it has become almost normal for many of them. Today young people of 14 can talk quite openly among themselves or with trusted adults about their drug use, and those who do not use cannabis, for example, are tolerant of occasional smokers. It is interesting to note that the use of various drugs is determined to a very large extent by the habits of the group that is currently "in" (which may be a school or an entire suburb, or people involved in a certain type of sport). Trends of this type are open to very little intervention on the part of parents or guardians.

Years ago there was still a clear distinction between adolescents who drank alcohol and those who smoked cannabis, with the two groups generally having little to do with each other. This distinction has blurred increasingly. The single-substance "cultures" still exist of course, but many adolescents consume both alcohol and cannabis depending on the situation and availability. This intermingling of two formerly separate "cultures" is increasingly rendering obsolete the question of the extent to which cannabis consumption is open to social integration.

In the current situation, cannabis has become an integral part of the social reality of a not inconsiderable part of the population. Cannabis use has changed from something originally intended to achieve a "high" and a particular emotional state into a recreational activity pursued purely for the pleasure of it. Against this background, it is difficult for people who consume a small amount of cannabis for relaxation purposes – in the same way that social drinkers consume alcohol – to understand why cannabis is referred to as a narcotic drug. As with any psychoactive substance, of course, there are adolescents and adults who seek refuge from the reality of a situation which, for them, is intolerable. It is this group which deserves special attention.

On the other hand, there is a current resurgence of interest in hemp as a renewable raw material, and many traditional uses for the plant have been rediscovered. Cannabis is once again being used in medicine, with some success (the therapeutic use of cannabis is described in detail in Chapter 2.5). The ecological advantages of hemp are particularly evident in comparison with cotton, a crop which is susceptible to insect pests and thus contains pesticide residues (Katalyse-Institut 1995), but also in comparison with wood because hemp grows much faster. Switzerland now has a hemp support project run by the Federal Office of Agriculture (Bischof 1994). This project threw into sudden and sharp focus the traditions and expertise which had been lost with the demise of hemp cultivation. Seeds had to be imported from Hungary and France, and the techniques for growing the plant had to be relearnt (Bischof 1994). Overall there is growing interest in hemp cultivation and products made from hemp.

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2.5 The medical importance of cannabis

Note on this chapter: *This report is concerned primarily with the use of cannabis as a recreational drug. Whether cannabis products can be used beneficially in the medical treatment of patients is a completely different question which must be considered separately from both a technical and a legal point of view. However, Chapter 2.5.2 provides a brief summary of the current state of knowledge, and the conclusions at the end of this report will also touch on this aspect. The paragraphs printed in italics and smaller typeface are intended for those with a special interest in this field and may be omitted without fear of losing the context.*

2.5.1 Introduction

The first written evidence of cannabis being used in medicine is probably a Chinese handbook of botany and healing some 4,700 years old. Cannabis was mentioned in herbals from the 16th century. It was used in popular medicine from the time of the first crusade and featured in the medicine practiced by monks in many monasteries. It was used to treat rheumatic and bronchial disorders, and was also prescribed generally as a substitute for opium. In the 19th century it was also a popular treatment for migraine, neuralgia, epileptiform convulsions, insomnia and other conditions. Marijuana was the most commonly used pain killer in America until 1898, when it was faced with stiff competition from Aspirin and was ultimately replaced by a wide range of new, synthetic medications. Between 1842 and 1900, cannabis preparations accounted for half of all medicines sold in America (Herer 1993). More than 100 different cannabis-based medicines were available in Europe, most of them in Switzerland as well, between 1850 and 1950 (Fankhauser 1996). Difficulty in dosing these preparations, paradoxical effects and the development of more effective products led to a decline in prescriptions for cannabis even before prohibition finally put an end to its use (Mikuriya 1973, Mikuriya 1982, Springer 1982). Today doctors are not allowed to prescribe cannabis or cannabinoids (the legal situation is explained in Chapter 2.6.4.3). Scientific research involving cannabis requires a special license from the Swiss Federal Office of Public Health. The Paraplegic Center in Basel is currently running a study to investigate dronabinol in the treatment of painful muscle spasms in paraplegics; initial results are promising.
Below is a brief summary of two medical aspects of cannabis:

- A review of the major scientific findings relating to the therapeutic use of cannabis (δ^9-tetrahydrocannabinol [THC] and synthetic cannabis products);

- An overview of medical experience with cannabis poisoning in acute medical care.

2.5.2 Investigation of the therapeutic action of cannabis

In recent years, the prescription of cannabis and cannabis-based active principles for therapeutic purposes has become a recurrent and growing focus of scientific, medical and political interest. Some countries permit cannabis to be prescribed under various conditions, usually for medical trials or on a named-patient basis; a treatment regimen for a distinct indication has been established only in very few cases. The only indications for which dronabinol (delta-9-THC) has received regulatory approval for routine use to date are to stimulate appetite in AIDS patients and to control nausea and vomiting in patients undergoing chemotherapy in whom other drugs have proven ineffective. Dronabinol was launched in the USA in 1986 under the name Marinol and has since been approved in Canada (1990), Australia (1995), Israel and South Africa. It is available for license in Germany, Belgium, Japan and Switzerland (Kleiner and Kovar 1998).

In 1997 the National Institutes of Health (NIH) in the USA reviewed the available literature on the therapeutic value of cannabis and the need for further research. The information below is based on the expert report subsequently submitted to the NIH (Beaver et al 1997). A further summary has been complied by Gowing et al (1998).

Pain management: *Two controlled studies of patients with cancer pain were carried out with oral THC vs. placebo. Although THC had an analgesic effect, it was difficult to dose because of the very narrow*

therapeutic window between ineffective underdosing and the adverse effects associated with overdosage. No studies have been carried out with smoked or otherwise inhaled cannabis.

Neurological disorders: *There is evidence that cannabis is effective against the spasticity associated with multiple sclerosis and has a certain potential in the treatment of epilepsy, but no clinical studies have been carried out in either indication. Cannabis has proved ineffective in attempts to treat Parkinson's disease and Huntington's disease.*

Nausea and vomiting caused by chemotherapy in cancer patients*: THC administered orally is more effective than placebo but less effective than drugs such as metoclopramide. The relative efficacy of oral THC or smoked marijuana compared with newer anti-emetics has not been studied. Dronabinol is authorized in the USA for patients in whom conventional therapy to counter nausea and vomiting is ineffective.*

Glaucoma: *Local administration of THC reduces intraocular pressure in healthy subjects and glaucoma patients without affecting blood pressure or mood. The mechanism of action is unknown.*

Cachexia (wasting associated with serious illness): *Clinical studies have demonstrated a connection between cannabis use and increased appetite in healthy subjects. THC can bring about weight gain in wasted AIDS and cancer patients. Dronabinol is approved in the US for the treatment of AIDS-related anorexia.*

Further research *is recommended in all these indications. In particular, controlled clinical trials are needed which focus both on pharmaceutical products and on smoked cannabis.*

2.5.3 Cannabis poisoning in medical emergency statistics

A completely different aspect of any medical evaluation of cannabis must be the experience gained with acute intoxications encountered in critical care situations. There are no systematic medical statistics documenting cases of acute poisoning and their outcome, but the figures compiled by the Swiss Toxicology Information Center and studies carried out by two hospital emergency departments (Berne and St. Gallen) provide a good indication of the current situation.

2.5.3.1 Swiss Toxicology Information Center

In 1997 the Swiss Toxicology Information Center handled 87 enquiries about cannabis poisoning (66 in 1996 and 60 in 1995). Between 70 and 75 percent of these cases involved simple intoxication with cannabis, between 25 and 30 percent involved another substance as well. Of the enquiries received, 60 percent came from doctors, 40 percent from lay people. More detailed analysis only started in 1997. Of the cases of simple intoxication, two had an asymptomatic course, eight involved moderately severe symptoms and one involved severe symptoms. All the patients survived.

2.5.3.2 Clinical trials in Switzerland

a) Study in Berne

A retrospective study analyzed all the cases of acute intoxication with illegal drugs admitted to the emergency department of the Inselspital Hospital in Berne during a 183-day period in 1989 and 1990. The study covered a total of 157 patients, among whom cannabis featured fewer than four times (< 1.6 percent) in combination with another substance. A total of 257 different substances were recorded for these patients. Cannabis showed no dangerous effects in this study.

b) Study in St. Gallen

A five-year prospective study (1993 - 1997) of 20,220 medical emergencies at St. Gallen cantonal hospital showed that intoxication with cannabis alone accounted for just three emergencies. This is equivalent to 0.015 percent of all medical emergencies. All three patients presented to the out-patients department with mild mental disturbances. The symptoms regressed spontaneously within a short time in all patients. Cannabis was detected in a total of 21 patients (0.1 percent of all medical emergencies), three times as the sole cause of poisoning, once in combination with other illegal drugs, and 14 times in

combination with illegal drugs, prescribed medication and alcohol. There were no deaths or serious complications related to cannabis.

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2.6 The legal environment

2.6.1 International conventions

A significant factor in the policy debate over cannabis – as is also true in the case of other substances classified as narcotic drugs – is the fact that the scope for national legislation is curtailed to some extent by obligations entered into under various international agreements (for a complete and exhaustive account of international drug law see Rausch 1991: page 107 to 136). Several conventions have been drawn up in order to regulate the abuse and trafficking of illegal substances. These international conventions have been ratified by numerous countries and to some extent shape their national legislation directly. Among the matters covered by these conventions is cannabis consumption.
A milestone in the development of international drugs law was the *Single Convention on Narcotic Drugs* of 1961. This laid down rules of international application and largely superseded a number of existing conventions, agreements and protocols which were incomplete in their coverage. To this day the Single Convention forms the cornerstone of most countries' national drugs legislation. It requires ratifying States to promulgate laws giving effect within their territories to the measures recommended in the Convention (Hug-Beeli 1995: page 146). The Single Convention places cannabis and cannabis resin in the same category as opiates (e.g. heroin), in Schedule IV. It classifies substances hierarchically according to their medical utility and carries on a distinction between the useful substances of the West (medicines) and traditional substances of the Orient having no therapeutic value (Richard 1995: page 18). However, with the emergence of new, chemically manufactured substances in the seventies the Single Convention soon began to appear outdated. As a consequence, a new international agreement was adopted to cover these new synthetic products. This was the *Convention on Psychotropic Substances* of 1971, also known as the *Vienna Convention*. It places synthetic products in the category of 'psychotropic substances' (psychopharmaceuticals, barbiturates, LSD). The Convention permits their use in medicine but otherwise prohibits consumption.[1] The main active constituent of cannabis (delta-9-tetrahydrocannabinol) is included among the stimulants (e.g. amphetamine) in Table II (psychotropic substances), which means it is subject to the same level of controls as narcotic drugs under the *Single Convention*. The residual mix of active ingredients in cannabis, on the other hand, is included in Table I under hallucinogens, which may be used solely for scientific and – to a limited degree – medicinal purposes under individual licenses issued by the authorities. In 1972 there followed the *Protocol Amending the Single Convention*, which defines the functions of the International Narcotics Control Board. This body works in cooperation with governments to ensure that only such quantities of narcotic drugs are cultivated, produced or used as are necessary for medicinal and scientific purposes (Hug-Beeli 1995: page 147). The most recent convention is the *United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*[2] of 1988, which further extends the scope of international drugs law. Unlike the Single Convention and the Vienna Convention,[3] this convention expressly requires signatory countries to prohibit the activities preparatory to personal consumption. It does not require the actual consumption of illegal substances to be made an offence, only their possession and procurement (Hug-Beeli

[1] According to Richard (1995, page 19), psychotropic substances as defined under this Convention include all products capable of causing addiction, which affect the central nervous system by either stimulating or depressing it or by causing hallucinations and which, most importantly, engender misuse to the detriment of society and public health. Also, legal psychotropic substances (alcohol and tobacco) are not included in the category.

[2] This convention has yet to be ratified by the majority of the signatory states. In Switzerland, the issue of ratification is to be debated after the referendum on the 'Droleg initiative' has been held.

[3] Article 36(1) of the Single Convention only requires the criminalization of illegal possession in connection with dealing while the Vienna Convention is also directed against illicit trafficking rather than against the unlawful consumption of psychotropic substances (see notice and draft resolution of 29 November 1995 on the 1988 Convention against the Illicit Traffic in Narcotic Drugs and Psychotropic Substances (BBl 1996 I, 619).

1995: page 148).[4] The Convention permits these substances to be used in medicine but otherwise prohibits all consumption.

2.6.2 The Federal Narcotics and Psychotropic Substances Act (BetmG; SR 812.121)

The Federal Narcotics and Psychotropic Substances Act (BetmG) of 1951, as amended in 1974, regulates the production, distribution, purchase and use of narcotic drugs and psychotropic substances which are subject to State controls. Within the meaning of the law, narcotic drugs include addictive substances and compounds of the cannabinoid type (Article 1(1) BetmG). By way of example, in the second paragraph of the same Article, hemp is specified as a raw material of narcotic drugs. The resin of the glandular hair of the hemp plant (known as 'hashish') is also listed as an active constituent of cannabis. Under Article 8(1) BetmG, neither hemp plants used for the purpose of producing narcotic drugs nor hashish may be cultivated, imported, produced or placed on the market. Hemp may be freely cultivated for other purposes, however, without any special permit being required. Article 4 BetmG, which provides that a permit is required for the production of narcotic substances, does not apply in the case of hemp.[5].

Under Article 1(2)c and d BetmG, narcotic substances also include 'other substances' having a similar effect to hemp or the resin of its glandular hair and 'preparations' containing any of the 'substances' already mentioned. Hemp products are thus by definition narcotic substances. Whether Article 8(1)d BetmG actually extends the criterion of narcotics production to hemp products ['the following narcotic substances may not be cultivated, imported, produced or placed on the market: d) hemp for the purpose of narcotics production or the resin of its glandular hair (hashish)'] is an open question, which has not yet been definitively resolved by the courts. The current position therefore appears to be that the production and supply of cannabis products such as cannabis oil etc. are not subject to any restriction whatsoever under the drugs legislation unless the motive is the production of narcotic drugs (see Annex d to the Order of the Federal Office for Public Health on Narcotic Drugs and Psychotropic Substances, BetmV-BAG, SR 812.121.1).

Under the first subparagraph of Article 19(1) BetmG it is a criminal offence to cultivate hemp without authorization, where it is done for the purpose of producing narcotic drugs. Otherwise, the penal provisions of the BetmG draw no distinction between cannabis and the other narcotic drugs and make both illicit trafficking and consumption an offence. Since the decision of the Swiss Federal Supreme Court of 29 August 1991,[6] the legal position is that, according to the present state of knowledge, cannabis, even in large quantities, 'cannot endanger the health of many individuals' within the meaning of Article 19(2)a BetmG. Any offence contrary to the first subparagraph of Article 19(1) BetmG, which concerns cannabis, cannot therefore be treated as 'a serious case' within the meaning of Article 19(2)a BetmG. Trafficking in cannabis products, unlike other drugs such as LSD, heroin or cocaine, is thus capable of being treated as a 'serious case' (carrying a minimum sentence upon conviction of one year's imprisonment) only if it is organized by a gang or carried on as a business. The consumption of hashish, however, will not automatically be treated as a 'minor case' in accordance with Article 19a(2) BetmG. It cannot be treated as such in the case of somebody who is a regular user of hashish and has no intention of changing this behavior.[7] For minor offences of cannabis trafficking and consumption the approach varies from canton to canton.[8] The courts have been tending to take a more lenient approach to sentencing for

[4] The difficulty of distinguishing between possession and consumption is briefly discussed below with reference to the case of the United Kingdom. Suffice for now to observe that the question as to whether possession or consumption is involved is often left to the discretion of the prosecution authorities.

[5] See the Report of the Swiss Federal Office of Justice of 21 January 1994; the same conclusion is reached by Seiler in the Legal Opinion on Hemp Cultivation, page 14, 13 January 1998.

[6] BGE 117 IV 314ff.

[7] BGE 124 IV 44ff.

[8] Hug-Beeli 1995: page 181: 'in Zurich the following practice has become established over recent years: a first-time hashish user receives a fine of between SFR 50 and SFR 300 – SFR 100 is the norm – depending on his financial circumstances. In the case of a repeat conviction for regular use the fine is increased accordingly, but does not exceed SFR 500. Notorious users

offences of personal consumption. In some cantons there are even places (meeting points, small venues) where cannabis is freely consumed or sold in small quantities. Ten of the 26 cantons also confirm that their police forces adopt a different approach to drug law enforcement where cannabis is concerned, as opposed to other illegal substances, and tend to turn a blind eye to consumption offences (see Fahrenkrug et al 1995: page 143). According to the results of special surveys carried out by the Swiss Federal Statistical Office[9] of court decisions[10] in drugs cases in the years 1991 and 1994, cannabis products were the substances most frequently involved in convictions for drug use, especially where the person before the court was a minor (in 95 percent (1991) and 91 percent (1994) of cases where a minor was convicted on a drugs charge). These rates fall to 65 percent and 51 percent in the case of adults. In cases where no criminal conviction is entered in the records, the most common court orders against persons convicted of mere consumption of cannabis are fines, followed by censures or cautions.

