NEW PSYCHOR SUBSTANC CHOACT, SUBSTAN USE EASTERN EUROP D CENTRAL ASIA **REGIONAL REPO**

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More information is available on the website https://harmreductioneurasia.org/

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CONTENTS

	Executive Summary List of Abbreviations	5 6			
1	INTRODUCTION	7			
2	EECA REGION-SPECIFIC UNDERSTANDING AND USE OF NPS				
3	MAIN COMMUNITIES OF PEOPLE WHO WHO NPS IN THE EECA REGION				
4	DRIVERS FOR USE OF NPS IN THE EECA REGION				
5	ROUTES OF ADMINISTRATION OF NPS AND COMBINATIONS 1 OF SUBSTANCES				
6	NPS MARKET IN THE EECA REGION	12			
7	7 RISKS AND CONSEQUENCES OF NPS USE AND RESPONSES TO REDUCE THESE RISKS				
8	B AVAILABLE TREATMENT AND HARM REDUCTION SERVICES FOR PEOPLE WHO USE NPS				
9	IDENTIFIED GAPS IN TREATMENT AND HARM REDUCTION AND NEEDS 14 BY COMMUNITIES OF PEOPLE WHO USE NPS				
0	COUNTRY OVERVIEWS				
	 10.1 Belarus 10.2 Estonia 10.3 Georgia 10.4 Kazakhstan 	15 16 17 18			
	10.5 Kyrgyzstan 10.6 Lithuania	19 21			
	10.7 Moldova 10.8 Serbia	22 23			

11	RECO	MMENDATIONS	24
	11.1	INTRODUCTION	24
	11.2	OVERALL RECOMMENDATIONS	24
		Support, don't punish	
		Acknowledgement and ownership of the phenomenon	
	11.3	DATA COLLECTING AND MONITORING	25
		Set-up of a regional Early Warning System	
		Pilot drug checking services	
	11.4	INFORMATION, EDUCATION, AND COMMUNICATION	26
		Development and distribution of evidence-based and	
		comprehensive information on NPS	
	11.5	HARM REDUCTION	27
		Scale-up and broaden the scope of harm reduction services	
		Address the emergence of chemsex, including unsafe sex and	
		unsafe injection practises	
		Address aggressive marketing of NPS	
		Promote less risky routes of administration	
		NGOs to update outreach work by "going online"	
		(internet outreach work)	
		Promote peer-based interventions among people who use NPS	
	11.6	TREATMENT	29
		Adjust treatment facilities to respond to the needs of people who use NPS	

REFERENCES

EXECUTIVE SUMMARY

This report draws on a study conducted by the School of Law, Swansea University, in collaboration with the Eurasian Harm Reduction Association (EHRA).¹ Within the framework of this project, 8 country reports were drafted, targeting the use of new psychoactive substances (NPS) in Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, and Serbia. The assignment was undertaken to generate a more accurate picture of the use of NPS in these countries. For this study, two sources were used: (1) desk research of available literature and (2) additional structured interviews and focus groups with key respondents.

Throughout the Eastern Europe and Central Asia (EECA) region, the use and variety of NPS are relevant issues, although the nature and extent differ among the EECA countries and subregions, with better awareness of their presence among health professionals and people who use drugs. Synthetic cannabinoids and synthetic cathinones are predominant groups of NPS and widely available, whereas synthetic opioids seem to be more present in Estonia and Lithuania. Among people who use NPS, there are two key populations: those who have more experience with use of drugs, who have shifted to the use of NPS for a variety of reasons, and young people with no previous history of drug use. Drivers for use of NPS include the unavailability of drugs of choice, context-driven motives, as many NPS are not detected in blood and urine, and the aggressive marketing of NPS throughout the EECA region. NPS are marketed on social media channels, but also on public walls in many cities. A main risk of NPS is the absence of (chemical) analysis: that is, you do not know what you are actually consuming. Other health-related risks include mental health issues and increased risk of transmission of human immunodeficiency virus (HIV) and hepatitis C virus (HCV) caused by unsafe use (mainly by injections), often combined with unsafe sex. So far, in the EECA region, no specific treatments are available for people with NPS dependency issues, as the focus has remained on traditional drugs, in particular opioid use. Similarly, harm reduction services are mostly not equipped to address the need of people who use NPS. In the EECA region, data-driven and science-based publications on NPS are almost non-existent.

To better address the phenomenon of NPS in the EECA region, recommendations include the following:

- implement a pilot program to check consumer drug samples (drug checking);
- establish a regional Early Warning System (EWS) for NPS, similar to the EWS for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA);
- develop and disseminate evidence-based, comprehensive information on NPS, including their risks and a suggested action for those overdosing on NPS;
- scale-up harm reduction services to meet the needs of people who use NPS, to address
 the emerging and potentially very risky unsafe drug use and unsafe sexual practices
 in various chemsex scenes (for example, men having sex with men and young people
 communities); and
- implement measures to address the aggressive marketing of NPS in public spheres and via social media.

The time of governments to bury their heads in the sand, hoping this phenomenon would disappear one day, is behind us. NPS are here to stay, and immediate action is urged to address NPS, in particular the needs of people who use NPS.

¹ The Principal Investigator for the overall study was Dr. Rick Lines of the Swansea University School of Law. The research was supported by a grant from the Global Challenges Research Fund.

