Dear Mr Secretary-General,

The fortieth meeting of the WHO Expert Committee on Drug Dependence (ECDD) convened from 4 to 7 June 2018 at WHO headquarters in Geneva. The fortieth ECDD meeting was dedicated to the review of cannabis and its component substances.

CND Resolution 52/5 noted that the health effects of cannabis had not been recently reviewed and requested the WIHO ECDD to provide an updated report. The thirty-eighth ECDD (November, 2016) reviewed updates presented by the Secretariat and recognised an increase in the use of cannabis and its components for medical purposes and the emergence of new cannabis-related pharmaceutical preparations for therapeutic use. The Committee further recognised that cannabis had never been subject to a formal review and therefore recommended that pre-reviews of cannabis and its component substances be evaluated at a specific ECDD meeting dedicated to those substances.

Following those recommendations, the fortieth ECDD undertook a critical review of cannabidiol (CBD). It also carried out pre-reviews of cannabis plant and resin; extracts and tinctures of cannabis; delta-9-tetrahydrocannabinol (THC); and isomers of THC.

With reference to Article 3, paragraphs 1 and 3 of the Single Convention on Narcotic Drugs (1961), as amended by the 1972 Protocol, I am pleased to submit the recommendations of the fortieth ECDD as follows:

Cannabidiol (CBD)
The Committee recommended that preparations considered to be pure CBD should not be scheduled within the International Drug Control Conventions.

ENCL: (1)

cc: Ms J. Dedeye-Amann, Chief, Secretariat to the Governing Bodies, UNODC
Cannabis plant and resin
The Committee concluded that there is sufficient evidence to proceed to a Critical Review

Extracts and tinctures of cannabis
The Committee concluded that there is sufficient evidence to proceed to a Critical Review

Delta-9-THC
The Committee concluded that there is sufficient evidence to proceed to a Critical Review

Isomers of THC
The Committee concluded that there is sufficient evidence to proceed to a Critical Review

The recommendations and the assessments and findings on which they are based are set out in detail in the WHO Expert Committee on Drug Dependence Fortieth report. An extract of the report is attached in Annex 1 of this letter.

I would like to take this opportunity to inform you that the forty-first meeting of the ECDD will take place in November 2018. At that time, the Committee will undertake critical reviews of the above-mentioned cannabis components (cannabis plant and resin; extracts and tinctures of cannabis; Delta-9-THC; Isomers of THC) as well as of a number of New Psychoactive Substances (NPS), including fentanyl-analogues and other psychoactive substances.

I am very pleased with the ongoing collaboration between WHO, the United Nations Office on Drugs and Crime (UNODC) and the International Narcotics Control Board (INCB), in particular, how this collaboration has supported the work of the WHO Expert Committee on Drug Dependence, and more generally, the implementation of the operational recommendations of the United Nations General Assembly Special Session (UNGASS) 2016.

With my very best personal regards,

Yours sincerely,

Dr Tedros Adhanom Ghebreyesus
Director-General
Annex 1 - Extract from the WHO Expert Committee on Drug Dependence: Fortieth report

**Cannabidiol (CBD)**

Cannabidiol is one of the naturally occurring cannabinoids found in cannabis plants.

There are no case reports of abuse or dependence relating to the use of pure CBD. No public health problems have been associated with CBD use.

CBD has been found to be generally well tolerated with a good safety profile. Adverse effects of CBD use include loss of appetite, diarrhoea, and fatigue.

Therapeutic applications of CBD are being researched for a variety of clinical uses. Research in this area is most advanced in the treatment of epilepsy. In clinical trials, one pure CBD product has demonstrated effectiveness for treating some forms of epilepsy such as Lennox-Gastaut Syndrome and Dravet Syndrome that are often resistant to other forms of medication. Since the Committee met, a pure CBD product has received marketing approval by the US Food and Drug Administration (FDA).

Cannabidiol (CBD) is not specifically listed in the schedules of the 1961, 1971 or 1988 United Nations International Drug Control Conventions. However, if prepared as an extract or tincture of cannabis it is controlled in Schedule I of the 1961 Single Convention on Narcotic Drugs.

There is no evidence that CBD as a substance is liable to similar abuse and similar ill-effects as substances in the 1961 or 1971 Conventions such as cannabis or THC, respectively.

The Committee recommended that preparations considered to be pure CBD should not be scheduled.

**Cannabis plant and resin**

Cannabis is defined as the flowering tops or separated resin of the Cannabis sativa plant. Cannabis contains 121 reported phytocannabinoids, with the most prominent of these compounds being Δ9-THC (THC) and cannabidiol (CBD). THC is thought to be the principal intoxicant constituent of cannabis.

When consumed acutely, cannabis causes adverse effects such as dizziness and impaired motor control and cognitive function. Cannabis can cause driving impairment. There are particular reported risks for children such as respiratory depression, tachycardia, and coma. The adverse effects of cannabis consumption are similar to those produced by THC alone.

Most of the adverse effects associated with cannabis result from chronic use. Regular cannabis use is associated with increased risk of mental health disorders such as anxiety, depression, and psychotic illness. Chronic regular cannabis use is particularly problematic for young people as a result of the effects on the developing brain.
Cannabis can cause physical dependence in humans as evidenced by the onset of cannabis withdrawal symptoms upon abstinence. Withdrawal syndromes include mood changes, irritability, and sleep impairment. Clinical diagnostic guidelines such as DSM-5 and ICD-10 recognise cannabis use disorder.

The Committee considered information regarding the therapeutic indications of cannabis and ongoing research for its possible medical applications. Several countries permit the use of cannabis for the treatment of medical conditions such as back pain, sleep disorders, depression, post-injury pain, and multiple sclerosis. Research with cannabis for its potential medical applications is ongoing.