2.6.3 The Swiss Road Traffic Act

An aspect of cannabis consumption which merits special attention is the scientific debate over the issue of driving under the influence of psychotropic substances. Here again there are divergent views. There are studies which show cannabis to cause negative effects on driving performance (reduction of capacity to adapt during difficult maneuvers (cited in Bühringer et al 1993: page 9). Other studies have failed to detect any significant effect on motor functions and reaction time (cited in Hug-Beeli 1995: page 556). It is true overall that both the excessive consumption of alcohol or other psychotropic substances and their consumption in combination can impair driving performance. An Australian report by Hall et al (1992: page vii) found that drivers with THC in the blood drove more cautiously and had a lower propensity to take risks than drivers with alcohol in the blood. In studies on accident victims, however, the presence of THC in the blood was detected in up to 37 percent of cases, mostly in combination with an elevated alcohol level. Are cannabis users therefore more likely to be involved in accidents? The above figures do not provide an answer since, for one thing, the presence of THC in the blood indicates only that cannabis was recently consumed and not a cannabis-induced state of inebriation and, furthermore, the confounding effect of alcohol (in over 75 percent of the cases covered) makes it difficult to give a conclusive interpretation to the results[11]. To be on the safe side, a limit could be imposed on cannabis consumption by drivers, but such a provision would be difficult to put into practice. First, it is not possible to determine a cut-off point above which cannabis consumption makes driving dangerous. Secondly, there is no direct correlation between THC content in the blood and driving performance (in contrast to the alcohol level of the blood).
These difficulties are reflected in the Road Traffic Act. In Switzerland, 'driving in a state of drunkenness', for example, is a misdemeanor under Article 91(1) of the Act, whereas being unfit to drive due to consumption of drugs is merely an infraction, under Article 90(1), unless it is accompanied by a serious traffic violation within the meaning of Article 90(2) (Hug-Beeli 1995: page 561f). However, the law does provide for the punishment of a person found driving under the influence of illicit substances[12]. Under the current legislation, the court has discretion to deal with a case of driving under the influence of illicit substances after taking

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may be fined between SFR 500 and SFR 1000 and in exceptional cases may even receive a custodial sentence. 'Weekend use', as it is called, which means taking cannabis no more than once a week, and consumption on a purely occasional basis, at parties etc. are either not punished at all or attract merely a caution.

[9] Drugs and the Criminal Law in Switzerland, results of two surveys, 1991 and 1994, Swiss Federal Statistical Office, Berne 1997; page 25f.

[10] Only the decisions not entered in the criminal record give details as to the type of drugs used (1991: 62 percent and 1994: 78 percent of convictions for drug use). These findings therefore relate to these decisions and do not provide an overall picture of the various drugs dealt in or consumed by those convicted.

[11] In addition, comparative figures on the incidence of cannabis in the blood of non-accident victims are lacking. It is therefore not possible to establish whether cannabis users are proportionately over-represented among accident victims.

[12] Under Article 31(2) of the Road Traffic Act, a driver who is not fit to drive is guilty of an offence under Article 90(1) in a minor case and under Article 90(2) in a serious case.

into account all the circumstances of the case.[13] In Germany, too, the Cologne Oberlandesgericht (Higher Regional Court), in a decision given on 24 August 1990, has recognized that there is still insufficient empirical data to show exactly the impairment of driving performance that occurs following cannabis consumption (Hug-Beeli 1995: page 565; see also Bühringer et al 1993: page 9).
The Road Traffic Act is currently in the process of being amended. In order to improve road safety, the proposed amendments are intended to enable more effective action to be taken against those who drive in an unfit condition. In the consultation process on the draft amendment, a unanimous welcome was given to the proposed creation of a federal power to take blood and urine samples from a driver suspected of being under the influence of narcotics or medication. It is also proposed to give the Federal Council powers to introduce a zero-limit for certain substances – narcotic drugs and/or medicines – deemed to have been proven to cause unfitness to drive. In the case of all other substances, an allegation of unfitness to drive would have to be proved in each specific instance. In relation to this proposal, the question will again arise as to which category of substances cannabis falls into. The Federal Office for Roads, in its submission on the proposed legislation, expresses the view that cannabis can impair driving performance for a period of approximately eight hours following consumption. It has not been conclusively established to what extent cannabis consumption can result in flash-backs i.e. episodes of phantom inebriation following drug-free intervals (BGE 124 II 566).

2.6.4 Agricultural and private cultivation

2.6.4.1 Hemp in agriculture

Under the sustainable resources trial being conducted by the Federal Office of Agriculture, the Federal Government provides subsidies for the cultivation of low-THC hemp (THC content of less than 0.3 percent) for industrial use. Hemp cultivation for the production of edible oils, etc., is not eligible for subsidy since sustainable resources, as defined, may not be used as foodstuffs for humans or animals (Article 6a(2) of the Ordinance on Production Control in Crop Farming). A list of saleable varieties of hemp seed in the agricultural sector was brought into effect in Switzerland on 1 March 1998.[14] Delivery notes and certificates are used to monitor hemp seed transactions and the Federal Office of Agriculture carries out tests to determine THC content. Anybody growing hemp with a THC content in excess of 0.3 percent is liable to investigation and prosecution. These provisions do not apply directly to hemp grown for non-agricultural purposes (e.g. as an ornamental plant or house-plant).

2.6.4.2 Hemp in food, cosmetics and articles of daily use

Hemp blossoms, seeds, volatile oil and other plant parts are currently used in food and cosmetics production. Latterly, a variety of products such as hemp oil, hemp biscuits, hemp pasta and hemp-blossom-flavored beer have appeared on the market. By law, foodstuffs may not produce any pharmacological effect. With the amendment of the Ordinance on Foreign Substances and Ingredients in Food Products (FIV) on 30 January 1998, maximum limits were introduced for the THC content in various foodstuffs. For example, hemp seed oils containing more than 50mg/kg no longer constitute foodstuffs within the meaning of Article 3 of the Food Act. The FIV amendment came into effect on 15 February 1998. There are no equivalent regulations in the product categories of cosmetics and articles of daily use.

2.6.4.3 Hemp in medicine

At both national and international level there is keen interest in the medical use of the hemp plant or its extracts (see section 2.5). The use of narcotic drugs for medicinal purposes is

[13] See Bill of the Federal Council to the Federal Assembly on the Amendment of the Swiss Road Traffic Act of 14 November 1973, in Hug-Beeli 1995: page 563.
[14] Ordinance on the Production and Marketing of Seeds and Plants. Amendments of 25 February 1998 and Ordinance of the Federal Office of Agriculture on the Varieties Catalog for Hemp, 26 February 1998.

regulated by the BetmG. That Act prohibits the production, supply, possession and consumption of narcotic drugs for non-medical use, in accordance with Switzerland's obligations under international conventions. With the enactment of the BetmG in 1951, the existing general prohibition on opium was extended in accordance with the recommendation contained in the International Convention of 19 February 1925 to extend prohibition to hashish, other than where used for therapeutic purposes.[15] In the eyes of the legislature of the time, the medical utility of cannabis was regarded as at best marginal. Today, only scientific research into cannabis i.e. into its psychoactive constituents, is allowed, subject to authorization being obtained from the Swiss Federal Office of Public Health in accordance with Article 8(5) BetmG. However, Article 8(5) BetmG makes no provision for the authorization of cannabis for medical use, not even for limited medical use, as in the case of heroin or hallucinogens. Thus hemp products whose active constituents produce psychotropic effects cannot at present be used for medical purposes in Switzerland. Plant extracts such as hemp tinctures or hemp extracts or other compounds are no longer included in the current lists of the Intercantonal Office for the Control of Drugs (IKS). The position is somewhat different in the case of individual active constituents: under the current legislation they may be used in clinical studies and for limited medical applications – but subject to stringent conditions. Article 8(5) BetmG permits the use of THC in the treatment of a small number of serious cases of spasticity, which are not treatable with other medicines (severe spasmodic contractions in paraplegics or tetraplegics or in multiple sclerosis patients).

2.6.4.4 Hemp as a "dual-use crop"

Hemp has become a dual-use crop, i.e. it may be both consumed as an illicit narcotic drug (marijuana, hashish) and used legally in agriculture as a renewable resource for the textiles, oil, paper, rope and building industries, or for the production of foodstuffs and articles of daily use, or as a medicine. This duality of lawful and unlawful uses poses major difficulties for the authorities in policing hemp cultivation and the sale of its various products[16]. From the perspective of the law enforcement agencies the problem lies in the fact that all varieties of hemp may lawfully be grown provided they are not grown for the purpose of producing narcotic drugs, with the onus of proving such intention lying on the prosecution authorities. Similarly, in the case of the sale of hemp products it is incumbent on the prosecution authorities to adduce proof that the products in question are prohibited substances having a psychoactive effect and that the seller has offered the products for sale in that knowledge. It is virtually impossible for the prosecution authorities to discharge this burden of proof any more, particularly in relation to the growing export trade for hemp products, as the final processing and use of the products takes place abroad. According to police figures, Switzerland is increasingly an exporter of hemp for use as a drug[17] (see also section 2.2.2)

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[15] BBl 1951 I 843

[16] See the Evaluation Report of July 1998 issued by the Central Office for Criminal Police Matters on the survey of cantonal prosecution authorities concerning the question of hemp cultivation, hemp products and their sale and the introduction of an aurhorization requirement for the cultivation of hemp.

[17] See Half-yearly Report No 1/98 of the Federal Office for Police Matters/Central Office for Criminal Police Matters: Drugs, Counterfeit Money

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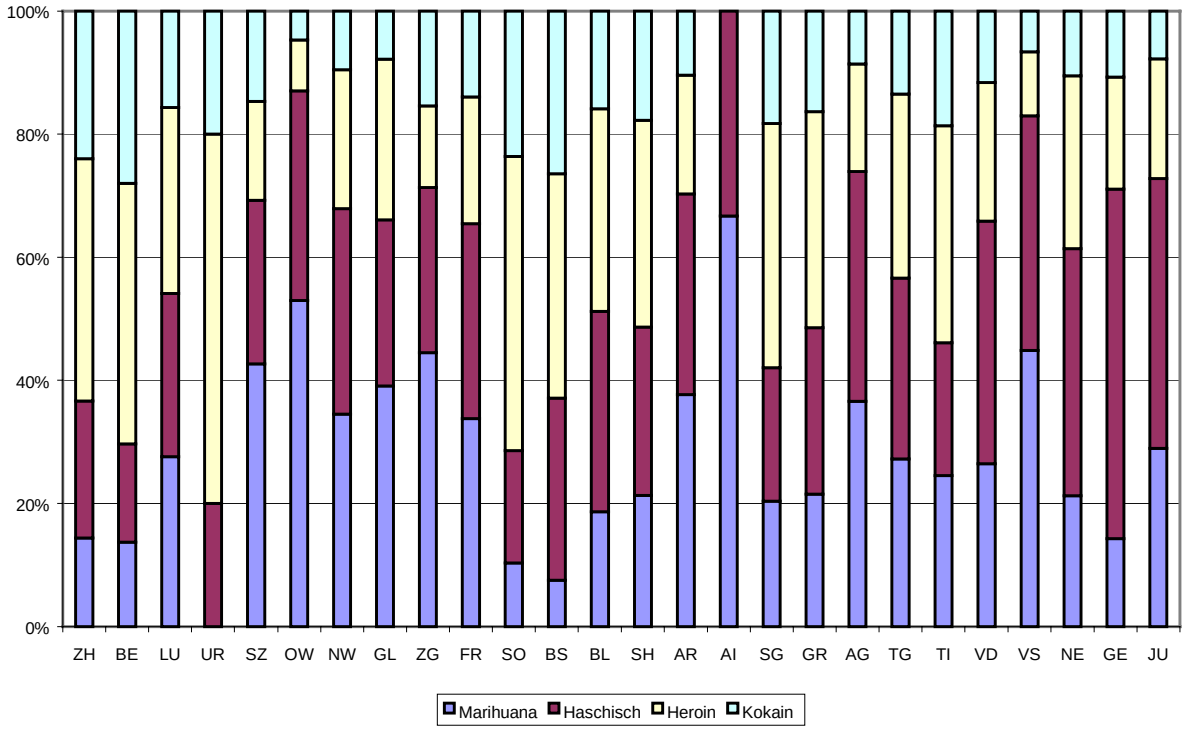
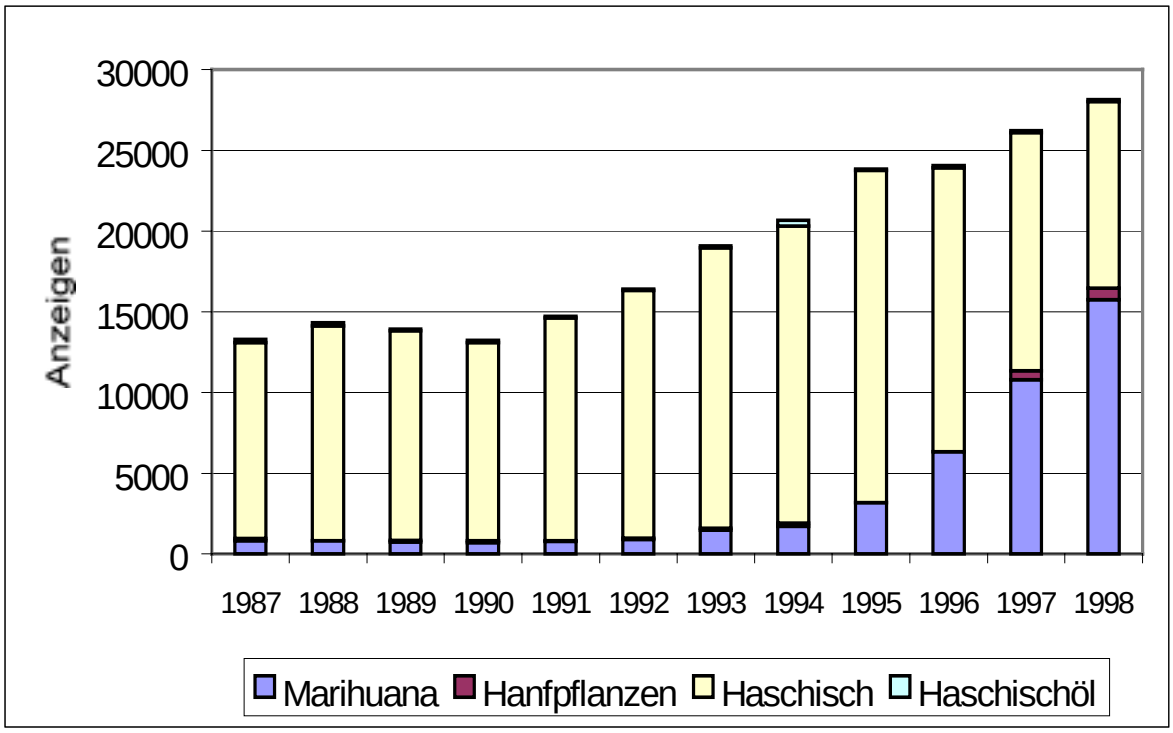
2.7 Enforcement of the existing legislation

As shown above in sections 2.2 (availability and trade) and 2.6 (The legal environment), the duality of licit and illicit uses poses major difficulties for the regulation of cannabis cultivation and the sale of cannabis products. The prosecution authorities are required to provide additional evidence as proof that hemp under cultivation is being grown for the purpose of the illegal production of narcotic drugs or that hemp on sale is intended for illegal consumption. Such evidence is often not possible to produce or, where it is, only at an inordinately high cost in terms of administrative resources.
Often the only means of proof is the evidence of the consumers of the hemp products themselves. Obtaining such evidence is a time-consuming and expensive process. Another difficulty for law enforcement officers is the fact that the bulk of the hemp plant can be channeled into legal uses after harvesting (hemp stems and leaves for fiber production, hemp seeds for oil production), while the parts with the highest THC content are used as drugs (flowering tops, fruit and resin).
On 16 October 1998, in a case which attracted widespread notice, the 6th division of the Zurich Bezirksgericht (District Court) held that the mere fact of declaring hemp bags as "scented pillows" constituted in itself an attempt to circumvent the BetmG and that selling these "aromatic pillows" was the equivalent of dealing in cannabis. Among the grounds relied upon by the Zurich court in its judgment was the fact that in the case of this product the element of narcotics production required by the BetmG had already taken place and the product was capable of being consumed in its present form.
The above-mentioned difficulties together with regional variations in the perception of the drugs issue lead to substantial disparities from canton to canton in the way the authorities deal with cannabis users. Even the level of police charges against consumers of soft drugs is uneven. In a number of French-speaking cantons and in the canton of Aargau – as the following chart illustrates on the basis of various examples – the majority of charges brought for drug use offences concern hashish and marijuana. In the large German-speaking cantons, in contrast, the police concentrates to a much greater degree on heroin and cocaine users.
Police figures (Swiss Narcotic Drugs Statistics, Federal Office for Police Matters) indicate that hashish consumption has barely increased in recent years whereas consumption of marijuana (most of it domestically produced) has risen sharply. The shift from hashish to marijuana is manifested both in the number of prosecutions and in the level of seizures.