ABBREVIATIONS & ACRENYMS

EECA	Eastern Europe and Central Asia
EHRA	Eurasian Harm Reduction Association
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EWS	Early Warning System
FT-IR	Fourier Transform Infrared Spectroscopy
GBL	Gamma Butyrolactone
GHB	Gamma Hydroxybutytic Acid
нсч	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
LSD	Lysergic Acid Diethylamide
NBOMe	N-methoxybenzyl
NGO	Non-Governmental Organization
NPS	New Psychoactive Substances
OST	Opioid Substitution Treatment
PCP	Phencyclidine
PVP	Pyrrolidinovalerophenone
STD	Sexually Transmitted Diseases
UNODC	United Nations Office on Drugs and Crime

1. Introduction

For this report, we have followed both the United Nations Office on Drugs and Crime (UNODC) and European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) definitions of new psychoactive substances (NPS). UNODC defines NPS as "substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat." [1] EMCDDA's definition is very similar: "a new narcotic or psychotropic drug, in pure form or in preparation, that is not controlled by the United Nations drug conventions, but which may pose a public health threat comparable to that posed by substances listed in these conventions." [2] "New" refers to newly synthetised substances, but can also refer to substances synthetised decades ago but have now (re-) emerged on the drug market. This is why NPS is also referred to as "novel" psychoactive substances.

NPS vary largely in effects, risks, duration, potency, and appearance. Based on their effects, they are divided as aminoindanes, phencyclidine-type substances, phenylethylamines, piperazines, plant-based substances, synthetic cannabinoids, synthetic cathinones, tryptamines, and a group of other substance (to which, for example, synthetic opioids belong).

Little information is known about the effects and risks (short-term and long-term) of NPS, with few evidence-based health responses (for example, a perspective for action in case of NPS overdosing). Furthermore, most countries lack consumer drug checking services, resulting in little clarity about what substances are actually present in NPS.

The UNODC Early Warning Advisory (EWA) was established in 2013 as a response to the emergence of NPS at the global level. Until December 2020, 1,047 unique NPS were reported to the EWA by 126 countries, with 71 of these unique NPS reported in 2019 [3,4]. The EMCDDA has monitored the presence of NPS on the European market since 1998; presently, at mid-2021, around 850 NPS are being monitored. In 2020, despite the COVID-19 pandemic, 46 NPS were first reported new NPS to the EMCDDA Early Warning System (EWS) [5]. In 2019, seizure data reported significant confiscations, particularly synthetic cannabinoids and synthetic cathinones. A growing concern mentioned by both international agencies was the increased availability and use of synthetic opioids, causing many overdose deaths in North America, but increasingly also in some other parts of the world [4,5].

Alongside the changing drug markets, a second phenomenon has emerged, that of online drug markets. Between 2017 and 2020, drug sales from the Darknet have increased four-fold [4], whereas social media, especially Telegram, are increasingly used for marketing substances [6,7]. During the COVID-19 pandemic, sellers and buyers seem to have increased their use of these messaging services, social media outlets, and online sources [5,8].

It is clear that NPS are now fully integrated in the global, regional, and national drug markets. Therefore, national and regional responses that are data driven and science-based are crucial.

This report aims to address the health and social consequences related to the use of NPS in the Eastern Europe and Central Asia (EECA) region. The goal is for this report to be used as an advocacy and agenda setting tool for use by local, regional, and national stakeholders to improve the structured and systematic monitoring of trends in drug use, drug use patterns, and drug markets, as well as to meet the needs of people who use NPS.

2. EECA Region-Specific Understanding and Use of NPS

In the EECA region, there is no common understanding of what is considered an NPS, neither among health professionals nor among people who use drugs. This lack of a common understanding has hampered discussions on NPS' relevance in the EECA region, subregions, and countries, thus affecting evidence-based decision-making [9].

In some areas, all substances that have recently entered the local market are perceived as NPS (for example, because they are now available on the internet but were previously not available via street-level dealers). This is in contrast to the acknowledged definitions from the EMCDDA and UNODC [10], but also other commonly used definitions for NPS. For this report, individuals who participated in structured interviews and focus group discussions also mentioned the classic or traditional illicit drugs (MDMA/ ecstasy, lysergic acid diethylamide [LSD], mushrooms, phencyclidine [PCP], and speed/ amphetamines) in the list of NPS. In some regions, internationally controlled medicines such as fentanyl were also considered an NPS, mainly because names of the substances were used interchangeably (that is, most of the respondents were not aware of any difference between fentanyl and carfentanyl).²

In addition to the lack of a common definition for NPS, reliable data on the prevalence of use of these substances are absent, although some countries have conducted research among subpopulations of people who use NPS. Seizure data are available in most countries, but data from other sources, such as wastewater analyses (with the exception of Lithuania) or drug checking services, are lacking. This gap in available data does not allow a robust analysis and comprehensive understanding of the nature and extent of use of NPS in the EECA region; therefore, the development and implementation of an effective, evidence-based drug policy response are needed. Good decisions start with good data.

Interview's and focus group's participants mentioned the need for low-threshold facilities

where the content of purchased substances can be (chemically) analysed (that is, a so-called drug checking service). Having chemical analyses of substances would provide knowledge on what substances are actually present in consumer markets in the EECA region. At present, people who use NPS, as well as professionals and policymakers, must rely on nonreliable information from sellers and packages, as well as self-reported information from those who have already used a similar product.

This worrying situation has been made worse by the absence of a regional (and, in most countries, also a national) EWS for NPS. As a result, their emergence is neither monitored in a structured and systematic manner nor are data available from forensic institutes (for example, regarding seizures) to be commonly shared among local, regional, and national stakeholders. There is also no mechanism in place to assess risks of these substances, for example, through desk review of existing scientific literature or through monitoring of "grey" literature (news articles, forum discussions, or social media channels where NPS are offered/discussed).