Cannabis plant and cannabis resin are placed in Schedule I and Schedule IV of the 1961 Single Convention on Narcotic Drugs. Substances that are included in both Schedules I and IV of the 1961 Convention on Narcotic Drugs are particularly liable to abuse and to produce ill-effects. Other substances included in both Schedules I and IV are fentanyl analogues and other opioids considered especially dangerous.

The evidence presented to the Committee did not indicate that cannabis plant and cannabis resin were liable to produce ill-effects similar to these other substances that are in Schedule IV of the 1961 Convention on Narcotic Drugs. The inclusion of cannabis and cannabis resin in Schedule IV may not appear to be consistent with the criteria for Schedule IV.

The Committee concluded that there is sufficient evidence to proceed to critical review of cannabis plant and cannabis resin at a future ECDD meeting and explore further the appropriateness of their current scheduling within the 1961 Convention.

**Extracts and tinctures of cannabis**

Extracts and tinctures of cannabis are substances that have been extracted from the Cannabis sativa plant. These include preparations such as cannabis oils, teas, and nabiximols (an extract with approximately equal quantities of THC and cannabidiol). These substances can be administered through various routes including through oral consumption and smoke inhalation.

Evidence around the dependence potential of extracts and tinctures of cannabis varies by substance. There are no published studies that have evaluated the dependence potential of nabiximols, but there is limited evidence of a withdrawal syndrome upon abrupt cessation (e.g. sleep disruption, mood changes). The frequent use of butane hash oil has been associated with physical dependence. The psychoactive constituent Δ9-THC present in a majority of extracts has been separately examined and has been shown to have dependence potential.

There are few published studies that have evaluated the abuse potential of cannabis extracts in animals or humans. There are, however, studies that have investigated the abuse potential of various components of extracts and tinctures of cannabis. Whilst particular components, such as Δ9-THC, have demonstrated abuse potential, other components in these preparations, such as CBD, do not have abuse potential.
The Committee recognised that the term ‘extracts and tinctures’ as cited in the 1961 Single Convention on Narcotic Drugs encompasses preparations that have psychoactive properties as well as those that do not have such properties. The Committee also recognised that the psychoactive properties of these preparations are due to Δ9-THC and possibly isomers of THC, substances which are currently scheduled in the 1971 Convention on Psychotropic Substances. Amongst the substances that are not psychoactive within the preparations that are derived as extracts or tinctures of cannabis, some like cannabidiol have promising therapeutic indications. Cannabis extracts and tinctures are placed in Schedule I of the 1961 Single Convention on Narcotic Drugs.

The Committee noted that the category ‘extract and tinctures of cannabis’ encompasses a variety of very diverse formulations with varying ratios of cannabis components, in particular THC, and with or without psychoactive properties.

The Committee therefore concluded that there is sufficient information to progress extracts and tinctures of cannabis to critical review at a future ECDD meeting in order to address the necessity of continuing to include the nomenclature ‘extracts and tinctures of cannabis’ in the 1961 Convention.

Delta-9-tetrahydrocannabinol (THC)

Delta-9-tetrahydrocannabinol (THC) refers to four stereoisomers of Δ9-THC. One of these stereoisomers is known by the International Nonproprietary Name (INN), dronabinol, and has recognised therapeutic uses.

Chronic administration of Δ9-THC can induce physical dependence in laboratory animals and in humans. This has been evidenced by the presence of withdrawal effects in animals and human subjects.

The subjective effects of Δ9-THC when administered orally resemble those of cannabis. However, there is little evidence that oral Δ9-THC is used for non-medical purposes so as to cause a public health problem.

Δ9-THC (dronabinol) has approval in a number of countries for therapeutic indications including anorexia associated with weight loss in patients with Acquired Immune Deficiency Syndrome (AIDS) and for nausea and vomiting associated with cancer chemotherapy. Δ9-THC (dronabinol) is routinely administered orally.


In previous ECDD reviews, Δ9-THC and especially dronabinol had been considered in a synthetic form as a pharmaceutical preparation.
However, the Committee recognised that Δ9-THC, in particular, its active and naturally occurring stereoisomer, dronabinol, today also refers to the main psychoactive component of cannabis and cannabis-derived psychoactive products. In this form, dronabinol produces similar ill-effects, dependence, and abuse potential to cannabis which is placed under the 1961 Single Convention. A substance liable to similar abuse and productive of similar ill-effects as that of a substance already scheduled within the 1961 Convention would normally be scheduled in the same way as that substance.

The Committee concluded that there is sufficient information to progress Δ9-THC to critical review at a future ECDD meeting in order to address the appropriateness of its placement within the Conventions.

**Isomers of THC**

There are currently six isomers of tetrahydrocannabinol (THC) listed in Schedule I of the 1971 Convention.

Of the six THC isomers reviewed here, the abuse potential of only two of these isomers - Δ8-THC and Δ6a,10a-THC- have been evaluated in a few human studies. These studies found that the acute intoxicating effects of these substances are similar to those of Δ9-THC, but they are less potent.

There are no reports that THC isomers induce physical dependence. There are no reported medical or veterinary uses of these isomers.

There is no evidence that any of these listed isomers are being abused or are likely to be abused so as to constitute a public health or social problem. However, the Committee noted the potential difficulty of differentiating between these six isomers (listed in Schedule I of the 1971 Convention) from Δ9-THC (listed in Schedule II of the 1971 Convention) using standard methods of chemical analysis due to their chemical similarities. The Committee further noted that this is an important factor to consider in the scheduling of these isomers.

The Committee concluded that there is sufficient information to progress the isomers of THC to critical review at a future ECDD meeting and to explore further the relevance of their current scheduling within the 1971 Convention.