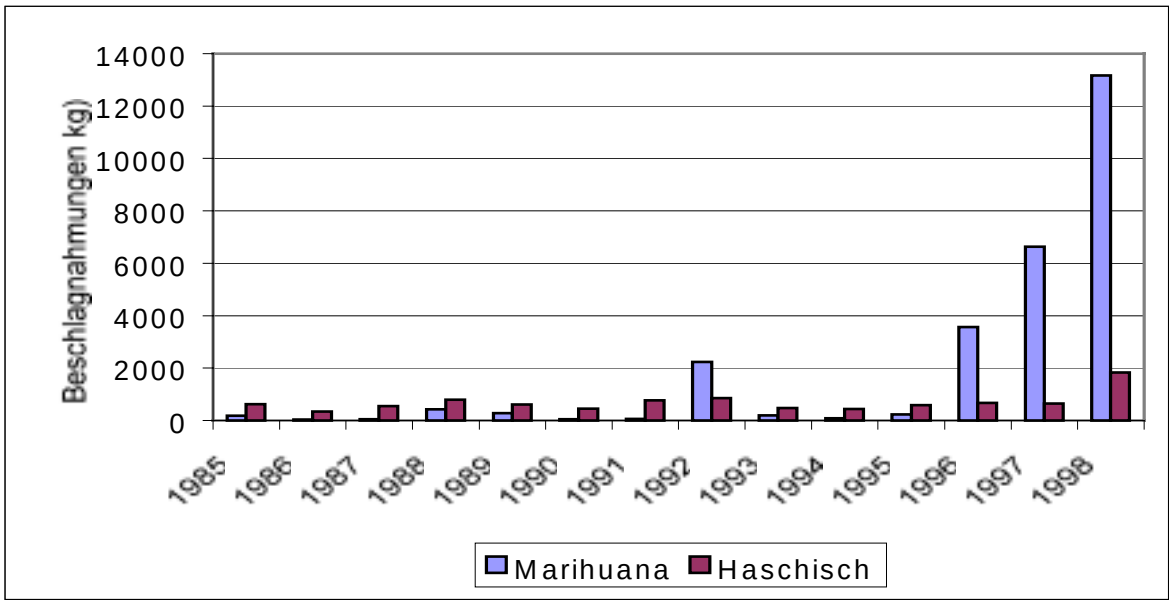
Police charges for consumption offences 1997



[Legende: Marihuana / Hashish / Heroin / Cocaine]
The most striking feature is the variation between cantons in the proportions of police charges for offences relating to 'soft' drugs (marijuana and hashish) and 'hard' drugs (heroin and cocaine).



[Grafik: Charges / Marihuana / Hemp plants / Hashish / Hashish oil]
Charges for hashish consumption have remained more or less constant since 1987, whilst those for marijuana consumption have increased dramatically from 816 (1987) to 15,734 (1998). With the exception of last year, when 1837 kg hashish was seized, there was no overall increase in the volume of hashish seizures in the period from 1985 to 1997; volumes ranged between 341 and 858 kg. From 1996 onwards, however, the level of marijuana seizures has been rising (1998: 13 tonnes).



Datenquelle:
(Schweizerische Betäubungsmittelstatistik, Bundesamt für Polizeiwesen, Berechnungen und Grafiken: BAG, Maag)

[Grafik: Confiscation (kg) / Marihuana / Hashish / Source: Swiss Narcotic Drugs Statistics, Federal Office for Police Matters; Calculations and graphs: SFOPH, Maag)

2.8 Effects of the status quo

In this chapter we will show the effects of the status quo in relation to cannabis on the situation in Switzerland.
The following are the main (positive and negative) consequences of prohibition and, in particular, the prohibition of consumption:

- 2.8.1 General preventive effectiveness
- 2.8.2 Aid in crime detection
- 2.8.3 Higher propensity to undergo treatment
- 2.8.4 Prevention of consumption in public
- 2.8.5 Cost of policing and prosecution
- 2.8.6 Stigmatization of users
- 2.8.7 Doubts as to appropriateness and credibility
- 2.8.8 Inequality of justice
- 2.8.9 Corruption

Although some material is available on the consequences of the prohibitions in force in other countries, little comparable research has been undertaken in Switzerland. With the exceptions of 2.8.1, 2.8.5 and 2.8.8 there is no relevant statistical data on the issue either. The following discussion is based on case studies, observations and a weighing up of the evidence.

2.8.1 General preventive effectiveness

It had been hoped that the outlawing of consumption would reinforce general prevention. But the adoption of the measure failed to halt the rise in Swiss prevalence figures either for cannabis or for other illicit drugs; the figures for cannabis have increased approximately threefold over 20 years (surveys of conscripts 1971-1993), and among schoolchildren they doubled between 1986 and 1994 (Müller et al 1997). Nor did the outlawing of cannabis consumption prevent the practice spreading to virtually all regions of Switzerland, including the rural cantons.
Whether the prevalence levels would have been even higher had consumption not been made an offence, however, is not amenable to proof. But there is a good deal of evidence that consumption is held in check by health concerns rather than by the criminal law prohibition (see Chapter 5)

2.8.2 Aid in crime detection

The criminalization of consumption was seen as a way of facilitating the identification of drug-dealers, since those arrested for drug use can be questioned as to the source of the drugs. But, at best, this method succeeds in tracking down small-time intermediaries. These days the police have more effective ways of exposing the major drug rings.
It was not the Narcotics (Amendment) Act which first outlawed consumption. It had already been effectively illegal after the Swiss Federal Supreme Court held that one could not consume narcotic drugs without first having been in their unlawful possession or having otherwise obtained them, thereby committing a misdemeanor contrary to Article 19(1) of the Swiss Narcotics Act (BGE 95 IV 179). The Amendment Act thus merely confirmed the existing situation, albeit reducing the seriousness of the offences of consumption and procurement for personal consumption from misdemeanors to infractions (with the insertion of Article 19a(1)). This step was criticized by the police at the time as a softening of the law, since a person charged with an infraction (rather than with a misdemeanor, which cannabis consumption had been prior to the amendment) cannot be held in pretrial detention.

2.8.3 Higher propensity to undergo treatment

There is a belief that the threat of punishment coupled with the option of accepting drug-treatment as an alternative acts as an incentive to drug-users to undergo treatment in order to avoid having a sentence imposed. Whether and to what extent that is the case, however, is less certain than is generally perceived. Even more doubtful is the critical question as to whether this type of motivation can constitute a sound basis for the therapy to have a reasonable prospect of success. But even if the benefit of the doubt is given on both those scores, the argument still has no bearing on the issue of the criminalization of cannabis consumption. The threat of punishment under Article 44 of the Penal Code is of little relevance in cannabis cases because of the fact that cannabis consumption in itself rarely, if ever, gives rise to a need for treatment, let alone in-patient treatment. Accordingly, Article 19a(3) BetmG, which gives the court power to send drug addicts for treatment even where they are charged only with consumption offences, has never been used in the case of cannabis – and rightly so. Moreover, there remains the possibility – if ever the need should arise – of using the provisions of the Civil Code, including the protective custody provision of Article 15b, as well as the other guardianship and child protection measures (Article 307ff. Civil Code).

2.8.4 Prevention of consumption in public

With regard to the negative consequences of open consumption, cannabis consumption is of relatively minor significance by comparison with the public injecting of heroin and cocaine. In any case, problems of public consumption could be dealt with by public order measures even if cannabis consumption were not prohibited.

2.8.5 Cost of policing and prosecution

Between 1981 and 1996 prosecutions for cannabis consumption rose approximately threefold (Müller et al 1997) reaching over 24,000 in 1996. Prosecutions for consumption offences account for the bulk of the total (approximately 80 percent); multiple prosecutions of the same individuals are also on the increase and now outnumber first-time prosecutions (Estermann and Rônez 1995).
An analysis of the court decisions from 6 cantons has shown that 81 percent of convictions of minors and 39 percent of convictions of adults were for hashish consumption (Uchtenhagen 1993). Between 1991 and 1994 the number of convictions for mere consumption rose by 68 percent to a total of 14,168, involving 12,783 individuals. The majority of those convicted for mere consumption received a fine, but custodial sentences were also imposed, not all of them suspended (Rônez und Fink 1997).
There are no recent figures for recidivism rates among those convicted of offences of this kind. However on the basis of the continuously rising figure for multiple convictions one may infer that the cost of enforcing the prohibition of cannabis consumption is out of proportion to its effectiveness as a means of preventing future acts of consumption.

2.8.6 Stigmatization of users

Counseling and treatment providers report many cases of school pupils being expelled, apprentices or employees being dismissed, and of other serious consequences suffered by clients as a result of police investigations of drug offences. Similar consequences can result where employers order staff to submit to a urine test. The potential damage to an individual's career prospects caused by dismissal and/or conviction for cannabis consumption bears no relation to the gravity of the offence. However, there are no reliable quantitative data available on this subject.

2.8.7 Doubts as to credibility and appropriateness

The law treats cannabis on a par with heroin, cocaine and amphetamines, which have a far higher potential for addiction and risk. This tends to undermine the credibility of the law as it

stands, since there is no valid basis for treating these different substances alike. In particular, the old argument that cannabis acts as a stepping-stone to harder drugs can no longer be used to justify this approach.
What is more, the current legal status of cannabis and the scale of the resources deployed in order to enforce it call into question the appropriatenessof the present legislation. This is particularly so in circumstances where the police and the public prosecution services become so over-stretched that they are unable to deal adequately with other matters. The resources expended on repressive measures in the drugs arena also appear disproportionate when compared with the level of spending on prevention and treatment.

2.8.8 Inequality of justice

The current legislation is not uniformly enforced in the cantons. For example, the number of prosecutions for consumption is unusually high in the cantons of Berne, Aargau and Vaud compared to other cantons (Müller et al 1997). Similarly in Appenzell Innerrhoden and Nidwalden the proportion of prosecutions for consumption is 90 percent (Estermann and Rônez 1995). Across all the cantons this rate ranges from as low as 24 percent to as high as 90 percent.
By and large, the authorities in urban centers concentrate more on combating drug-trafficking than those in rural areas, whereas they do not pursue cannabis consumption as vigorously or systematically. In addition, the evidential requirements vary. In cantons where a fine is the normal sentence for consumption offences, fines frequently remain unpaid but are not converted into prison sentences as a result; in those cases the individuals concerned go unpunished (Cesoni et al, no year given). All this produces a situation of unequal justice which, while the reasons for it are apparent, nonetheless casts further doubt on the credibility of the criminal law in this area.

2.8.9 Corruption

Differences in the application of the criminal law together with the profit potential of the drugs trade are two factors which favor corruption. A further factor is the law's attitude to cannabis consumption which, in the eyes of many people today, is devoid of any rational basis. To what extent corrupt practices may have actually crept in, however, is a matter on which there is no reliable material available.

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3. Ethical implications of a liberal policy on drugs

One of the criteria on which every drugs policy will be judged is how well it reflects society's moral values and civil liberties. A commission of experts cannot provide any definitive answers to such questions but can identify various issues which are of relevance in the evaluation of the appraisal of the options discussed below.

The core element of human rights and of a morality founded on the consensus of the community is the protection of individual rights, dignity and freedom of choice. This common aspiration is enshrined in the catalog of fundamental rights established by every society which is based on the rule of law and democratic principles. How each individual should live his life and the goals he or she should pursue, in a liberal society, are matters which only the individual can decide. There is no consensus within society on these questions and no such consensus is sought. In a pluralistic society, thus, there is no guarantee that answers to questions of personal lifestyle by which an individual or a group may regard itself as bound will also be viewed as binding by all the others.

This situation is mirrored in the dichotomy between law and morality. In principle, the law confines itself essentially to regulating social relationships. Accordingly, only an individual's obligations to other individuals or to society as a whole are regulated by law and not those obligations which the individual owes to himself or herself. How an individual behaves toward himself or herself is a matter for that individual alone, provided no others are harmed or endangered by such behavior. This principle applies even to the most extreme forms of self-inflicted injury, right down to (attempted) suicide, which is not an offence in the eyes of the law. In this light, it is highly questionable whether indirect consequences of such behavior which may adversely affect other individuals or society as a whole, such as absence from work or the costs of accidents, illness and welfare, can be construed as harm to others the prevention of which may legitimately entitle the State to exercise its coercive powers. These doubts apply particularly in the case where a particular lifestyle is enforced by the threat of punishment, in particular by the threat of deprivation of freedom.

Against the background of the above-mentioned rights and liberties, a number of fundamental issues arise in relation to what might constitute a socially justifiable drugs policy.

Does it follow from the principle that each individual is prima facie responsible for himself or herself and for his own life that society is precluded from taking any interest in the fate of the individual? Does it also follow that society has no obligation to protect the individual from himself or herself – if the circumstances arise – a responsibility which flows from the concept of human solidarity? At any event, it is to a large degree this very tension between these two conflicting objectives which characterizes the legal and ethical issues at the heart of an enlightened drugs policy. Such a policy seeks to reconcile the liberal goal of individual autonomy and the freedom to take drugs with the need to protect the young, who are not yet capable on their own of perceiving their best interests, from being harmed by drugs.

In the case of minors, a moderate degree of paternalism in the form, for instance, of youth protection measures – including, for example, a ban on the supply, sale or possibly even the consumption of drugs – would appear to be a reasonable approach, capable of commanding a consensus. This is because it is based on the sound premise that the young are not yet capable of fully understanding what is in their true and long-term best interests and of acting accordingly. It is different for adults. In their case, outright prohibition, backed up with the threat of legal sanctions, constitutes a highly paternalistic approach which disregards the autonomy of the adult citizen, who is well able to make up his own mind as to what is best for him or her.

The following suggested approaches to the cannabis issue are aimed at minimizing the apparent or real conflicts between ethical and legal considerations. These tensions can never be fully resolved since every future drugs policy will have to balance the protection of individual freedom and health against that of collective rights and public health concerns, and conflicts between these two objectives are always inevitable.

4. Options

In this chapter we will present the different options for future legislation on cannabis consumption, purchase and supply. In public discussion of this topic various legal terms are continually used in a vague or misleading sense. This is particularly true of the notion of an 'expediency principle' which has entered the vocabulary in this country under the influence of the Dutch practice in relation to cannabis. Section 4.1 is therefore devoted to clarifying a number of terms. In section 4.2 we describe options which could be implemented within the ambit of the United Nations Single Convention of 1961. Section 4.3 then looks at legalization models. Chapter 5 considers the foreseeable consequences of the various options. Finally, Chapter 6 consists of an evaluation of the options.

4.1 Clarification of terminology

4.1.1 Decriminalization under substantive and procedural law

'Decriminalization', as a general term, denotes a change in the law which has the effect of removing, with prospective effect, the criminal sanction attached to a particular form of behavior. A distinction is made between *substantive* and *procedural* decriminalization. The relationship of the term to another frequently used expression – *legalization* – will also be explored.
While the meaning of the term 'substantive decriminalization' is self-explanatory (it means removing the criminal sanction for conduct which was previously prohibited), to facilitate a better understanding of the reform models considered below some further explanation must first be given of the term 'procedural decriminalization' i.e. a relaxation of the obligation to investigate and prosecute crime involving the partial disapplication of the procedural law's 'legality principle' in favor of the so-called 'expediency principle'.
The expediency principle, as such, does not exist. The term merely refers to a common concept, which in practice however find expression in various forms. The basic idea is this: the substantive law (criminal law) remains unchanged but not every offence (which comes to the attention of the authorities) has to be investigated and prosecuted – contrary to what the procedural law's legality principle would demand. We will now look briefly at the key differences between the Swiss and Dutch understandings of the expediency principle in the field of drug enforcement law.

4.1.1.1 Discretion in Swiss law

In Switzerland the expediency principle is understood as meaning that the criminal justice authorities, but not the police, are given discretion (which must be exercised on proper grounds) *exceptionally*, in particular circumstances which are specified *in legislation* (mainly in the cantonal procedural rules but to some extent also in criminal justice statutes), to refrain or to desist from prosecuting or to seek no penalty for conduct which is prohibited by the criminal law. Decisions are always taken in the light of the facts of the individual case, although the grounds on which the discretion is exercised are expressed in broad terms. Decisions not to prosecute must not become standardized to such an extent that particular conduct which the criminal law has made an offence is no longer ever prosecuted or punished. For example, it would not be possible for the prohibition of cannabis consumption to be undermined by being always dealt with as a minor case under Article 19a(2) of the Swiss Narcotics Act, resulting in the proceedings being discontinued or no sentence imposed (BGE 124 IV 44 E. 2 b). It is of course possible, and a common practice, for the prosecution authorities to exercise their discretion in accordance with schematised internal guidelines and for the police to take a lead from that practice, although there is no legal basis for the police to operate in this way (referred to as 'de facto expediency'). This gives

rise to some marked divergences between the cantons in prosecution and sentencing practice[1].