The prevalence of use of NPS in the EECA region varies between countries. According to structured interview and focus group participants, NPS are hardly used in Serbia, with gamma hydroxybutyric acid (GHB)/ gamma butyrolactone (GBL) being the most commonly used. In contrast, in Belarus, NPS appear to have become the predominant drugs used. Overall, synthetic cannabinoids and synthetic cathinones are the two groups of NPS mostly used throughout the EECA region, with the exception of Lithuania and Estonia, where synthetic opioids seem to be mostly used. In Georgia, ketamine is also considered relatively popular. Other NPS groups, such as

² It is not correct to call fentanyl an NPS, because it is an internationally controlled medicine, while fentanyl analogues such as carfentanyl fall within the definition of what constitutes an NPS.

new benzodiazepines or phenylethylamines, were hardly mentioned by the participants.

The names of NPS usually indicate the supposed **effect** (for example, skorost, speed), the **colour of the substance** (red dragon, blue, red), or the physical **appearance** (crystal, salts, muka); however, although less frequently, they can also indicate the specific **name** (alpha-pyrrolidinovalerophenone [PVP], alpha, mephedrone, meph). Similarly, for synthetic cannabinoids, substances are usually named after their **effect** (Shiza, referring to schizophrenic episodes that are reported after use) or **appearance** (chamomile, spice). However, overall, synthetic cannabinoids

and synthetic cathinones are usually referred to as "spice" or "spices" and (bath) "salts" or "sol," respectively. This is problematic and poses a risk for those who use, as both synthetic cannabinoids and synthetic cathinones incorporate many different NPS that differ largely in effects, duration, potency, and associated risks, especially the risk of overdosing. Having to rely on self-reports from those who use (although better than no information at all) or on advertisements from sellers is not a reliable indicator of effects of a purchased substance and its associated health risks.

3. Main Communities of People Who Use NPS in the EECA Region

There are two predominant groups of people who use NPS. The first group consists of young people (15-30 years of age) with no prior history of drug consumption. This group uses NPS occasionally and mostly in recreational settings such as clubs, parties, and festivals. The second group consists of more experienced (and often older) people who may have used traditional drugs (mainly opioids, such as heroin, fentanyl, or homemade opioid derivatives). This group may have shifted to NPS because of the nonavailability of their drug of choice on the market. They consider the use of NPS as a temporary issue and will stop using NPS as soon their preferred substances reappear on the market. However, within this group are individuals who have become dependent on the specific substance and thus will continue to use NPS.

Other communities of people who use NPS have been identified throughout the region, with some overlap and to various degrees. These include people who use NPS with the intent of having long episodes of sexual activity. Some NPS increase sexual arousal, such as GHB and alpha-PVP, and people engage in frequent and continuous NPS use (often by injection) and extended sexual activity (often with several partners and often unprotected). Within this scene, subgroups include men having sex with men and lesbian, gay, bisexual, and transgender individuals and heterosexual people experimenting with NPS and having sex. A fourth group of people who use NPS is sex workers who purposely use NPS for better performance, sexual arousal, or coping with their work and working conditions.

In some areas of EECA, a fifth group of people who use NPS was identified; these are people who are incarcerated. Within the criminal justice setting, where traditional substances can be detected and people who use drugs fear punishment, synthetic cannabinoids are preferred. They are impregnated on personal documents or pictures, for example, and as such can be brought without difficulty into the penitentiary facility, as it is not visually detectable. Once in, these can be easily smoked by just rolling up the paper and burning it after which the substance is inhaled.

4. Drivers for Use of NPS in the EECA Region

Participants of the structured interview and focus groups mentioned a wide variety of reasons why people use NPS.

Unavailability, bad quality, or high price of drug of choice

Some people choose to start to use NPS mainly because their drugs of choice (in particular, heroin and cannabis) are no longer available (perhaps because it is off-season or because of intensified law enforcement activity). Many respondents mentioned that they see NPS use as temporary and will shift to their traditional drug of choice as soon as it reappears on the market. Some respondents mentioned that the supposed quality (strength, potency) of their traditional drug of choice was inferior or that prices were high and thus switched to use of NPS. On those occasions, they were taking NPS as a (temporary) substitute.

Unintended use

Respondents assumed that many people take NPS unknowingly. That is, they sometimes think they have taken an NPS, as the effects of the substance taken differed from what they expected. This unfamiliarity can be potential risky, as the person may easily overdose, which could lead to a lifethreatening situation.

Context-driven motives

The fact that most NPS are not easily or commonly detected during blood or urine screening is another reason for use of NPS. In some clinics, tests for alpha-PVP and mephedrone are available and used. However, for most other NPS, there are no reliable tests. In contrast, clinics are well equipped to detect traces of heroin or cannabis in blood or urine. Thus, an unintended consequence is that it motivates people who use drugs to initiate or prolong their use of NPS, thus minimising the legal consequences of possession or use of drugs, including incarceration. In Kazakhstan, the fact that one could be expelled from opioid substitution treatment (OST) if any NPS are found in blood or urine motivates people who use drugs to experiment with less common and non-opioid NPS, knowing that these will most likely not be traced in blood or urine.

Consumer benefits, aggressive marketing, and innocent reputation

NPS are generally cheaper than traditional substances and are also easy to obtain (for example, via social media and also because of aggressive marketing strategies). Young people who use perceive NPS occasionally may as an attractive substitute for traditional substances. While heroin is often used intravenously, NPS are often snorted or swallowed, requiring minimal technical skills, and are also less visible; these routes of administration are also less stigmatising. Among many young people who use NPS, there is a perception that NPS are relatively innocent and do not cause any adverse heath events. The fact that some NPS are, or were until recently, legal substances adds to this image and further motivates people to use NPS. Finally, in the absence of evidence-based comprehensive information of effects and risks related to use of NPS, young people generally may be unaware of those risks.