4.1.1.2 Discretion in the Dutch sense[2]

In the Netherlands, the criminal law (in relation to all offences but particularly drug offences) confers not an obligation (as is the case in Switzerland under the prevailing legality principle) but merely a power to prosecute. This does not apply merely on a case by case basis: it is actually possible to refrain from prosecuting certain offences altogether, and thus to 'rewrite' the substantive law to some extent. This is normally done by means of guidelines issued by the Conference of the five Prosecutors General and approved by the Minister for Justice, to whom they are answerable. These guidelines are binding throughout the Netherlands and are published in the official gazette. They also apply to police investigations. They specify which offences are to be prosecuted in what order of priority and which offences are (in future) not to be prosecuted. The Minister for Justice is responsible to the national parliament in respect of the exercise of his authority over the Prosecutors General. This indirectly makes for a degree of parliamentary control, since the government (which is reliant on the parliament's support) will ensure, in its own political interest, that the guidelines curtailing prosecutions are not too far removed from the majority view prevailing in the parliament (and thus indirectly from the wishes of the electorate).

Using this machinery, the Netherlands has largely decriminalized dealing in small quantities of cannabis (together with possession of small quantities and consumption), primarily by means of guidelines which provide that 'coffee shops', as they are known, and their clients should not be prosecuted for the illegal sale or purchase of cannabis. This is subject to the following conditions: no advertising, no hard drugs, no breach of public order, no selling to minors or of quantities in excess of those required for personal consumption (the limit was formerly 30 grams and is now 5 grams). But no provision is made in relation to an equally important question: what quantities of cannabis the coffee shops may purchase or keep in stock. In fact, the guidelines state that it is not possible to specify maximum permitted quantities for want of a statutory basis (so that a coffee shop operator who is at all times in possession of sizeable quantities and, if individual transactions are aggregated, also sells large quantities, ought really to be prosecuted). In practice, this loophole appears to be dealt with in a fairly informal manner: either by the police turning a blind eye or else a) using the possibility provided for in the guidelines for a further curtailment of law enforcement by arrangement between the local prosecutor, the local police and the mayor's office, b) by agreements with the coffee shop owners based on arrangements of the above kind or c) by the local authorities operating coffee shops themselves. However there is no waiver of criminal prosecution, at least not 'officially', in the case of those who supply coffee shops, with the remarkable consequence that the cannabis which de facto can legally be sold can be procured only from illegal sources, the result of which is that, contrary to the objective of separating the drugs markets, the coffee shops have remained to a greater extent than expected within the milieu of hard drugs, money laundering and organized crime.

4.1.2 Decriminalization and legalization

In accordance with standard usage, the term legalization and the legalized availability model are used in this report to refer to forms of legal regulation which remove the criminal sanction – i.e. make lawful – the handling of narcotic drugs of the cannabinoid type (or at least some of them) including cultivation, production, supply, purchase and consumption, subject to certain conditions (e.g. selling to minors prohibited). In effect, legalization means full decriminalization under the substantive law, as opposed to limited decriminalization restricted, for instance, to consumption and purchase for personal use.

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1 Albrecht, 1995, Art. 19 N. 10; Art. 19a N. 47; Art. 19b N. 8 (on the related issue of determining what is a 'small quantity'); Killias, Vorschläge betreffend die Verankerung des Opportunitätsprinzips im zukünftigen Betäubungsmittelstrafrecht, 23.11.1998, II. ff.; vgl. auch BGE 124 IV 184 ff.

2 This topic and the following are discussed in detail in Killias/Grapendaal, 94 ff; Rüter 1988, 385 ff; 1992, 147 ff.

4.2 Models of limited decriminalization

4.2.1 Introduction and summary

The following summary shows the most important variants which are possible under the United Nations Convention of 1961. The range of variants would be reduced if Switzerland were to ratify without reservations the United Nations Convention of 1988. It is the view of the Commission that Switzerland should not ratify the Convention without reservations, in order to keep all drugs policy options open.

Variants possible under the United Nations Single Convention of 1961

Conduct

Consumption — criminal offence or not

Possession for personal use — criminal offence or not with or without a maximum quantity limit

Cultivation for personal use — criminal offence or not with or without a maximum quantity limit

Sanctions

Consumption — criminal or other

Possession for personal use — criminal or other

Cultivation for personal use — criminal or other

Toleration (expediency principle)

Consumption/possession — with or without a maximum quantity limit

Cultivation — with or without a maximum quantity limit

Sale — with or without conditions

Legislative variants
There are considerable differences in drugs legislation around the world, even among the countries which have ratified the Single Convention of 1961. There are also internal variations in the criminal law within those countries. For example, possession of small quantities of marijuana is treated as merely an infraction in ten states of the USA, but as a misdemeanor in the remainder. The penalty for this ranges from a fine of between US$500 and US$10,000 to one year‘s imprisonment. The penalty for possession of more than a small quantity is imprisonment of between six months and life (The Lindesmith Center 1998). A comparative analysis of legislation on the possession and consumption of cannabis in a number of European countries was carried out in a Swiss study (Cattacin and Renschler 1997). The differences are apparent from the following table.

Cannabis legislation in Europe and the USA

Country	Consumption/possession illegal	Penalties
Germany	- / p	no penalty for small quantities
France	c / p	?
United Kingdom	c / p	low
Italy		- / - fluctuates
Netherlands	- / p	de facto no penalty
Austria	c / p	low
Sweden	c / p	varies
Switzerland	c / p	low
Spain		- / - only public consumption illegal
USA		c / p variable, partly high

(from Cattacin and Renschler 1997)

The differences become even clearer when one observes the changes in anti-drugs legislation in the various countries. In some the penalties are being reduced while in others the opposite is happening. Even within regions sharing a similar historical and cultural background the laws of different countries have been increasingly diverging (for example in Scandinavia, Hakkarainen et al, 1996). One common feature of all these differences, however, is that they reflect differences in attitude rather than differences in the empirical facts that have been established in relation to cannabis consumption and dealing.

4.2.2 Removal of the substantive offence of consumption and procurement for personal use

In the past, the establishment of new criminal offences in relation to cannabis products was usually founded on arguments of general prevention. This was particularly so in the case of the amendment of the Swiss Narcotics Act in 1975, which made cannabis consumption a statutory offence.
At the forefront of the current debate on drugs policy reform is the proposal by the 'Experts Commission on the Amendment of the Swiss Narcotics Act' (Schild Commission) to remove from the statute book the offences of consumption and activities of procurement or preparation solely for personal use (cultivation, purchase, possession etc.).[3] There are a number of arguments in favor of substantive decriminalization along these lines and they are considered in Chapter 7 below. The Report also contains a separate discussion of whether it should continue to be an offence to supply cannabis to others for their own personal consumption and not for profit.
There is little point, either from a legal or a practical standpoint, in removing the prohibition of consumption while maintaining in force the prohibition of preparatory activities and possession. If the offence of possession were retained every consumer could be convicted

[3] Report of February 1996, page 49 ff.

on a possession charge even if consumption itself were no longer a criminal offence. Definitions of what constitutes a small quantity for personal consumption vary widely however: in the Federal Republic of Germany, for example, the maximum amounts range from one gram (in Bavaria), six grams (in Lower Saxony), ten grams (in Northrhine Westphalia) right up to 30 grams (in Schleswig-Holstein). (These figures are based on the 1995 provisions). (Schneider 1995).

4.2.3 Change in the severity of penalties

Both increases and reductions in the severity of punishment for a wide variety of offences have been introduced in a number of jurisdictions over the past two decades. As part of its 'war on drugs' the United States has both increased the level of penalties and introduced other forms of punishment, such as loss of social security benefits or grants, confiscation of driver's license, notification of employer together with the attendant consequences, etc.
The present debate is centered on variants of the substantive or procedural decriminalization either of consumption alone or of consumption together with the preparatory activities for personal consumption. Another proposal that has been the subject of discussion is the substitution of administrative measures for criminal sanctions (Schneider 1995).
In States which impose custodial sentences for cannabis consumption, and particularly those where such sentences are heavy, a reduction in the level of penalties is also under discussion, since heavy sentences are believed to cause more detriment than benefit to the offenders concerned and to the criminal justice system itself.

4.2.4 Introduction of an expediency regime for cultivation and retail along the lines of the Netherlands model

An alternative course to the decriminalization of consumption and procurement activities, but one which would achieve a similar effect in practice, would be to leave the statutory prohibition in place but to issue a legally-binding order directing the police and prosecution authorities to refrain from investigating and prosecuting violations. This is the approach which the Netherlands has opted to take. However, procedural decriminalization in this form, if restricted solely to consumption and prior activities enabling personal consumption, would amount to little more than a formal change of minor significance. A truly progressive and ground-breaking measure would involve the non-prosecution of retail dealing, including dealing from fixed premises on a commercial basis, under certain conditions (see section 4.1.1.2 above). In such a system, an expediency regime for suppliers could be readily combined with the decriminalization of consumption and activities preparatory to personal consumption.
Does the Netherlands solution offer a viable alternative for Swiss law – particularly with regard to the decriminalization of drug-dealing? It quickly becomes clear that the Dutch model cannot simply be imported en bloc. That would immediately give rise to difficulties caused by constitutional differences between the two countries, in particular the different understanding of the separation of powers principle, together with the fact that, unlike the Netherlands, Switzerland does not have a single Conference of Prosecutors General for the whole country but instead has twenty-six autonomous cantonal prosecutors who are not normally beholden to any authority (and at any event do not take orders from the Federal Minister of Justice). What is more, the power to waive prosecution *across the board* for certain offences would constitute a de facto disapplication of the substantive law and consequently would amount to a transfer of legislative power from the legislature to the body empowered to issue the relevant guidelines.
These difficulties do not mean that a system equivalent *in its end effect* to the Dutch model is not possible, but they would have to be taken into account in the way the system was designed. The starting point for a Dutch-style solution can be found in Articles 69 and 69bis of the Swiss Constitution, which gives the Federal Council powers of legislation in the field of narcotic drugs, including power to enact penal provisions and provisions governing the administration of criminal justice (see Article 30(1) BetmG). This means that the Federal

Council has power to issue implementing regulations to regulate the prosecution of crime, despite the fact that this is otherwise a matter within the province of the cantons (see Article 28(1) BetmG). The statutory basis for the issuing of such regulations would first have to be created in the BetmG, which would need to contain all the essential provisions enabling offences to be overlooked by the prosecution authorities (and by the police), so that the implementing regulations issued by the Federal Council would be limited to filling out the details[4]. Not the least attraction of this approach is that it would offer the possibility of extending procedural decriminalization, on a clear legal basis, to the cultivation, purchase, storage, possession etc. of medium/large quantities – activities which are antecedent to the small-scale retailing which would be tolerated under such a system. In this way the inconsistencies and weaknesses of the Dutch approach on this point (see the final part of section 4.1.1.2 above) could be avoided.
Decriminalization by means of the expediency approach does not – as the example of the Netherlands demonstrates – constitute a breach of international obligations assumed under the Single Convention of 1961. A number of difficulties (albeit of a formal nature) arise, however, in relation to the Vienna Convention of 1988 (which has not yet been ratified by Switzerland), Article 3(6) of which requires contracting states to endeavor to ensure that any discretionary legal powers are exercised 'to maximize the effectiveness of law enforcement measures' with due regard to the need for deterrence. This point could be dealt with by means of a reservation, however, as was done by the Netherlands.

4.2.5 Conditions to be met by models for change

The most important condition that has to be satisfied by the models described under section 4.2 is compatibility with the relevant United Nations Conventions. Note that these Conventions accord no special status to cannabis. The Conventions of 1961 and 1971, however, do not specify in any detail how the basic prohibition is to be enforced in law and in practice. The severity of penalties and the way the legislation is operated is left up to the signatory states. Only the list of offences to be established is mandatory. The substantive or procedural decriminalization of consumption and of preparatory activities are compatible with these Conventions.
The 1988 Convention, however, unlike the 1961 and 1971 Conventions, explicitly requires signatory states to make criminal offences of the possession, purchase or cultivation of narcotic drugs or psychotropic substances for personal consumption. This means that while consumption itself does not have to be prosecuted, the preparations for personal consumption do. If such offences are no longer to be prosecuted, a reservation will have to be made to the 1988 Convention.

[4] This is similar to the approach suggested by Killias/Grapendaal, page 103 ff., whose proposed legislation, however, would not meet these criteria. On examination, it contains neither a general clause empowering the Federal Council to make regulations concerning the non-prosecution of categories of offences i.e. not just in the specified cases, nor is it drafted broadly enough, if the category of such offences is meant to be closed. The condition that 'solely consumption or dealing in small quantities is involved' is not satisfied in the case of commercial retail outlets or coffee shops. Their 'dealing' necessarily involves purchasing and stocking – and perhaps growing – quantities which can be substantial – violations which, under this proposal, would be liable to be dealt with severely under existing law, with a minimum sentence on conviction of one year's imprisonment (Article 19(2)(b): offence committed by a member of a criminal gang; Article 19(2)(c): professional dealing, with a large turnover‘ or a ‘substantial profit‘").

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4.3 Models of legal availability of cannabis and THC products

4.3.1 Introduction and overview

The common feature of the models discussed in this section is that they all, in one form or another, would abolish the existing prohibition of cannabis and introduce legal availability for the plant, its products or its active constituents (in particular δ^9-Tetrahydrocannabinol THC). Comprehensive proposals for such models are to be found in the report of a UK experts group (Logan 1979) and in the proceedings of the London Cannabis Conference of 1998 (Single 1998). None of these existing surveys contains all the possible options, such as are presented here.

The most radical model treats cannabis like any other commercial good, albeit one subject to regulations and taxes, but the production, sale and purchase of which are not subject to any special authorization or restriction. This most radical variant is not at the forefront of the legalization debate. Other models involve control mechanisms which operate either at the level of the producer/vendor or consumer/purchaser. The purpose of the control mechanisms is to prevent or at least to minimize any adverse consequences of legalization. Examples of adverse consequences would be an overall rise in consumption, an increase in harmful forms of consumption, an increase in health and social problems and a higher endangerment of especially vulnerable groups. Whether and to what extent the controls envisaged are capable of averting adverse consequences of this kind is discussed in Chapter 5 below.

The common denominator of all the proposed control measures is the introduction of an authorization requirement for production, dealing and/or purchase. In the case of a medical prescription, the authorization function is reserved to medical practitioners, with or without special provisions. The licensing model is also based on authorization, the issuing of which can be subject to special conditions the fulfillment of which is capable of being monitored. Restrictions could also be imposed in relation to the purchase of cannabis products. Even free availability could be subject to conditions.

On the basis of a systematic analysis, the following models of legal availability arise for consideration:

Doctor's prescription (see section 4.3.2)
- for medicinal purposes
- for non-medicinal purposes

Dealing subject to authorization (licensing);(see section 4.3.3)
- with or without technical qualifications
- with or without proof of need
- with or without restrictions on sale
- with or without product requirements
- with or without taxation/ retail price maintenance
- with or without advertising restrictions

Purchase subject to authorization (see section 4.3.4)
- with or without age limit
- with or without proof of residence
- with or without exclusion of persons at risk
- with or without maximum quantity limits
- with or without registration of purchasers
- with or without logging of purchases

Free availability (see section 4.3.5)
- with or without restrictions on sale
- with or without product requirements
- with or without taxation/ retail price maintenance
- with or without advertising restrictions

Cultivation (see section 4.3.6)
- with or without mandatory notification
- with or without requirement of authorization
- with or without specified maximum quantity

4.3.2 Prescription of cannabis by medical doctors

Medical prescription of cannabis constitutes a special case. As a rule, what is meant here is prescription for medicinal purposes, that is, the therapeutic use of the active constituents of cannabis in the treatment of certain medical conditions. This topic is dealt with in section 2.5. The idea of a medical prescription for non-medicinal purposes is a very recent one that has been put forward as an alternative to the present prohibition of hashish.

4.3.2.1 Medicinal use

See section 2.5.2

4.3.2.2 Non-medicinal use

There have been isolated calls for medical doctors to be permitted to prescribe cannabis for purposes other than therapeutic ones. The advocates of this approach argue that it would allow information and advice to be given to users regarding the negative effects of cannabis use and enable such effects to be promptly detected and dealt with.
Such proposals have hitherto been rejected on the ground that prescription for non-medicinal use is inconsistent with the function of a medical doctor. Perhaps a more acceptable variant would be to permit cannabis to be supplied only to individuals who have undergone a medical examination and received medical advice. This idea is looked at under restrictions on the right to purchase (see section 4.3.4.).

4.3.2.3 Conditions for medical prescription

The prescription of cannabis or active constituents of cannabis for medicinal purposes presupposes that the products in question are registered as medicines and that the permitted indications are specified. In Switzerland such registration would have to be applied for to the Intercantonal Office for the Control of Drugs (IKS), on the basis of a file prepared in accordance with Good Clinical Practice guidelines.
Medical prescription for non-medicinal purposes would entail the authorization of all or selected medical doctors for that purpose.
In addition, the Swiss Narcotics Act would need to be amended accordingly and a reservation would have to be made to the United Nations Convention of 1988.

4.3.3 Licensing of dealing

Lawful availability of cannabis products can be provided in a controlled manner by introducing an authorization requirement for their importation, production and supply. The grant of such authorization can be made subject to certain conditions, compliance with which is monitored and failure to comply with which can mean loss of the license. Possible parameters and criteria for the grant of such authorizations are discussed in the following sections.

4.3.3.1 Limitation of the number of licensed outlets

In order to guard against an increase in the volume of consumption of cannabis products, the number of importers/producers/sales outlets could be restricted. This could be done, for example, by allocating quotas or by requiring proof of need to be shown. But instruments of this type would run counter to the general contemporary trend towards trade liberalization and are being done away with in the case of other dependency-causing substances (alcohol, for example). Moreover, the criteria to be used for fixing quotas or for the proof of needs are a contentious issue.
Another means of limiting the number of dealers would be to require specialist knowledge and professional expertise from prospective licensees. This would help to ensure that the businesses are properly managed. Another possibility would be to require a certificate of good character as a condition of eligibility for a license. But here again the general trend appears to be moving away from requirements of this kind.
One concrete proposal originating in Schleswig-Holstein, Germany, involves using pharmacies as distribution outlets for cannabis and cannabis products. Under such a system, its proponents argue, purchasers would be given proper advice and the products would be handled expertly. This is the only proposal yet to have been worked out in detail as a practical project to be carried out under scientific monitoring (Raschke and Kalke, 1997). It was drawn up following the approval by the Conference of Health Ministers of the German Federal States of the implementation of a model trial in November 1995. The reason why pharmacies were chosen as delivery points, apart from the pharmacists‘ specialist expertise, was the fact that coffee shops, tobacconists, public health offices and drug counseling units – which were the other candidates considered – were judged unsuitable (the first two because they failed to meet the criteria for participation in a scientific trial, the public health offices because they are viewed with suspicion by drug users and drug counseling units because they are too close to the drugs scene and to users of hard drugs). The project is scheduled to run for five years, minors are excluded from taking part and measures have been put in place to prevent abuses. A question still to be resolved is where to source the cannabis for this pilot project (both cultivation and purchase are seen to pose difficulties). Finally, enthusiasm for the project among the pharmacists concerned is apparently limited.
Similar arguments could be put forward in support of permitting the sale of cannabis in drugstores, for example: drugstore personnel have training in handling toxic substances and experience in advising customers, skills which are not generally found in hemp shops.
A perceived difficulty with all these proposed solutions, however, is that the vendor would have a commercial interest in maximizing sales; the only way of avoiding this would be for the distribution outlet to receive a fixed fee for its services, irrespective of the quantities sold.

Special restrictions on distribution outlets could include, for example, the prohibition of cannabis selling in highway restaurants (by analogy with the ban on alcohol in such outlets) or in school shops and recreation centers for young people.

4.3.3.2 Product requirements

In Switzerland, at present, it is lawful to cultivate cannabis plants with a THC-content of less than 0.3 percent and to sell food products having a THC-content of less than 0.3 percent. In similar fashion, a maximum THC-content for legally available cannabis products could be laid down. The rationale for doing so is that very high-percentage and concentrated forms present a significantly increased risk of adverse health consequences for the user.
Further product requirements could relate to the quantity per packet, health warnings to be displayed on packaging etc. Special quality specifications could also be considered.
Another issue to be considered under the heading of product requirements is whether all product formats should be permitted or not. To allow the sale of cannabis cigarettes manufactured on an industrial scale would be to run the risk of an increase in the volume of consumption: preparatory activities would no longer be necessary, a new and lucrative market would open up for the tobacco industry, suppliers would spend heavily on advertising and the hashish cigarette would acquire the status of a 'normal' consumer product. This is what happened when industrially produced tobacco cigarettes came on the market.

4.3.3.3 Taxation and retail price maintenance

By analogy with other potentially addictive substances, the sale of cannabis products could be taxed and thereby become a source of revenue for the State. Among the points in favor of such a measure are the fact that the consequential costs of drug consumption have to be met out of public funds and the argument that the higher prices caused by the effects of taxation would have a preventive effect. Retail price maintenance in the form of a minimum price could also be prescribed.

4.3.3.4 Advertising restrictions

The advertising of potentially addictive substances has been a subject of contention for many years. All-out bans on such advertising have been proposed on several occasions but have never been passed into law. Advertising restrictions have however been introduced, such as the ban on the advertising of addictive substances on radio and television and, in certain circumstances, on public property.
Were cannabis products to be made legally available under a licensing scheme, consideration would have to be given to a total prohibition of advertising. This would constitute an additional argument against the authorization of manufactured cannabis cigarettes, as an advertising ban would be virtually impossible to enforce in respect of such products.

4.3.3.5 Licensing without restrictions or taxation

The possibility of licensing the sale of cannabis without restrictive measures and without taxing the product is conceivable but has little in its favor. Of course, a license that has been issued could subsequently be withdrawn, in cases, for example, where the licensee was found to have sold adulterated products or was at the same time dealing unlawfully in prohibited substances.
Given that making cannabis legally available is not without its attendant risks, the feasibility of restrictive and fiscal measures in relation to the licensing option will have to be studied carefully.

4.3.3.6 Requirements for the implementation of licensing models

The first requirement would be to amend the Swiss Narcotics Act in order to remove cannabis and cannabis product from the lists of banned or prescription-only substances. Licensing models are not compatible with Switzerland’s obligations under the United Nations Conventions. At national level, legislation would have to be enacted laying down the rules governing the grant of licenses and the taxation provisions.

4.3.4 Controlled purchase

An quite different strategy from supply control measures consists of imposing controls on the purchase of cannabis products. The two strategies can be used in combination.
Purchase controls involve placing limitations on the quantity that may be purchased and restricting the category of persons authorized to make purchases or requiring that such persons to be registered. Common to all such models is that purchase authorization is not issued unless certain conditions are fulfilled. As a consequence, any person wishing to purchase cannabis products must apply for the necessary authorization and furnish proof that he or she satisfies the conditions laid down.

4.3.4.1 Rationing

Under this model a limit is placed on the quantity of cannabis products that can be purchased in a given month. Detailed proposals as to how such a rationing system would operate have not been produced. Such proposals would have to contain a realistic method for determining the permissible quantity and both for individual products and for the total purchase volume. A rationing scheme would also require eligible purchasers to be issued with counterfeit-proof purchase vouchers or for purchases made to be recorded in a central register. In both cases the administrative workload entailed would be quite considerable. Furthermore, in order for the rationing model to work there would need to be a credible notion as to what is the critical limit for regular consumption of cannabis products. Unlike the case of alcohol and tobacco (for which approximate values are known for the daily intake levels which can be consumed without serious risk of damage to health), a credible safe limit has yet to be put forward in the case of cannabis products.

4.3.4.2 Restriction of the right to purchase

It is known from cannabis research that certain groups of persons are more vulnerable than others when using cannabis products, particularly when the use is intensive. These include the young, pregnant women, individuals having a tendency towards paranoid psychoses and in particular those suffering from chronic paranoid psychoses, and finally individuals suffering from heart and lung disease (Kleiber and Kovar 1998, Gowing et al 1998, Hall 1998, Hall and Solowij 1998). For their protection and in order to limit the harmful potential, these persons would have to be denied the right to purchase. If a rationing scheme were to be adopted, another possibility would be to reduce the ration of cannabis products issued to these groups of persons.
The research also indicates, however, that the adverse mental health effects brought on by cannabis consumption are to a large extent determined by personality factors. But these personality factors are not amenable to sufficiently clear and conclusive diagnosis as to provide a scientifically tenable basis for imposing restrictions on purchasing rights. Further research in this area would be necessary.
For such groups, examination by a medical specialist would be a condition for the granting of a purchasing entitlement. However, the examinations would need to be repeated at regular intervals in order to allow detection of factors such as pregnancy and recent onset paranoid psychoses, for example.
Whether provisions of this nature could be implemented must be regarded as doubtful. There are no comparable provisions in force for other addictive substances such as alcohol and tobacco, although it has been proven that these also involve significantly higher risks for vulnerable individuals. But the provision of information and advice to individuals belonging to these categories is an acceptable alternative.

4.3.4.3 Registration of purchasers

The idea behind this model is that although everybody can apply for and receive a purchasing entitlement all purchases will be recorded. Particularly frequent and large purchases would attract attention. In police investigations of illegal cannabis dealing the volume of purchases made by an individual could be scrutinized and that individual's purchase rights withdrawn.

One variant would be, for example, that purchases would be logged only at the sales outlet; the purchase records would have to be transparent, however, in order to facilitate investigations by public health officials and the police.
Another possibility would be to have central registration of purchases. The most suitable center would appear to be the official agency which issues the purchase entitlements. The entitlement cards could be issued without personal data but with an identification number which would be recorded each time a purchase is made. In this way, only the official agency would have the means of identifying the individual in question.

4.3.4.4 Purchase entitlement without rationing or registration

If everybody were entitled to purchase cannabis products, with no restriction applying to particular groups of individuals, with no quantity limitations and with no registration, then there would be little point in requiring users to apply for a purchase entitlement.

4.3.4.5 Prerequisites for controlled purchase

As with the licensing models, all forms of legalized purchase would require the drugs legislation to be amended appropriately in respect of cannabis and cannabis products and an exception would have to be made for cannabis when ratifying the United Nations Conventions. In addition, it would be necessary to create the statutory basis for measures restricting the right to purchase. Finally, if a rationing scheme were to be adopted, a declaration obligation for cannabis products would have to be introduced.

4.3.5 Free availability

Free availability denotes a situation in which no special authorization is required either for the importation, production or supply, and no purchase entitlement is necessary for the purchase of cannabis products. But even free availability may be subject to certain requirements, on matters such as product characteristics, advertising , pricing and taxation. Restrictive measures of this kind are common practice in the case of many potentially addictive substances, such as alcohol, tobacco and habit-forming medicinal drugs, for example. The exceptions are solvents and other commercially available intoxicating substances.

4.3.5.1 Product requirements

Basically, the same product requirements are involved as those looked at under section 4.3.3.2: a maximum limit for the content of psychotropic constituents (particularly THC), clear marking and health warnings on the packaging, other quality requirements. In this case too, consideration would need to be given to a prohibition of the industrial manufacture of cigarettes with THC content, in order to prevent consumption levels being driven up.

4.3.5.2 Fiscal measures

Both the taxation of the products and the setting of minimum prices would need to be considered under this heading, along the same lines as discussed under section 4.3.3.3.

4.3.5.3 Advertising restrictions

As discussed under section 4.3.3.4 above, an advertising ban or at least some effective form of advertising restrictions would need to be looked at. This applies in the case of free availability just as much as under the licensing model.

4.3.5.4 No restrictive regulations and no taxation

This constitutes the most radical variant of the legalization of cannabis products. It has not hitherto attracted much serious consideration, since every form of legalization seeks to find a reasonable compromise between the drawbacks of prohibition and those associated with unrestricted marketing.

4.3.5.5 Prerequisites for the introduction of free availability

Once more the necessary legislative amendments would have to be enacted, both to permit legal availability and to introduce the necessary restrictions.

4.3.6 Cultivation

For the cultivation of cannabis plants all variants between the two following models are conceivable.

4.3.6.1 Cultivation permitted for personal consumption

This would necessitate stipulating what quantities of hemp plants could be grown for personal use.

- For their own self-supply adults are permitted to grow a maximum of 10 plants of the drug type on their own land or in their own home.

4.3.6.2 Strictly regulated cultivation

Legislative action would be required in order to give the Federal Government control over cannabis products and empower it to raise taxes from the growers.

- The Federal Government has a monopoly over the entire hemp market. Commercial production, processing, supply and distribution are allowed only with a license issued by the State.
- The Federal Government stipulates the total area under cultivation, quality standards, prices and taxes.
- The Federal Government controls the quality of all products and carries out research, both of which are paid for by the producers and suppliers.
- The areas under cultivation are allocated to selected operators according to criteria of agricultural policy and security.
- Outside of the selected operators in these valleys all commercial cultivation of cannabis is prohibited, with the exception of limited cultivation for self-supply (see above).
- The Federal Government issues market licenses to suitable operators in accordance with strict safety and quality criteria.

5. Consequences of the options

Since only some of the options considered have ever actually been implemented (the models based on the current regime of prohibition), the following discussion of consequences can be founded only in very small part on empirical research data. Instead we are restricted to evaluating circumstantial evidence and drawing inferences. The only way to remedy this state of affairs would be by implementing particular models as pilot projects with proper scientific monitoring and evaluation, along the lines of the Schleswig-Holstein initiative for the sale of cannabis in pharmacies.
The consequences are considered under the following headings: changes in risk awareness and consumption propensity, changes in consumption and consumption patterns, changes in the effects of consumption, consequences for the illegal cannabis market, need for new regulation and political consequences.

5.1 Change in consumption propensity

A criticism which is raised in respect of all the alternatives to the current regime of prohibition is that they could lead to a proliferation in cannabis consumption, since the general preventive effect of prohibition would have been removed (Logan 1979). In the following sections this assumption is critically examined in relation to each of the models.

5.1.1 Removal of the offence of consumption (see section 4.2.3)

In its report on the consequences of liberalization the Munich-based Institut für Therapieforschung concludes that the volume of consumption would rise in rough proportion to the degree of liberalization (IFT 1995). By analogy with the growth in alcohol consumption that took place as social controls of alcohol were relaxed, the IFT foresees consumption rising to reach similar levels to those of alcohol and tobacco consumption. Against that, it must be observed that the prohibition of consumption is only a minor factor in young people choosing not to take cannabis; health concerns play a far greater role in this (Bundeszentrale für gesundheitliche Aufklärung 1994). A similar conclusion was arrived at in an earlier US study (Johnston et al 1984).
A comparative analysis of countries in which consumption is and is not outlawed shows that there is no direct correlation between prohibition and the incidence of consumption (measured by prevalence statistics). A more valuable indicator would be an analysis of consumption prevalence figures before and after the decriminalization of consumption and of activities associated with personal consumption. But no prospectively designed, systematic study of consumption patterns before and after such a change in the law and enforcement practice has ever been carried out. The figures available show only that the prevalence of current cannabis consumption is not directly correlated to the presence or absence of a criminal sanction for consumption. The possibility of a general and sustained rise in consumption as a consequence of the lifting of the prohibition of consumption cannot therefore be ruled out but nor is such a development very likely. Instead, one might expect a temporary rise in curiosity consumption which, however, would not necessarily result in a rise in the number of long-term users; the majority of those who experiment do not become regular users and over time the overall level of consumption tends to fall rather than rise (Sieber 1988, Kleiber and Soellner 1998).
It should also be noted that there has been a sharp rise in cannabis consumption propensity in Germany in the period up to 1995, even moreso in the former East Germany than in the former West (Kraus et al 1998), without there having been any change in the legal status of the drug. This indicates a change in attitudes towards cannabis, the effect of which has been to boost consumption. Over the same period (1990-1995) actual consumption rates increased by a factor of between two and three – but only among males (Kraus et al 1998). The increase in consumption propensity was highest in the 21-24 age group (Simon et al 1997). But since 1995, despite the higher consumption propensity, actual consumption rates have stabilized and to some extent fallen back (Kraus and Töppich 1998).

In Switzerland too, there has been evidence available for some time that consumption propensity is less influenced by the legal status of the substance in question than by the perceived risks and by subjective feelings (Hornung et al 1983). More recently, surveys of school-children show that health risks, fear of dependency and of personality change, together with financial considerations are far more frequently given as reasons for abstinence than the fact that drugs are illegal (Müller et al 1997). Despite both cannabis and heroin, for example, having the same status in the eyes of the law, not only the actual prevalence figures but also the reported consumption propensity for the two substances are very different. This is largely accounted for by the fact that heroin carries a higher risk of addiction and damage to health. Thus the low propensity for heroin consumption associated with the perceived health risks of that substance contrasts with the higher propensity for cannabis consumption based on the perception of a far lower health risk, despite the fact that both substances are equally unlawful.
There is nonetheless a fear that removing the prohibition would send the 'wrong signal' and convey the impression that cannabis is harmless. There is a possibility, which cannot be rejected out of hand that, in the event of cannabis becoming legally available and product safety improving accordingly, the perceived risk of cannabis use would diminish further leading to a rise in consumption propensity. The point has therefore been rightly made that any change in the legal status of cannabis should be accompanied by intensive preventive measures in order to counteract any such mistaken interpretation.
Another consideration to be borne in mind is that the prohibition of consumption produces a degree of caution in users, with the result that consumption tends to take place in the private domain or in an environment where users are safe in the knowledge that they will not be discovered or reported to the authorities. The removal of the prohibition of consumption could thus have the effect of leading to an increase in public consumption. In some countries (e.g. Spain) it was therefore regarded as important to restrict the lifting of the prohibition to the private domain. Potential consequences of a proliferation of public consumption would be, first, to increase the attractiveness of consumption for others and, secondly, to create a problem with ambient smoke, the reduction of which is a current concern with regard to cigarette smoke.