Intentional use of NPS to enhance (sexual) performance

NPS are used by people who engage in chemsex. The NPS, such as GHB and alpha-PVP are used alongside other substances to increase libido and to be able to perform sexual activities for longer periods of time. In the EECA region, people from various communities engage in chemsex, including men having sex with men and lesbian, gay, bisexual and transgender communities, and sex workers (to better cope with working conditions), as well as people who use drugs to engage in predominantly in heterosexual activity.

Youth subculture

Young people tend to distinguish themselves by rebelling against the norms, including against the beliefs of their parents or older generations. Drug use is one way to express rebellion. In this case, young people may purposely start to use NPS to distinguish themselves from other generations. The interest of young people may be compounded by the drastic changes in the drug market itself and the availability of psychoactive substances, which now includes the Darknet and social media markets. Young people may read about NPS in forums or social media, hear about these substances from friends and peers, and decide to try NPS themselves. With no NPS prevention programs and data-driven and science-based information about their risks and other health consequences, the threshold for experimenting with NPS is low.

In the EECA region, as in many other regions of the world, another subculture exists, a group termed "psychonauts," who are often young people who deliberately use psychoactive substances to alter their state of mind.

5. Routes of Administration of NPS and Combinations of Substances

NPS can be administered in many ways, depending on the appearance of the substance. Synthetic cannabinoids (usually herbal mixtures) are by default used by smoking, but routes of administration of synthetic cathinones (which are usually in crystal powder or forms) can differ among those who use. Young people who occasionally use NPS in recreational settings use synthetic cathinones mostly by snorting (sniffing) or by swallowing (for example, adding the powder to a drink). Inhalation (for example, with self-made equipment) is another route, while intravenous or intramuscular routes of administration are not common in this group. For the more experienced and older group of people who use NPS, intravenous or intramuscular injection of synthetic cathinones and synthetic opioids is preferred. However, there are differences among subregions. Injection is very uncommon in Serbia but is a more common route of administration in Kazakhstan, Belarus, Estonia, and Lithuania. NPS that appear in the shape of blotters, such as 1P-LSD or 25I-N-methoxybenzyl (NBOMe), are

administered sublingually (under the tongue). Similar to that shown with routes of administration, the prevalence of combined use of substances differs throughout the EECA region. In Central Asian countries, the combined use of drugs, including NPS, is rather common, while in Lithuania, for example, the combination of one substance with another is much less common.

When people combine substances in one session, they often combine substances with stimulant effects, such as alpha-PVP or mephedrone, with substances with more sedating effects, such as alcohol or cannabis, thereby trying to adjust the effects to their liking; others combine just what is at hand. In Belarus and Central Asian countries, NPS are mixed with medicines such as Lyrica and others. The combined use of substances, especially when NPS is involved, as their make-up is often unknown, poses additional health risks.

11

6. NPS Market in the EECA Region

NPS are offered and sold in the EECA region in a number of ways. One way, characteristic for the EECA region, is that codes and links to websites offering NPS are written or painted on walls in public areas of many cities.

NPS are also aggressively marketed in social media channels (for example, Telegram channels, WhatsApp groups, and Viber). In these media, links to channels of where to order NPS from available operators are frequently communicated. People who subscribe to these social media channels often receive random notifications from

shops advertising NPS. In the EECA region, the NPS market is very visible, much more visible than the market for traditional drugs. NPS are also sold by street-level dealers,

especially in Estonia, Lithuania, and Serbia, and many people prefer this way over the internet. They fear that buying psychoactive substances online may increase their chance of being caught by law enforcement or that they may serve a long time in prison, for example, for drug smuggling, for those drugs ordered and imported from abroad.

7. Risks and Consequences of NPS Use and Responses to Reduce These Risks

Without the option to chemically analyse consumer samples of NPS in the EECA region, it is neither justified nor useful to describe the risks of use of specific NPS. At present, the EMCDDA monitors around 850 different NPS, all with different effects and risks, many of which are still unknown. Therefore, this section will only address some of the overall risks to the consumption of NPS.

Unknown content of the substance

People who use NPS put themselves at risk of adverse health-related events. If someone takes a substance with effects different from anticipated, the toxicological profile may be different. The effects may be more potent, may have a much longer duration, may interfere with possible medication one may be taking or with other substances already taken, and could lead to health consequences, especially an overdose.

Mental health issues

Despite the lack of knowledge on what substances are really present in NPS, many respondents mentioned a number of mental health issues associated with NPS use, especially NPS that have stimulant effects (that is, mainly cathinones). These issues include feelings of paranoia and depression and psychotic episodes during or after consumption.

Increased risk of transmission of HIV and HCV caused by multiple and unsafe injection practices

Injection is often the route of administration of some NPS, such as carfentanyl, alpha-PVP, and other cathinones. Cravings can develop quickly with a number of these substances, requiring much more injections compared with, for example, heroin. Country reports have mentioned that 20 to 30 injections per drug session are common, thereby increasing the risk for abscesses. Because NPS use often occurs within groups of people, mistakenly using someone else's equipment occurs regularly. While binging on NPS, personal inhibitions and psychological barriers may decrease, further increasing sharing of needles and the transmission of infectious diseases such as human immunodeficiency virus (HIV) and hepatitis C virus (HCV).

Increased risk for contracting an STD caused by unsafe or unprotected sex In chemsex scenes, specific NPS are used for their libido-enhancing properties. While under the influence, people engage in long sessions of sexual activity. Here too, personal inhibitions may decrease, and people may engage in sexual activities that they would normally not be engaged in, such as unprotected sex.

8. Available Treatment and Harm Reduction Services for People Who Use NPS

In the EECA region, no specific drug treatment is available for people with dependency issues from NPS use. Existing treatment remains focused on treatment of dependencies related to traditional substances.

A few countries in the EECA region have developed clinical protocols for the diagnosis and treatment of mental health and behavioural disorders by the use of NPS, but it is unclear whether they are actually widely used, as some health specialists were not informed about the existence of such protocols. Some people who use NPS and seek treatment can make use of standard treatment for people with drug dependence, but this is not completely addressing their needs.

A number of countries in the EECA region still make use of the Narcological Register. This system imposes mandatory registration in order to receive treatment. Many people who use drugs resist against this registration as they fear serious problems with law enforcement agencies, obtaining accommodations, finding a job, or getting a driver's licence once they are registered in the Narcological Register and are recorded as a "drug user."

Similar to existing drug treatment services, harm reduction services are still focused on the needs of people who use opiates. The services are neither equipped to meet the needs of people who use NPS nor equipped for the changing drug market. Although OST is targeted for people who use heroin, heroin may not be available on the local market. In a few countries, such as Estonia and Lithuania, people who use synthetic opioids are admitted to OST. However, in Kazakhstan, a person who uses any other drugs besides opioids cannot be accepted for OST. In the EECA region, pilot programs with stimulant substitution treatment do not exist.



9. Identified Gaps in Treatment and Harm Reduction and Needs by Communities of People Who Use NPS

During the structured interviews and focus group discussions, many gaps in the current practise of drug treatment and harm reduction services were mentioned, as well as needs identified by members of communities who use NPS. The following main gaps were identified during the interview and the focus groups.

Implement drug checking services

Throughout the entire region, respondents mentioned the need for low-threshold, anonymous consumer drug checking services. Among people who use NPS, many are unaware of their actual composition. In addition, undesired or unexpected effects after substance use are often reported, thereby suggesting that the substance contained something not expected. Many overdoses can be attributed to the use of NPS, resulting from people basically being their own guinea pig. Colorimetric tests to identify for example fentanyl analogues would be of help.

Scale-up and broaden harm reduction services

In general, harm reduction services in the EECA region are not equipped to deal with new and changing drug trends and changes in patterns of use. Harm reduction services usually focus on people who use traditional opiates intravenously and their needs. People who use NPS need different services, which are not available or only limited. These needs include the provision of a greater variety of syringes and adjustments in current needle exchange policies (such as increased maximum amount of needles per person, expanding

Peer-based interventions are also needed to improve knowledge about NPS among communities who use, as they are often rather closed societies. hours of services, providing vending machines for syringes), as people who inject NPS tend to inject more often than people who use traditional drugs. Respondents also expressed the need for the provision of more and other drug paraphernalia, such as snorting tubes, smoking pipes, and mouthpieces for smokers of synthetic cannabinoids; access to clean water, for dilution and administration of salts, as well as to prevent dehydration; and waterbased lubricants and condoms to prevent sexually transmitted diseases (STDs) and infectious diseases. Some respondents also mentioned blood pressure control as a part of harm reduction programs. Finally, many mentioned the need for psychological support (the so-called "friendly" psychiatrist/psychologist) for people who use NPS. This could be achieved by integration of mental health professionals into harm reduction services.

Develop and distribute evidence-based information on NPS

Among all stakeholders involved, including among members of communities who use NPS, an overwhelming need exists for evidence-based comprehensive information materials on the effects and risks of the use of NPS; on health, social, and legal consequences; and on training programs for employees of harm reduction programs, narcologists, and emergency doctors. Respondents also mentioned the need for a perspective for action in case of overdose. Peer-based interventions are also needed to improve knowledge about NPS among communities who use, as they are often rather closed societies.

10. Country Overviews

Focus group and structured interview participants indicated that NPS use is significant and has been increasing. However, in the EECA region, accurate data on use of NPS are lacking. There are a few local studies, but national data do not exist. So far, the existing data are small studies and do not include a large population of people who use NPS.

In this section, the main findings from structured interviews with professionals and from focus groups, which included representatives of communities who use NPS, are presented by participating country. Full country reports on NPS are available from <u>EHRA's website</u>.

10.1 BELARUS

According to the respondents, the main NPS groups used in Belarus are synthetic cathinones (salts, alpha-PVP, "sabaka," mephedrone) and synthetic cannabinoids (spice, "black mamba"). Although data are sparse, NPS use is considered high in Belarus. NPS are now considered the predominant psychoactive substance on the market since classic or traditional substances such as heroin and cannabis have been eliminated from the local drug market in Belarus and are thus difficult to obtain. The low prices of NPS make their access especially attractive for young people as traditional substances, including cannabis, are too expensive. NPS are easy to obtain and are not detected during regular analyses of blood or urine.

In Belarus, two main groups of people who use NPS were identified:

- young people who have never used anything else prior to use of NPS, with synthetic cannabinoids being used in particular;
- people with longer drug use experience who have started to use NPS by injection (especially those who already injected classic drugs) or by other routes. For people who previously used these traditional substances, NPS are seen as temporary substitutes and not their drug of choice.