5.1.2 Change in the severity of penalties (see section 4.2.4)

The same criticism as above is also made in relation to any reduction in penalties for consumption, possession, purchase and supply: that it could result in a weakening of the general preventive effect generated by harsher penalties. The example of the USA, in which the severity of penalties varies enormously from state to state without any corresponding divergences in the prevalence figures, shows that there is no systematic correlation between the scale of sanctions and the incidence of potential offences. It has to be borne in mind that the numbers of prosecutions and convictions is influenced by several factors, including the intensity of the police effort, the resources available for the purpose and, of course, the actual incidence of drug law violations. A prospectively designed and systematic study of the effects of an increase or reduction in penalties has yet to be carried out. The figures currently available do not support the conclusion that a reduction in the severity of sanctions results in an increase in consumption.

5.1.3 Introduction of a system based on the expediency principle (see section 4.2.5)

The figures available from the Netherlands show that while the prevalence of cannabis consumption rose sharply during the seventies, as it did in many other countries too, in recent years there has been a leveling off and even a decline. On the other hand, the estimated quantity of cannabis produced in the Netherlands has mushroomed. It is believed that the importation of cannabis, which is illegal and still liable to be prosecuted, has decreased accordingly, but this is naturally only conjecture. In the coffee shops, at any rate, the proportion of imported cannabis has fallen in favor of produce grown in the Netherlands. There is also some evidence in the Netherlands of the emergence of an unwanted export

trade in cannabis. Establishing the quantity of the substance being produced in the so-called grow-shops and how much of that is being exported is posing a fresh challenge for the Dutch authorities. However, this has not resulted in the application of the expediency principle to cannabis dealing and consumption being called into question (Jansen 1998).

5.1.4 Medical prescription (see section 2.5)

Prescription for medicinal purposes, as considered above, relates to a very restricted group of persons, perhaps no more than isolated cases. It could therefore, by its very nature, be expected not to influence prevalence rates. That would only be likely to occur if the prescription grounds were to be extended to include considerably more – and less serious – medical conditions. But there is no demand for such a measure, nor is there any rationale to justify it.
A system based on prescription by doctors for non-medicinal purposes has not been implemented in any jurisdiction and there is consequently no means of judging its effects. Resistance to such an approach on the part of both users and medical practitioners would be likely to constitute a major obstacle.

5.1.5 Licensing of suppliers (see section 4.3.3)

One of the purposes of the restrictions to be imposed under a supplier licensing system, as discussed under section 4.3.3 above, would be guard against a potential increase in consumption volumes. Such measures include limiting the number of distribution outlets, taxing sales and imposing restrictions on advertising. To what extent measures such as these are in fact capable of preventing more widespread or more intensive consumption is an open question. Experience with similar forms of regulation in relation to the legal sale of alcohol and tobacco have shown that the removal of restrictive measures, reductions in price and targeted advertising can lead to an increase in consumption.

5.1.6 Controlled purchase (see section 4.3.4)

Part of the rationale for the introduction of a system of authorization for the purchase of cannabis products is to create an inhibition threshold. The registration of users, especially, is a measure likely to deter a fairly sizeable category of potential consumers. The introduction of a quantitative limit for purchase entitlements (rationing) would additionally prevent an increase in consumption.
A problem with such measures, as with the imposition of a heavy tax charge, is that by helping to maintain an illegal parallel market in existence their effect may be counterproductive vis-à-vis their stated aim of prevention.

5.1.7 Free availability (see section 4.3.5)

Here as in the case of a licensing system the importance of accompanying restrictive measures must be emphasized. Without such restrictions the probability of a rise in consumption is far greater. Of particular significance in this regard are product requirements: the prohibition of manufactured cannabis cigarettes would have an especially important preventive function.

5.2 Changes in consumption and consumption patterns

5.2.1 Removal of the offence of consumption (see section 4.2.3)

A key question is whether current users of cannabis would increase the frequency of consumption and the dose size in the event of the prohibition being removed. Here again, the data needed to provide an answer is not available. Nonetheless, it is likely that consumption volumes are limited by various factors, among which the price and quality of the product on offer together with the perceived risks are at least as important as the legal status of consumption. The low risk of being detected for the purchase, possession and consumption of cannabis, even under a regime of prohibition, makes it unlikely that there would be any significant change in the inhibition threshold if the prohibition were to be removed.

5.2.2 Change in the severity of penalties (see section 4.2.4)

There are no studies available which focus on whether cannabis users orient the volume of their consumption according to the severity of the penalties to which they would be liable. This appears less likely than that non-users would be deterred to some extent by heavy penalties. A person who is already a user has already assumed the basic risk. However, it is probable that users exercise a greater or lesser degree of caution depending on the size of the risk. According to an American study, a majority of long-term users are not worried that others could find out about their consumption; those that do not wish their habit to be discovered are concerned primarily about criminal prosecution but also about adverse employment consequences (Erickson 1989).

5.2.3 Introduction of a system based on the expediency principle (see section 4.2.5)

There are no known studies available from the Netherlands into whether the Dutch approach of tolerating retail sale and consumption has led to any change in the consumption patterns and consumption volumes of long-term users.

5.2.4 Medical prescription (see section 2.5)

Under such a system, any increase in the levels of individual consumption would be recorded by the prescribing doctor, assuming multiple prescriptions (by several doctors at the same time) can be excluded. It would then be for the doctor to take action in the light of the increase in consumption.

5.2.5 Licensing of suppliers (see section 4.3.3)

Restrictive measures such as a cannabis tax and advertising curbs would need to be considered, primarily for the purpose of preventing any upsurge in user numbers. Non-users, users out of curiosity and sporadic users are the most receptive targets for such measures rather than those for whom consumption represents a priority (those who have become dependent, for example, in whose case price elasticity can be expected to be low).

5.2.6 Controlled purchase (see section 4.3.4)

With controlled purchase models it is to be expected that a section of users, particularly those who are socially integrated, would endeavor to avoid registration (which would increase the incentive for a parallel black market). Other users who had already come to the attention of the authorities and been registered would on that account be more likely to submit to registration. A similar pattern is found with opiate addicts, of whom about half those in Switzerland are estimated to be in substitution treatment and therefore registered, while perhaps an almost equal number remains underground and avoids contact with official agencies.

The added purpose served by a rationing model is to prevent an increase in consumption volumes per user. When an alcohol rationing system (the Bratt System) was introduced in Sweden it led to a reduction in the statistics for alcohol-related problems (delirium tremens, cirrhosis of the liver, accidents caused by the effects of alcohol), but was costly to operate and could be circumvented by means of purchases on the black market.

5.2.7 Free availability (see section 4.3.5)

In a scenario of unrestricted availability, an increase in the frequency of use and dose sizes among habitual users is a risk which cannot be excluded.

5.3 Changes in the effects of consumption

Studies of varying quality have been carried out into the adverse health and social effects – both acute and chronic – of cannabis consumption. A summary of the findings can be found in the latest experts' report commissioned by the German Federal Ministry of Health (Kleiber and Kovar, 1998). There are other recent summaries of the findings by Hall et al 1994, Hall 1998, Hall and Solowij 1998, Solowij 1998, and Zimmer and Morgan 1997. An exhaustive systematic review of the scientific literature has been published by Waller et al (1990, 1994, 1995). Without embarking on a detailed examination of the various risks involved, the situation may be summarized as follows:

- No cases of death from overdose have been substantiated
- The extent of beneficial or harmful effects is extremely variable, depending on the survey sample
- The probability of adverse effects occurring increases with higher frequency and greater intensity of consumption (dose per consumption)
- In relation to mental disturbances suffered by cannabis users the prevailing view is that personality factors are just as important as the effects of the substance
- Certain groups are especially vulnerable to adverse consequences:young people, the mentally unstable, pregnant women, sufferers from heart and lung disease.

An issue which has still to be adequately resolved is the relationship between cannabis use and the onset of schizophrenic psychoses. On the one hand, studies have shown that in subjects who have been using cannabis regularly schizophrenic psychoses tend to occur earlier (Linszen et al 1993, Caspari 1998) and more frequently (Andreasson et al 1987). On the other hand, cannabis is taken by schizophrenia sufferers to alleviate negative symptoms and the side effects of neuroleptic drugs (Schneier and Siris 1987, Dixon et al 1990). But continued cannabis use has also been shown to be associated with a higher relapse rate for psychotic symptoms (Linszen et al 1994, see also section 2.3.4).

Not all heavy daily users of cannabis experience serious negative consequences. There is even some evidence that such users find it easier to 'function' on a day-to-day basis, but at the price of losing the ability to address and resolve problems which ought to be addressed and resolved (Hendin et al 1987).

As discussed above, frequency of consumption can be increased by promotion and marketing, reduced risk awareness and the availability of easy-to-use products (pre-fabricated cigarettes and food products). Intensity of consumption (dose per consumption), on the other hand, can be increased by the supply of products with a high content of active principle. The risk of accident depends above all on the degree of caution exercised by cannabis users when under the influence of the drug; the cautious behavior shown by cannabis users when driving in road traffic (Krüger 1995) may be related to the test conditions but may also have to do with the prohibited nature of the substance. The possibility of an increase in careless conduct in the event of cannabis products becoming legally available cannot therefore be discounted.

The conclusion to be drawn is that the negative effects of cannabis consumption can best be prevented if cannabis products cannot be sold at a large profit, if products with a high content of active principle are prohibited and if particularly vulnerable individuals receive appropriate advice. In addition, if cannabis products are to be made more easily available, general prevention activities and measures to protect the young will need to be stepped up.

The legal availability of cannabis, whatever form it takes, will result in one specific problem: the cognitive impairment caused by the acute effects of cannabis leads to an increased risk of accident both when driving and in other hazardous situations at the workplace or during leisure activities (Solowij 1998). This necessitates not only appropriate preventive measures but also the imposition of a legal limit on motorists' blood-THC. A maximum level for the legally permissible THC-content in the blood of motorists will have to be defined and demonstrated. Studies of driving behavior in a driving simulator have yielded useful material in this regard. Still to be resolved is the problem of coming up with a practical and inexpensive means of determining blood-THC-content.

5.4 Consequences for the illegal cannabis market

The main consideration here is that an appreciable decline in the market for illegal cannabis is likely only if it becomes sufficiently attractive to consumers to switch to legal sources of supply. Restrictive measures of the type discussed above may in given circumstances have counterproductive effects. What is needed is an appropriate balance between restrictive measures on the one hand and the attractiveness of the legal cannabis market on the other, but it is difficult to predict what would and would not be found acceptable by the sections of the population concerned. Views on what is acceptable are also liable to change. Some degree of flexibility should therefore be built into the measures and their operation monitored in order to document their intended and unintended effects, so that they can be modified if necessary.

5.5 Need for new regulation

If a legal market is to be created for cannabis products new regulations will be necessary. At this point we need mention only road traffic regulations, product requirements, advertising restrictions, the criteria to be met by distribution outlets, etc. Provisions will also have to be adopted under the food legislation regarding which cannabis-containing products will be authorized and with what active principle content. It is not possible here to give an exhaustive list of the legislative and other measures that will be required. That will depend largely on which of the specified options is chosen.

5.6 Political consequences

What makes the current situation anomalous and a cause for concern is the gulf that separates the present state of the law from everyday reality, giving rise to repeated calls for a review of policy on cannabis. However, the consequences of implementing an alternative policy are by no means easy to predict. Ideas as to what should best be done in this situation thus constitute a palette of contrasting approaches, such as proposals for far-reaching legalization under a licensing model (Schneider 1995) as opposed to more cautious recommendations involving a reduction of the criminal penalties for consumption and activities preparatory to consumption (McCoun and Reuter 1998).
In view of the prominence of the drugs issue at home and abroad, a change in cannabis policy and legislation is bound to provoke controversy in relation to drug, health and social questions. The impact on other countries has to be taken into account – they may come under pressure to follow suit or may have to contend with a increase in cannabis imports and consumption or with 'drug tourism' to Switzerland on the part of their drug users. On the domestic front, there are likely to be misunderstandings and misinterpretations that could jeopardize the continuation of the present consensus on drug policy, of which the public is part. The only way to address potential consequences of this kind is by making the necessary preparations so as to provide ample information, to promote factually-based public debate and to get across the purpose and aims behind the new policy.
Nobody can say for sure what the consequences of a change in cannabis policy will be. An important preliminary task is therefore to draw up a blueprint for ongoing documentation and evaluation of the measures which are taken; to enable the effects of the changes to be gauged, a proper framework for recording findings must be in place before implementation of the changes begins.

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6. Evaluation of the options

All the options described in sections 4.2 and 4.3 involve the decriminalization of cannabis consumption and the preparatory and procurement activities associated with personal consumption. The discussion in Chapter 5 of the consequences of the options makes clear that every model involving easier access to cannabis has its attendant uncertainties and risks. The possible adverse consequences are not of a critical nature, however, and can be addressed by a suitable form of regulation. Moreover, the frequently made claim that legalization means easier availability of cannabis is open to question. The point has been made several times in the present report that in the present circumstances cannabis availability poses no difficulty whatsoever for anybody wishing to use the substance. Regardless of whichever option may be chosen, it is the unanimous view of the Commission that the prohibition on consumption and associated procurement activities should be lifted. Before proceeding to a comparative evaluation of the different options in section 6.2 below, it therefore appears appropriate first to list a series of key arguments, primarily of a legal nature, which have persuaded the Commission, albeit conscious of the uncertainties discussed in Chapter 5, to put forward only options which involve the removal of the prohibitions of consumption and of procurement for personal consumption.

6.1 Grounds for removing the prohibitions of consumption and of procurement for personal consumption

There are a host of arguments in favor of substantive decriminalization, of which only the most important are cited below[1]:

- Using the criminal law to prohibit a (possibly) self-endangering form of behavior is repugnant to the fundamental values of a legal system founded on personal liberties and is thus not part of the legitimate function of a criminal justice system supposed to uphold a system of that kind[2]. That applies to the consumption of all drugs but particularly so in the case of cannabis which, while it is not harmless, is nonetheless far less dangerous than the others. Accordingly, German legal commentators have of late increasingly tended toward the view that, because it violates the principle of proportionality, the prohibition of cannabis consumption is unconstitutional[3].
- The argument based on the general preventive effect of the prohibition of consumption does not stand up – as has been shown in the earlier chapters – although this cannot be proved in the strict sense but only inferred as highly probable. Any such general preventive effect is already contradicted by the fact that the risk of penalty for a *first-time user* is practically nil, because of the absence of the most basic prerequisite for the detection of crime: reporting by the victim, there being no victim in this case. The proposition that *dependent users* would be deterred by the threat of sanction for consumption is entirely untenable. All the empirical evidence and statistical data, based on both international and intercantonal comparisons always point to the same conclusion (see also section 5.1.1): that there is no significant correlation between the prevalence of drug consumption and the – sometimes considerable – differences in prosecution and sentencing practices[4]. Particularly noteworthy in this regard is the fact that in the Netherlands, where de facto and in the public perception there has effectively been substantive decriminalization of consumption and procurement activities associated with personal consumption, cannabis consumption has fallen and is significantly lower than in Switzerland and in the USA[5]. The fact that approximately 25 percent of the 15-30 age

[1] For further arguments - positive consequences "from a health and social policy perspective" - see experts' report (footnote 3), 50 f.

[2] For a comprehensive treatment of this point see, among many other commentators: Albrecht, Art. 19a N. 3 ff.; Jenny 1992, 168 ff.; Schultz 1972, 234 ff.

[3] See Büttner, 153 ff.; Nestler, § 11 N. 49 ff., where further references may be found.

[4] See Rüter 1992, 157 ff.; Killias/Grapendaal, 100 footnote 21.

[5] See section 2.1 above "Epidemiology"; Rüter 1992, 158, 165; Cedro Press Release 5/1/99, 1.

group have tried cannabis but only approximately 3 percent have taken opiates also contradicts the argument that prohibition of consumption has a general preventive effect. The law threatens both forms of behavior with (the same) penalty and ought therefore, if the argument were valid, to produce the same effect in each case.