In Belarus, NPS are injected (both intravenously and intermuscularly), smoked, sniffed, inhaled, rubbed over the gums, and swallowed. Synthetic cathinones, which are widely available and inexpensive, are mostly injected but also can be smoked. Synthetic cannabinoids are mostly smoked. Poly drug use is also common. The Darknet is the main source for Belarussians to buy NPS. However, NPS are also advertised on social media outlets such as Telegram or Viber, with people randomly receiving messages advertising NPS. Furthermore, addresses of websites where NPS can be purchased are written on public walls in city centres. On these websites, many NPS are marketed in fancy packages and have names that do not reflect the content of the product, that is, with no chemical name provided. Once a product is ordered and purchased, a picture of the money transfer is made as evidence of actual money exchange, after which the seller gives details regarding the geographical location where the product will be stored (the so-called hidden packages or zadkladki).

According to the respondents, most risks associated with NPS use include mental health issues such as paranoia, undesired hallucinations, panic attacks, psychotic and schizophrenic episodes, suicidal thoughts and behaviour, and aggression. Furthermore, many people who use NPS engage in unprotected sex, often with multiple partners at a time, thereby exposing themselves to STDs. There are also risks of contracting other infectious disease, such as HIV or HCV, caused by long episodes of injecting synthetic cathinones (in particular alpha-PVP, which often is injected 10 to 15 times during such an episode), in which needles are shared; this practice also often coincides with unsafe sex. In Belarus, overdoses have been increasing, which may be related to the use of NPS. In case of an overdose, fear of being arrested or being incarcerated prevents bystanders to call for medical assistance. Instead, people use self-invented tips and tricks that are far from evidence-based and are risky. There is no knowledge on perspective for action in case of NPS overdose, neither by people who use NPS nor by health professionals.

Current drug treatment services in Belarus are not equipped for new drug trends. Harm reduction services are also not equipped. Needle exchange programs exist, which include the distribution of condoms; however, these are not sufficient in number or in services provided to meet the different needs of people who use NPS. These needs include services targeted for people who use NPS as well as making available different sizes of provided needles, syringes in different colours, (in order to better recognize one's "own" syringe), safe injection kits, and needle vending machines. Both professionals and respondents who use NPS also mentioned the need for clear, evidence-based, and comprehensive information through leaflets, brochures, and training curricula on NPS, its risks and effects, overdose, and treatment. Psychological support for people who use NPS is also needed among low-threshold services.

10.2 Estonia

In Estonia, respondents mentioned the following NPS groups: synthetic opioids (especially "fenta," which may refer to fentanyl but also to its analogues, such as the much more potent carfentanyl, and isotonitazene), synthetic cathinones (especially alpha-PVP but also mephedrone and others), and, to a esser extent, synthetic cannabinoids (NPS with hallucinogenic effects, which include NBOMes and 1P-LSD). According to the respondents, NPS are often consumed "by accident," meaning that the felt effects were different from expected based on the name and appearance of the substance that was bought. However, without a service to check the content of samples, these unknowns remain for people who use NPS. In addition to the unknowing use of NPS, others, especially young people, use NPS out of curiosity, as a result of social pressures while going out, as a cheaper substitute for drug of choice or alcohol, because of its wide availability (for example, on the Darknet), or because use of NPS is considered the "norm" in specific

circles (for example, the electronic dance music scene). The lack of fentanyl (which was popular in Estonia) prompted some people to use analogues that are similar in effect. Respondents also mentioned the use of NPS to cope with depression and other mental health issues.

In addition to the group of people who use NPS unknowingly, two groups of people who purposefully use NPS were identified:

people (often young) who use NPS occasionally, in recreational settings, and people who use NPS regularly and who often have a long history of drug use (including those who use alpha-PVP as a substitute for opioids such as heroin or fentanyl).

In Estonia, the most common routes of administration of NPS include injection, snorting, and oral ingestion. Poly drug use is common in Estonia, with NPS often combined with other NPS and with traditional drugs. Like traditional substances, NPS are often purchased from street-level dealers and much less from the Darknet as a result of increased law enforcement activity. The risk of being caught by police while purchasing substances online is considered higher compared with buying from street-level dealers.

According to the Estonian respondents, the main risks associated with the use of NPS are mental health issues, such as paranoia, panic attacks, unwanted hallucinations, psychotic episodes, self-harm, and suicidal thoughts and behaviour. Other risks include reckless sexual behaviour and exposure to infectious diseases from sharing needles, as some NPS invoke long episodes of injecting alongside unprotected sex with multiple partners. Because information regarding the content of the substance is not reliable or not available, another risk is overdosing. In case of such an overdose, bystanders lack a perspective for action (perhaps with the exception of alpha-PVP overdoses) and may not ask for medical assistance for fear of arrest. In Estonia, there are currently no substancespecific addiction treatment programs targeting NPS. One specific problem is for people who solely use isotonitazene, a synthetic opioid; because current urine tests do not show isotonitazene, and thus no traces of opioid use are found, acceptance to OST services is rejected. Similarly, existing harm reduction services do not address the needs of people who use NPS, with services still targeting toward people who use traditional substances such as heroin or fentanyl. According to the respondents, what are needed first and foremost are drug checking services, where those who use NPS can get a reliable analysis of the purchased substance. Other needs include the provision of harm reduction paraphernalia for the use of NPS, such as snorting tubes and other safer drug use equipment, and the availability of psychological support and care.