- Punishment of drug consumption can only ever affect an insignificantly small fraction of those who violate the prohibition[6]. It is therefore so highly selective that it is doubtful whether the criminal sanction has even a symbolic effect[7]. The opposite appears more likely: that the criminal proceedings (which, in addition, vary greatly from region to region) against those prosecuted are perceived as arbitrary acts of futile coercion, which virtually nobody really takes seriously any more. The consequence of this is that drugs policy as a whole loses credibility – including those aspects which are geared toward prevention by methods more appropriate than the criminal justice system.
- It is argued that the prohibition of consumption acts as a sort of warning sign, drawing attention to the dangers of drugs. But prohibition is not necessary for that purpose. The same message can be communicated equally well and in a more appropriate way by means of prevention information and is already widely disseminated by virtue of the constant media coverage.
- There is no merit, in the case of cannabis at any rate, in the criticism which is sometimes raised that it would no longer be possible to safeguard the public interest if the prohibition of consumption were lifted. What is at issue here are the 'adverse side effects' of (public) drug consumption. These can be dealt with under suitable cantonal public order regulations (making use, where necessary, of general police powers) in exactly the same manner as such provisions are used to counteract similar side effects of prostitution (see Article 199 of the Penal Code). The fact that not all of the cantons have public order regulations providing the necessary police powers does not constitute a counter-argument. Such powers could be introduced without any great difficulty. Moreover, where open consumption occurs there is usually drug dealing taking place as well, which means police intervention is possible in any case[8].
- Nor is it a convincing objection that without the prohibition of consumption effective action against drug trafficking would no longer be possible. The consumer can still be interviewed as a witness and is then bound to answer questions and to tell the truth, which is not the case where the consumer is interviewed as a suspect. Obviously, in both scenarios, he or she will usually be little inclined to reveal his source of supply.
  The consumption of narcotics constitutes an infraction. In the case of this category of offence, however, pretrial detention cannot be ordered. If, on the other hand, dealing is also suspected, the legalization of consumption will have no effect on the investigative process.

  What is more, real successes in the fight against drug-trafficking cannot be achieved without protracted investigations in any case and are primarily the result of undercover and surveillance operations rather than the interrogation of users, who very often know only the small-time dealer and not the real drug barons[9]. Lastly, even if that were not so, there remains an objection of principle: a prohibition of consumption can be justified only on the basis of considerations of public health and not for the purpose of facilitating criminal investigations. Otherwise, the prohibition in question should be legally classified under the heading of offences against the administration of justice.

The removal of the prohibitions against consumption and preparatory activities with a view to personal consumption would be compatible with the international Conventions which have to date been ratified by Switzerland. The Single Convention of 1961 does not require consumption to be made illegal. In addition, the unanimous view is that it requires the prohibition of purchase, possession etc. only where there is an intention to deal (possession for illegal distribution), but not where it is for an individual's own use (possession for personal

[6] As to the reasons for this see Albrecht, Art. 19 N. 9 ff.; Jenny 1992, 172; 1997, 294 f.; Killias/Grapendaal, 107.

[7] A point already made by Schultz 1972, 235; 1973, 67 f.

[8] See also experts' report 1996 (footnote 3), 51 f. with footnote 6.

[9] See also experts' report 1996 (footnote 3), 51.

consumption)[10]. The position is different, however, under the terms of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, Article 3(2) of which requires signatory states to make the possession, purchase or cultivation of narcotic drugs for personal consumption a criminal offence also. Consequently, if Switzerland were to proceed to ratify that Convention it would have to make a reservation, if only on the basis that this obligation is expressed to be subject to the contracting state's "constitutional principles and the basic concepts of its legal system".

[10] See Büttner, 179 f. (with references); Schultz 1991, 244.

6.2 Objectives of cannabis policy

While the models for a cannabis policy described under Chapters 4 and 5 above share the common feature of not prohibiting consumption or preparatory activities, in other respects they are considerably different from one another. In order to appraise them with clarity it is therefore useful to consider what are the aims of cannabis policy in a society in which cannabis consumption has become part of social reality for broad sections of the population. **The overall objective of cannabis policy consists of creating conditions calculated to prevent adverse effects of consumption both on consumers and on society as a whole.**

In this regard, a 'cannabis policy' can draw on the many years of accumulated experience of alcohol policy, which was and still is required to address similar problems. In what follows, possible subgoals under this overall objective are described. After that, the Commission gives its view of what changes vis-à-vis the status quo (improvements or changes for the worse) would be entailed by the models described in Chapters 4 and 5 above.

Subgoals which a cannabis policy must pursue:

6.2.1 Protection of the young

The protection of the health of young persons is one of the foremost priorities of any drugs policy. To safeguard the physical health and the psychosocial development of young people, regulation together with suitable information and prevention measures must be put in place in order to prevent consumption of cannabis by individuals under a given age. The issues to be addressed here are the same as those which arise in relation to legal stimulants, such as, for example, in policy towards alcohol. Technical considerations would favor an age limit of 18. But before opting for that limit, one would need to weigh up the extent to which this would be likely to preserve the black market, which would be less likely a prospect if an age limit of 16 were adopted.

6.2.2 Consumer protection

Like the consumer of alcohol, for example, the cannabis consumer ought to be informed of the composition and origin of the product.

6.2.3 Promotion of health awareness

This subgoal involves getting across the message that the consumption of psychoactive substances is never risk-free. In addition – and as is the case with other substances – measures should be taken to promote awareness that the use of psychoactive substances is not an appropriate means of dealing with personal problems. Regular national campaigns should be mounted as one channel for disseminating these messages.

6.2.4 Minimization of problem consumption

In the case of all users, and not just young people, it is necessary to prevent consumption patterns which hamper character development or are detrimental to the interests or rights of non-users. A model must provide for appropriate counseling and early detection facilities.

6.2.5 Prevention of consumption-related criminalization and stigmatization of young persons

The status quo leads to the criminalization and stigmatization of young people for offences of mere consumption. This can, in some circumstances, have negative consequences.

6.2.6 Relieving the police and criminal justice system of the need to investigate and prosecute petty offences

A model should lessen the workload of the police and criminal justice authorities by doing away with the obligation to investigate and prosecute cannabis users.

6.2.7 Uniform enforcement of the applicable law

The disparities in the manner in which the applicable law is enforced in the cantons, described in section 2.7 above, effectively give rise to a situation of unequal justice. A model should provide for uniform enforcement of the applicable law.

6.2.8 Credibility of drugs policy

Different provisions or sanctions should not be employed against the consumption, possession and supply of psychoactive substances which carry a similar risk. Cannabis policy should, among its other aims, aspire to consistency. Provisions capable of being construed as sending out contradictory signals must be avoided.

6.2.9 Protection of other sections of the community

A model must be capable of protecting the community from undesirable consequences of consumption (nuisances, road safety etc.)

6.2.10 Eradicating the illegal cannabis markets

The different models must also be judged against the criterion of whether they are likely to weaken substantially the illegal cannabis markets or, ideally, eradicate them altogether.

6.2.11 Cost effectiveness of drug policy measures

The models must be capable of redressing the unfavorable ratio of costs to benefits which applies under the present regime (See Annex 3 of "Drug Policy Scenarios"[11]).

Medicinal use

We have deliberately refrained from expressing a view as to the consequences of the various models for medical use. The Commission is of the opinion that cannabis and cannabinoids should be permitted for therapeutic purposes (where their effects are scientifically proven). In any case, the use of these substances in self-medication (as is the case with other substances) eludes any form of control. Consequently, any model for change would represent an improvement on the present situation.

The question as to whether **international compatibility** should be an objective of a future cannabis policy is discussed as part of the overall conclusions (section 6.4).

[11] Sub-commission for Drugs Issues of the Federal Narcotic Drugs Commission: Drug Policy Scenarios, June 1996

6.3 Effect of the options in terms of the goals

The following table was prepared in order to provide an overview of the positive and negative consequences entailed by a change in cannabis policy. As very different weightings must be applied to the various goals, the information contained in the table should not be judged in isolation from the overall context.

Model	**Goal** **6.2.1** Protection of the young[1]	**6.2.2** Protection of consumers	**6.2.3** Promotion of health awareness	**6.2.4** Minimization of problem consumption	**6.2.5** Prevention of consumption-related criminalization	**6.2.6** Relieving the police and criminal justice system	**6.2.7** Uniform enforcement of applicable law	**6.2.8** Credibility of drugs policy	**6.2.9** Protection of other sections of the community	**6.2.10** Eradication of illegal cannabis markets[2]	**6.2.11** Cost-effectiveness	**United Nations Convention of 1961**
4.2.3 Consumption + procurement lawful	(-) / (+)	O	O	O	+	+	+	O	O	O	+	compatible
4.2.5 'Expediency principle'	O	O	O	O	∅	+	+	–	O	O	+	compatible
4.3.3 Licensing	+/++	++	+	+	++	++	++	++	+	+	++	not compatible
4.3.4 Controlled purchase	+/++	++	+	+	+	++	++	++	(+)	+	+	not compatible
4.3.5 Free availability	–	+	–	–	++	++	++	––	O	++	+	not compatible

Key:

O =No change vis-à-vis the status quo to be expected
(+) =Likely better conditions for attaining the goal
\+ =Better conditions for attaining the goal
++ =Substantially better conditions for attaining the goal
–– =Substantially worse conditions for attaining the goal
– =Worse conditions for attaining the goal

[1] *Depending on the accompanying measures taken*

[2] *Depending on the age limit*

(–) = Likely worse conditions for attaining the goal

∅ = non relevant

6.4 Overall conclusions

The following situation assessment by the Commission does not purport to be scientific, but reflects the consensus view arrived at by the Commission:

- Regardless of whether it is decided to retain the status quo or to adopt one of the models described here, an improvement in general health promotion and specific prevention measures is necessary. But under the status quo such measures would have to contend with credibility problems, since the law's unequal treatment of legal and illegal drugs is increasingly bringing the system into disrepute.
- A key issue with all models (including the retention of the status quo) is the protection of the young. The need to set an age limit, in the case of the legalization models, raises the difficult problem that the technically most convenient age limit of 18 would likely entail the continued existence of a black market. A single age limit for all the relevant stimulants (alcohol, tobacco, cannabis) should be pursued.
- All models represent an improvement compared with the status quo. While free availability would present advantages in a number of respects, these would be set at nought by uncertainties regarding the protection of the young and other vulnerable groups of users. This model does not satisfy the criteria for a credible drugs policy and, accordingly, is not discussed further in what follows.
- All the legalization models entail a need for regulation if they are to be capable of achieving the policy goals. Regulation must be tight enough for objectives such as the protection of the young to be adequately realized; but they must also be flexible enough to leave little incentive for the operation of a black market. Both the licensing model and the controlled purchase model depend greatly on how they are fleshed out in detail. A combination of elements of both is a possibility.
- The strength of the legalization models lies in the fact that they raise the credibility of state drugs policy (which in turn creates a more propitious environment for prevention measures) while restoring clarity and lessening the workload of the police and prosecution authorities. In addition, the taxation option could be a source of increased funding for prevention and therapy. The biggest drawback with these models is the fact that they are incompatible with international conventions.
- The available literature (see Chapter 5) indicates that the introduction of legalization models may lead to a rise in consumption, albeit temporarily. But all the empirical evidence shows that ultimately consumption levels bear no relation to the existence or otherwise of criminal sanctions.

The medicinal use model should be considered in isolation from the other models and has no bearing on these. However, the option of making cannabis available on a doctor's prescription for *non-medical* purposes was not considered further on the ground that it is probably contrary to medical ethics. The use of cannabis and cannabinoids should be permitted both as therapeutic drugs, where their effects have been scientifically proven, and in controlled studies for research purposes.

7. Recommendations

The Commission addresses only the issue of cannabis in this report. No new recommendations are made as to any action to be taken in relation to the other illegal drugs in the event of an amendment of the Swiss Narcotics Act; please refer to the reports issued by the previous Commission[1], mentioned in Chapter 1 above (Aspects of Drug Policy, 1989; Drug Policy Scenarios, 1996), and to the report of the Experts Commission on the Amendment of the Swiss Narcotics Act (Schild Report, 1996).

Against the background of the notable enhancement of the public profile of cannabis in the 1990s and the resulting change in the perception of the issue among broad sections of the community and also in view of the lesser risks posed by cannabis compared to other illegal drugs, the Commission is in favor of giving cannabis separate status from the drugs which are currently illegal. The intention is not to discount the potential dangers of consumption of cannabis products but rather to find ways of regulating such consumption appropriately. The legal status of cannabis should be aligned more closely with that of the legal psychoactive substances such as alcohol rather than that of the so-called hard drugs such as heroin and cocaine.

The Commission is conscious of the fact that under the terms of the international conventions there is very limited scope for amending the drugs legislation in the direction of legalization. But it is not the function of an expert commission to assess the political importance of such agreements and to take into consideration only those models which are compatible with obligations under international law. The solution unanimously favored by the Commission is not compatible with the Single Convention of 1961. Since this may prove politically unacceptable, the Commission is also proposing a second choice model, which has the advantage of being capable of implementation within the ambit of the international conventions.

1 Sub-commission for Drugs Issues of the Federal Narcotic Drugs Commission

7.1 Legal availability of cannabis

Following detailed consideration of the different options, the Federal Commission unanimously recommends the elaboration of a model which not only removes the prohibition of consumption and possession but also makes it possible for cannabis to be purchased lawfully. The model should not be one of free availability but instead should include clear provisions for the protection of the young and the prevention of all the potential adverse consequences of legalization.

Regulation should be tight enough to ensure that the public health objectives of the cannabis policy are attained. But it should be kept within appropriate bounds in order to guard against the possibility of a black market continuing to exist due to over-regulation. In terms of specific forms of regulation, on the supply side, supplier qualifications, distribution and product requirements, an advertising ban and, if thought fit, a minimum price could all be imposed. On the user side, an age limit would have to be introduced (making it illegal to sell to those under the age of 18). Furthermore, it would be necessary to impose a requirement of proof of residence in order to avert a 'drugs tourism' phenomenon. For self-supply purposes, it should be lawful to grow a specified number of plants. Commercial production should be closely regulated.

To avoid sending out the wrong signals (giving the impression that cannabis is harmless by making it legally available) a range of accompanying measures would be necessary. First and foremost, the prevention effort would need to be stepped up, including an effective information program on the risks of cannabis consumption and the provision of advisory facilities for high-risk or problem users.

A model of this nature is not compatible with the Single Convention of 1961. The Commission nevertheless believes that a licensing model of the kind outlined above is objectively the best option, as it would create a clear and enforceable system for the handling of cannabis. The Commission is of the opinion that the implementation of such a model would greatly enhance the credibility of the state's policy on drugs and, in addition, would mean that cannabis consumption could be taxed in the same way as consumption of other luxury goods. The Commission believes that a measure restricted to the decriminalization of consumption, possession and preparatory activities would not go far enough, as it would not address the issue of retail dealing, without which users cannot obtain supplies.

The model described would entail Switzerland renouncing the Single Convention of 1961.

7.2 Limited decriminalization within the ambit of the Single Convention of 1961

In the event that the legalization model proposed above should prove to be politically impracticable, the Commission proposes an alternative amendment of the Swiss Narcotics Act, which can be implemented within the constraints of existing international obligations. This would comprise:

- **The repeal of the substantive offences of consumption and preparatory activities for personal consumption;**
- **The introduction of an expediency principle in relation to dealing, by means of the creation of a statutory basis in the Swiss Narcotics Act and the enactment of the relevant criminal justice provisions by way of an implementing ordinance.**

The statutory basis referred to would have to contain all the necessary provisions to enable the authorities (including the police) to desist from the investigation and prosecution of criminal offences. The Federal Council ordinance would thus merely perform the function of filling in the details of implementation. The same statutory basis would also offer the possibility of extending procedural decriminalization, on a clear legal basis, to the cultivation, purchase, storage, possession, etc., of fairly sizeable quantities – activities which are antecedent to the small-scale retailing which would be tolerated under such a system (for details see section 4.2.5 above).

As the example of the Netherlands illustrates, decriminalization by way of a discretionary approach of this kind would not put Switzerland in breach of its obligations under the Single Convention of 1961. On the other hand, a reservation would have to be made upon ratification of the Vienna Convention of 1988.

7.3 Medicinal use of cannabis

In the light of the international specialist medical literature on the subject, the Commission believes that a statutory basis should be established for controlled research projects to be permitted in relation to the therapeutic use of cannabis in Switzerland. The details of such legislation would have to be drawn up by a group of medical experts. Cooperation should be sought with other countries in which similar measures are proposed or are already being implemented. If they are scientifically proven to be effective for therapeutic purposes, cannabis and cannabinoids should be authorized as medicines.

8. Country profiles

The following information is derived largely from the study by Sandro Cattacin and Isabelle Renschler: Cannabispolitiken; ein vergleichender Überblick zum aktuellen Diskussionsstand [Cannabis policies: a comparative survey of the current discussion]; the information has been summarized, amplified and updated.

This part of the report consists of brief descriptions of a number of countries with different policies towards cannabis and aims to illustrate the relationships between policy and implementation. These descriptions provide information on the various ways in which the use of cannabis is approached and regulated[1]. The main focus here is the general attitude towards cannabis and the way trade and consumption (in some instances cultivation too) are handled, the penalties attached to violation of existing laws, and special regulations. The countries appear in alphabetical order.

In **Austria** dependence on drugs is perceived as a psychosocial disorder and a disease (Council of Europe 1994: 9). The Addictive Substances Act of 1951 (revised in 1971, 1980 and 1985) that was in force until the end of 1997 did not penalize possession of small amounts of illegal substances until 1985. The new Addictive Drugs Act (SMG) came into force on 1 January 1998, and Art. 27 (1) mandates imprisonment for up to six months for acquisition, possession, production, import and export of addictive substances. A new feature of the law is that the same acts involving psychotropic substances according to Art. 30 (1) SMG attract the same sentences. Offenses involving large amounts can be penalized with prison sentences of between three and five years. The quantity that comprises a "large amount" is determined separately for each addictive substance by the Federal Minister for Labor, Health and Social Affairs in collaboration with the Federal Minister for Justice with the agreement of the General Purposes Committee of the National Council (Art. 28 [6] SMG). This regulation on limits for addictive substances gives 20 grams of pure active substance as the lower defining limit for a large amount of tetrahydrocannabinol and its isomers. Art. 35 SMG allows the public prosecutor's office to temporarily defer prosecution under certain conditions for offenses involving a small amount of an illegal substance intended for personal consumption, and to impose a probationary period. Offenses involving the purchase or possession of cannabis are subject to less strict conditions (Art. 35 [4] SMG). According to Art. 6 (2) of the Addictive Substances Act (which corresponds to Art. 3 [2] of the old law), cultivation of hemp is only illegal in Austria if it is intended for the production of an addictive substance.
However, irrespective of the Addictive Substances Act, Austrian seed legislation permits only seed of hemp varieties listed in the "common variety catalog of the EU" to be brought onto the market in Austria or the EU.
Compliance with the Addictive Substances Act is monitored by the Ministry of the Interior and the executive authority using a system of random checks. If a hemp crop is found to have a high content of THC, this is not illegal under the Addictive Substances Act. However, the higher the THC content, the greater the potential for illegal use as a narcotic. In such cases the executive authority takes a closer look at the intended use of the crop in question. A license is not required to grow hemp, and growers do not have to sign a contract with a customer intending to buy the crop. However, growers are recommended to inform the local council and police of plans to plant hemp.

In **France** the general thrust of the drug policy can be described as medical, with a distinct separation between repressive instruments and therapeutic facilities (cf. Lucas 1995). The

[1] It should be noted that certain cannabis policies in countries which do not distinguish between different types of drugs have been omitted from this section.

French legislation is based on international agreements (especially the Single Convention of 1961, the Vienna Convention of 1971 and the Convention of 1988). The use of illegal substances is viewed as pathological and criminal behavior. Trade in and consumption of substances defined in international agreements as illegal are forbidden. Under the current law dating from 31 December 1970, even private consumption may be penalized, although this goes beyond the provisions of the international agreements[2]. According to L 628 of the Public Health Code, unauthorized consumption of illegal substances of any type may be punishable with between two months and one year in prison and/or a fine of FF 500 – 15,000; the transportation, possession and offering for sale of such substances can mean between two and ten years' imprisonment. This law makes no distinction between different types of illegal substance, the amount used or the frequency with which they are used. Accordingly, there are no specific formal or informal rules governing cannabis products. In practice the police and courts may proceed differently in different cases, but there is by no means any suggestion of differentiated treatment according to the type of product involved (Commission de réflexion sur la drogue et la toxicomanie 1995: 63). It is far more accurate to describe the dominant attitude of the authorities as behavior-oriented, with decisions based not on the product but on the nature of its use.

Germany pursues a repressive drug policy at federal level; use of illegal substances in any form is a punishable offense, and cannabis is no exception. The Christian-Liberal coalition in power from 1981 took little more than symbolic action on drug policy. The federal system of government means that the implementation of the German Narcotic Drugs Act is in fact the responsibility of the federal states, which in turn take a very heterogeneous approach depending on their degree of urbanization and cultural composition (cf. Reuband 1992: 17ff; Cattacin et al 1995). In the 1990s, in particular, some federal states started to tolerate the use of cannabis. A decision by the Federal Constitutional Court on 9 March 1994 means that the purchase and possession of small amounts of cannabis for personal consumption is not necessarily penalized in practice.
The legal position after two amendments of the German Narcotic Drugs Act in 1984 and 1986 is that possession of illegal substances, but not consumption, is a punishable offense. However, where the substances are intended for personal consumption, the judge may not necessarily impose a penalty. The same law mandates that narcotic substances may only be used with permission from the authorities. Serious offenders (trafficking and possession of large amounts of any type of illegal substance) face up to 15 years in prison. In other words, with the exception of the decision by the Federal Constitutional Court, German legal practice does not distinguish between different forms of drugs[3]. However, there is now an increasing tendency for the police to take a more permissive attitude towards the supplying of drugs and, in particular, the consumption of illegal substances if the substance in question is a cannabis derivative[4].
Cannabis (marijuana) is a non-marketable narcotic substance except in seed form, or for use as a barrier strip in beet fields (when it must be destroyed before it flowers), or when it is sold (but not cultivated) so that the fibers can be extracted or processed for industrial purposes (Annex 1 to Art. 1 [1] of the German Narcotic Drugs Act [BetmG]). Accordingly, the cultivation of hemp – including as an exception to the exception the cultivation of cannabis for commercial purposes – is forbidden in Germany by the Narcotic Drugs Act (Art. 30 BetmG). Only certain agricultural organizations are permitted to grow industrial grade hemp

[2]Bless et al (1993: 25): In 1991 approximately half of all arrests for violation of the Narcotic Drugs Act resulted from use and possession of cannabis.

[3]However, the Federal Constitutional Court observed that this decision does not constitute approval, and issued the following statement: "There is no basis to reports that the Federal Constitutional Court has approved the use of hashish. The Federal Constitutional Court has declared the prohibition of this drug and all the types of offense submitted to it for review to be constitutional. In trivial cases, however, punishment may be inappropriate. The prosecutors must refrain from prosecution if hashish is acquired in small quantities for occasional personal consumption and this represents no danger to third parties" (announcement by the press office of the Federal Consitutional Court 19/1994).

[4]The national regulations listed in Annex II by way of illustration demonstrate this tendency. Cf. also Bühringer et al 1993: 7ff.

under certain conditions governed by EU regulations. All hemp cultivation must be notified to the authorities (Art. 18 BetmG). Cultivation of hemp varieties not conforming to EU specifications is illegal according to the Narcotic Drugs Act or requires a special permit from the Federal Institute of Drugs and Medical Products (Federal Opium Office). A special permit is granted only if the cultivation serves a scientific or other purpose which is in the public interest (Art. 3 [2] BetmG). It is also illegal to grow hemp for sale as an ornamental plant.

Italy, too, takes a medical approach. Like the United Kingdom, Italian legislation distinguishes between different types of drug, specifically between cannabis and heroin/cocaine/LSD, but also between dealers and users. Offenses involving cannabis use and small-scale dealing attract only an administrative fine. However, Italy regularly wavers between a product-oriented policy and a behavior-oriented policy in response to the relatively strong political pressure brought to bear on the way offenses against drug legislation are handled (Pisapia 1991). Although the expediency principle has applied to users of illegal substances since the successful referendum in 1993 (which depenalized possession of small amounts of illegal substances for personal consumption) (Decamps 1994), spectacular events repeatedly show that the police have difficulty in applying this principle. The youth riots that erupted in Riccione in the summer of 1995, after police confiscated cannabis, and their devastating consequences, show how difficult it is to apply the expediency principle in everyday practice. It should also be mentioned that a strong political group which formed part of the government for several months in 1994 has been lobbying for the legalization of cannabis for years and has initiated a referendum on this subject.

The **Netherlands** are making a conscious effort to pursue a pragmatic drug policy designed to minimize risks[5]. The principle of discretionary prosecution is implemented with the aid of a clear distinction between cannabis and heroin/cocaine/LSD on the one hand and between users and dealers on the other. This product-oriented policy inspired by the principle of harm reduction has led to the de facto legalization of cannabis. The substance is viewed as legally and socially acceptable, and only dealing in cannabis is prosecuted. The Dutch Narcotic Drugs Act also draws a clear distinction between "hemp products" and substances whose use "is associated with unacceptable risks" (Linder 1995: 219). Tolerance of cannabis thus does not impede repression of the use of heroin/cocaine/LSD or trafficking in drugs (Cattacin et al 1995). The Opium Act, amended in 1976, regulates the production, supply and consumption of psychoactive substances. Possession, supply, outside advertising, production and export of all illegal substances is prohibited except for medical or scientific purposes. However, use is not forbidden by law. In general, possession of illegal substances for commercial purposes represents a more serious crime than possession for personal use. Possession of large quantities of cannabis attracts a prison sentence of up to two years and/or a fine. The penalty for importing or exporting cannabis is a maximum of four years' imprisonment and/or a fine (Albrecht/van Kalmthout 1989:433).
Dealing in cannabis for personal consumption is tolerated in so-called coffee shops provided that five state-imposed conditions[6] are met: no outside advertising, no dealing in heroin/cocaine/LSD, no disturbance of the neighborhood, no selling to minors under 18 years of age, no selling of quantities larger than 5 grams[7] (Hug-Beeli 1995: 230). The maximum quantity that coffee shops may store at any one time is 500 grams, although individual communes may prescribe smaller quantities. Depending on the specific problems

[5]However, this must not be equated with a *laisser faire* attitude, as the Ministry of Welfare, Health and Cultural Affairs (1994) has stated: "Although the risks to society must of course be taken into account, the government tries to ensure that drug users are not caused more harm by prosecution and imprisonment than by the use of drugs themselves."

[6]These criteria, referred to as AHOJ-G criteria, were introduced nation-wide by the public prosecutor's office in 1991.

[7]There has since been a marked reduction in the number of "coffee shops". The Dutch Drug Policy of 1995 reduced the permissible quantity of cannabis from 30 to 5 grams and instigated measures to eradicate domestic cannabis production and drug tourism in response to pressure from the Schengen Agreement; no major changes were made to the Dutch policy towards cannabis. Coffee shops are monitored strictly, and the intention is to reduce their overall number, not least in the interests of regulative policy (cf. Swiss Embassy 1994).

encountered locally, the communes have attached special conditions, such as no parking in front of coffee shops, or making coffee shops close at 10.30 pm. Communal coffee shop policy is regulated by the local authorities and determined in regular discussions between the police, public prosecutor's office and the local administration. In 1996 the public prosecutor's office established new guidelines for the tripartite discussions, and since then many communes have developed their own coffee shop policies. It was also agreed in 1996 that alcohol must not be served in places where cannabis is sold.[8]
In the Netherlands, cultivation of hemp is permitted only for agricultural or horticultural purposes or to create windbreaks. A draft amendment to the exception granted for the possession of hemp for agricultural purposes is currently being written. In future, it will be an offense to grow hemp indoors and to cultivate certain types of hemp without permission. The maximum penalty for growing hemp plants has been increased from two to four years' imprisonment and HFL 100,000. The current directive on investigation and prosecution for the public prosecutor's office expressly mentions the illegal nature of advertising aimed specifically at foreign purchasers. The attention of the public prosecutor's office is directed particularly at coffee shops which sell cannabis for export, whether in quantities intended for commercial or personal use[9].

Use and possession of illegal substances for personal use has not been prosecuted in **Spain** since 1967. Production, cultivation, dealing, incitement to use and facilitation of use, on the other hand, are punishable offenses. Sentences are also determined by whether the offense involves cannabis or heroin/cocaine/LSD. Since the amendment of the Narcotic Drugs Act in 1988, which represented Spain's attempt to realign itself with the international community, dealing in cannabis has been a serious offense (Bole-Richard 1994). Administrative fines have been levied since 1991 against anyone found consuming any form of illegal substance in a public place or possessing illegal substances[10]. Spain, another country that follows a medical approach to cannabis, is often cited as the pioneer country in terms of decriminalizing cannabis. However, Cattacin/Renschler feel that Spain should rather be considered as the anti-model since it has not actively sought to come to grips with the problem of illegal substances, and the fact that the police have for a long time not intervened in the consumption of illegal substances owes more to chance than to political volition.

Drug policy in **Sweden** is part of a global social policy that outlaws drugs of any kind (including alcohol) and aims to create a drug-free society (Cattacin et al 1995; Council of Europe 1994: 186). This approach meets with a broad consensus in the population, so it is hardly surprising that the Swedish Minister for Health is confident enough to comment on his policy in a completely unequivocal way: "There are no serious advocates, either at the individual or the organizational level, of the idea that narcotics should be legalized or that possession of drugs should be decriminalized. This also applies to cannabis," (Swedish Ministry of Health and Social Affairs 1994). The 1968 Narcotic Drugs Act, revised in 1985, governs prosecution for the production, supply, sale and possession of illegal substances. All forms of non-medical use of illegal substances are forbidden[11]. Sweden distinguishes only between minor, simple and serious drug offenses (against the Narcotic Drugs Act), irrespective of the drug involved. There can thus be no doubt that prosecution is determined by the behavior of individuals who use illegal substances (some cities such as Stockholm

[8]Cf. Dutch Alcohol and Drug Reports, Fact Sheet 7: Cannabis policy, Trimbos-Institut, Utrecht, 1997.

[9]Progress report on drug policy by the Dutch government, 16 September 1997

[10]"The penalities can be imposed on individuals but also on owners of public facilities where drugs are used" (Council of Europe 1994: 93).

[11]Prior to 1 July 1993, consumption of illegal substances was punished only with a fine, but nowadays a prison sentence can also be imposed (Council of Europe 1994: 189). The penalty ranges from fines and a maximum prison sentence of six months for *minor drug offenses* to prison sentences between two and ten years for *serious drug offenses.* Production and dealing are *serious drug offenses*; consumption, possession and sometimes selling small amounts of drugs, on the other hand, are classified as *minor offenses* if the perpetrator has no prior convictions for violation of the Narcotic Drugs Act (Solarz 1989: 347).

and Gothenburg do, however, deviate from this practice and no longer intervene systematically where possession and consumption of cannabis are concerned).

The **United Kingdom** also takes a medically-oriented approach (Pearson 1991; Bless et al 1993: 77). The Misuse of Drugs Act came into force in 1971 and is based on the Single Convention of 1961 (and its amending protocol of 1972), the Vienna Convention of 1971 and the Convention of 1988. The manufacture, aiding and abetting in the manufacture, sale or offering for sale and possession of large quantities of illegal substances are major offenses. Consumption of such substances is not illegal, although individuals found using illegal substances can be charged with possession (cf. Council of Europe 1994: 218). The punishment for such offenses varies according to the class of illegal substance involved (Class A, B or C). Cannabis is in Class B, alongside amphetamines and barbiturates, and the punishment ranges from a minimum of three months up to five years in prison or a corresponding fine. Sometimes only a warning is given to cannabis users. The United Kingdom thus distinguishes clearly between different product types in its drug policy. Offenses involving cannabis are dealt with less severely than similar offenses involving other illegal substances. It must be added, however, that offenses involving cannabis are pursued intensively, even though they attract less severe punishment. Over 90 percent of the 40,000 or so individuals stopped by the police every year, most of whom subsequently appear in court, are cannabis users (cf. also Pearson 1991: 197f. and Zecchini 1994).

Consumption of cannabis was legal in the **United States** in the 1930s, but by the 1970s illegal substances had advanced to the status of "public enemy number one" (Wisotsky 1989: 409). Richard Nixon's plan to eradicate cannabis is widely considered to be a good example of how repressive measures can backfire. Following Operation Intercept, a powerful illegal cannabis industry developed in the USA, and this supplied the market with cannabis products more systematically than had been the case under the relatively unsophisticated conditions of the "cultural revolution" in the years preceding Nixon (cf. Levine/Reinarman 1993: 172). Nonetheless, the 1970s were an experimental period during which 11 federal states followed the National Commission of Marihuana and Drug Abuse's recommendation to decriminalize the possession of small amounts of cannabis.
War was again declared on illegal substances in the early 1980s: "We are making no excuses for drugs - hard, soft, or otherwise. Drugs are bad and we are going after them," was Ronald Reagan's comment in 1982 on national radio. Dealing in and possession and consumption of drugs became illegal. The Anti-Drug Abuse Act of 1986 mandates minimum sentences of between five and ten years' imprisonment depending on the substance and quantity involved (Wisotsky 1989: 416). The death penalty was even introduced in some states for serious drug offenses (Albrecht/van Kalmthout 1989: 436). The general policy toward drugs has not changed much since then. No distinction is made between different products, and behavior involving drugs is punished. The general approach is repressive, but the policy cannot be implemented.
Once more, the United States has produced astonishing yet interesting regulations for cannabis, as for many other areas of policy. For instance, the death penalty introduced for serious drug crimes would be more at home in an integralistic state like Iran than in a modern pluralistic society; or the experiments with approving the use of cannabis carried out in some states which were aborted less because critical evaluation deemed them to be ineffective (for, in fact, although the evaluations were sorely lacking, they did conclude that decriminalization has no effect on the rate of consumption, while rigorous prosecution leads to a marked increase in cannabis consumption – cf. the studies cited in Reuband 1992) than because they were politically unviable in a country that had declared war on illegal substances[12]. The attempts by some states to decriminalize the use of cannabis could not be continued because they violated federal laws (cf. also Bühringer et al 1993: 17).

[12]Cf. particularly Wisotsky 1990 for the failed prohibition policy pursued in the 1980s.

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