10.3

GEORGIA

Respondents mentioned three main NPS groups used in Georgia: synthetic cathinones (bath salts), NPS with hallucinogen effects including ketamine, and synthetic cannabinoids (spice). The most frequently consumed NPS alpha-PVP, NBOMes, include ketamine, synthetic cannabinoids, and mephedrone. Similar to other countries, NPS are often named by their appearance or colour. For example, synthetic cannabinoids are often referred to as "black bio" (supposedly the most potent synthetic cannabinoid) or "green bio" (the least potent cannabinoid).

Respondents identified several groups of people who use NPS:

people (mainly young) who have never used any other drug before and

people who already used drugs prior to NPS.

Respondents also mentioned a third group: sex workers who use NPS to facilitate their work.

Reasons mentioned by respondents for choosing NPS over traditional substances include the lower costs for NPS, the higher potency of NPS compared with traditional substances, and their easier access, given their wide availability. Respondents stated that people start with using "light" substances but soon want stronger effects and thus turn to NPS. This also happens when traditional drugs are more difficult to obtain or when the quality is poor or prices are high.

NPS are mainly used by smoking, sniffing (snorting), swallowing, or placing above or under the tongue (for blotters). Injection of NPS is mostly by people who are experienced with use of traditional substances. The combined use of NPS and NPS with traditional substances is common in Georgia, which may be purposefully practiced to prolong effects, change the mood (from stimulant/uplifting to relaxed and vice versa), or manage hangovers after the effects wear out. In Georgia, NPS are mainly obtained via the internet, especially on surface-web drug markets. However, there is a general perception among people who use drugs that this poses serious risks of being caught by the police, as they are also active online. Another risk of buying substances through these online markets, is the possible non-compliance of these web shops; that is, they may not deliver the substance at the exact agreed location. NPS are also sold through social media, with NPS-related advertisements often randomly sent to individuals on social media. Finally, NPS can also be sourced through street-level dealers, which is considered less risky than buying online.

According to the respondents, the main risk related to use of NPS is the chance of overdosing after using a substance with unexpected (for example, more potent or opposite) effects, as drug checking of consumer samples does not exist. Most NPS available cannot be analysed; thus there is little information on NPS available, both for professionals and for people who use NPS. Other risks include physical and mental health disorders that can occur after the use of NPS, such as paranoia, hallucinations, panic attacks, or psychotic episodes. Despite the risks of overdosing on NPS, both health professionals and people who use drugs lack a perspective for action and best practises for response.

There is no specific treatment available in Georgia for people who use NPS. Professionals with some experience with people who use NPS often start a dual diagnosis treatment, since many have developed mental health disorders for which they seek treatment.

OST is available for people who use NPS and who also use opioids. However, existing harm reduction services in Georgia are not equipped to deal with new drug trends and specific needs of those who use NPS. For example, the services often focus on people who inject (classic) drugs, and many people who use NPS do not inject. There is a general lack of knowledge about NPS, such as its effects and risks. Respondents mentioned that harm reduction services should provide paraphernalia for safer NPS use (for example, pipes, foils, paper tubes) but also mentioned the need for drug checking services, peerbased interventions, training on NPS for health professionals, and the development of leaflets and information materials on NPS. In general, harm reduction services should broaden their focus to include the needs of those who use NPS by other means other than injection. Also, an EWS, such as the EMCDDA's EWS, is considered necessary.

10.4 Kazakhstan

In Kazakhstan, respondents mentioned that synthetic cannabinoids and synthetic cathinones are the mainly used NPS groups. Respondents who use drugs mentioned some slang names for NPS used in social media and other internet platforms where they buy drugs, including salts or simply "stimulants" for synthetic cathinones and spice or "JWH" for synthetic cannabinoids. Reasons mentioned for use of NPS include the following: as a substitute for heroin and other classic drugs, which have disappeared from the local market; curiosity, especially among young people; the fact that NPS can be easily snorted, swallowed, or smoked (that is, not by injection), which gives NPS the status among young people of being harmless; easy access; not easily detected in blood or urine; peer pressure among young people; numerous advertisements; the increased sexual arousal from some NPS, which are therefore used in chemsex scenes; and generally low prices.

Respondents identified two main groups of people who use NPS:

people who have been using traditional drugs for some time and then switch to regular use of NPS and

people with non-problematic and occasional drug use.

These groups do not commonly mix and differ by age and route of administration. People with 'lived experiences usually inject, whereas people who use occasionally smoke, snort, and swallow NPS.

In Kazakhstan, the combined use of different substances is common and includes combination of NPS with NPS and NPS with traditional substances or legal substances, including beer, painkillers, and benzodiazepines. There are multiple ways to find NPS in Kazakhstan, mostly through Telegram and WhatsApp, but also through advertisements on public city walls, with codes referring to websites where NPS are marketed. Buying face-to-face from street dealers is also possible. NPS are also offered for "free," especially to women, in return for sex, and these contacts are usually established on popular chat sites.

The respondents mentioned multiple risks attached to the use of NPS, including mental health issues (schizophrenic and psychotic episodes, paranoia, undesired hallucinations, suicidal thoughts, and behaviour) and aggression or physical discomfort, as well as cardiovascular diseases and heart problems (heart attack, dystrophy, stroke), and respiratory depression. Overdosing on NPS, which is common in Kazakhstan, was also mentioned as a main risk of NPS use.

Another risk mentioned, especially among young people and those who occasional use, is that, while "high on cathinones," people



often get sexually aroused and engage in long sessions of unsafe, unprotected sex with various people and may cross sexual borders that they may have not have crossed were they sober, putting themselves and others at risk of contracting an STD. This practise is even more problematic as many persons who engage in chemsex may also start to frequently inject NPS. Because this practise may involve many people in dark or poorly lit rooms, injection equipment may be used by multiple people, increasing the risk of contracting an infectious disease such as HIV or HCV. Respondents also mentioned a great risk of NPS-related overdoses but were not clear on the symptoms of such conditions and had no perspective for action.

Although a clinical protocol for the diagnosis and treatment of mental health and behavioural disorders from use of NPS has already been developed, most respondents never heard of it or heard of it put in practise anywhere. However, some narcologists among those interviewed mentioned the protocol and also used it. Treatment for NPSrelated disorders is available in Kazakhstan, but the broadness of its application is not clear. Existing harm reduction services still target people who use opioids and not those who use NPS. Treatment and harm reduction services are not equipped to deal with the changing drug markets. Another issue that has hampered effective treatment is the general fear among people who use drugs of being registered in the Narcological Register when applying for treatment. Once registered as a "drug user," the person is stigmatised and the person's future is seriously undermined, including being excluded from applying for a job or for a driver's licence. Therefore, even if adequate treatment were available, not many people would actually seek that treatment.

Respondents mentioned a wide range of needs that are currently not addressed, including more and different drug paraphernalia offered by harm reduction services, better access to antidepressants and sleeping pills, as many engage in long episodes of NPS intake, provision of safe places including drug consumption rooms, and more competent and compassionate professionals. Also mentioned were the need for policy changes, including moving away from mandatory registration in the Narcological Register, and evidence-based knowledge, information, and training on NPS for all involved (people who use NPS and their family members, law enforcement).

10.5 KYRGYZSTAN

In Kyrgyzstan, there was no consensus among health professionals and people who use drugs on what is actually an NPS. Because there are no drug checking services to know what is used, substances are named by their form (salts, "solyaga," or "solyara"), colour (red, blue), or slang name ("SK," "flour"). To call NPS by their chemical names (for example, alpha-PVP or mephedrone) is very uncommon among people who use NPS, but may be more common among health professionals and representatives from law enforcement agencies. Some consider all synthetic stimulants as NPS, as opposed to "natural" substances as heroin and cannabis. Because heroin has become more difficult to obtain, people have started to use NPS, more specifically synthetic cannabinoids (spices) and synthetic cathinones (salts).

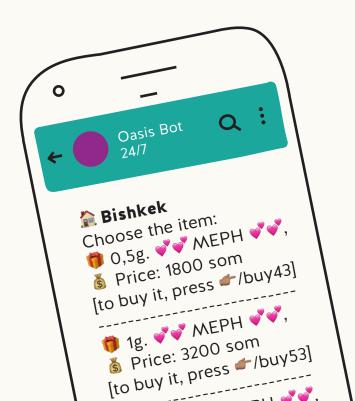
The respondents identified young people,

who often have no prior record of drug use, as the predominant group who use NPS.
A second group includes people who are experienced with use of substances, who may switch to NPS because of no or low availability of traditional drugs.

Both groups differ in route of of administration NPS. Young people NPS mainly smoke and snort and appear to dislike injecting. People with experience mainly inject NPS or smoke through bulbs, antennas, pipettes, and foils. However, some respondents mentioned that young people are shifting from smoking or snorting toward injection of NPS, as injection requires less of the substance for the effect and the "rush" is considered much stronger.

According to the respondents, there are many reasons why people in Kyrgyzstan use NPS. Some reasons are the "fast living" practices of young people; difficulties in obtaining heroin and "khanka"; affordable price and easy to purchase; the ability to purchase anonymously; boredom; familiarity and like for the "high," especially among young people who start first with use of NPS; increased appetite for sex after use, along with the ability to do their work among sex workers; relief of stress and better self-acceptance among men who have sex with men; and payment with NPS for young people working in shops selling NPS. Although the scarce data on NPS use have indicated a low prevalence of use, the topic of NPS is regarded relevant in Kyrgyzstan, particularly among young people but also among other closed and hard to reach communities by harm reduction professionals. Many NPS remain legal and can be freely and legally used. Furthermore, NPS are marketed extensively and aggressively, including on walls of buildings, and are easy to obtain through the internet. There is concern on the general lack in competence and knowledge on NPS and how to support people who use NPS. The fact that there is no way of knowing what NPS is used (there is no drug checking service in Kyrgyzstan) further complicates effective responses. In Kyrgyzstan, NPS are usually sourced online, for example, through specific Telegram channels. NPS may be offered for free, sometimes via billboards, with, commercial contests, for example, to win an iPhone.

According to the respondents, a major risk of NPS is the continuous use and sharing of



needles; many cathinones involve craving, with a need to re-use guickly to have the same effect as the initial dose. In addition, while using NPS, many people get sexually aroused and engage in unprotected sex and highrisk behaviour. Both phenomena can lead to the development of serious health issues, including contraction of infectious diseases and STDs. A major risk concerns the absence of reliable knowledge on what NPS people are actually taking. Other risks mentioned by the respondents generally refer to either synthetic cannabinoids or synthetic cathinones and include a wide range of consequences, including mental health disorders (psychotic episodes, paranoia, depression, and suicidal thoughts), strokes, and heart attacks. Overdose was also mentioned as a major risk of NPS use; respondents further mentioned that knowledge on how to recognize overdoses and a clear perspective for action are lacking in Kyrgyzstan.

Currently (as of mid-2021), a clinical protocol for treatment of mental health or behavioural disorders related to the use of NPS by adults in Kyrgyzstan is under approval, in addition to already existing protocols targeting children and adolescents. People who need treatment generally fear being added to the Narcological Register, which can seriously impact their future, as they will become known as a "drug user." Registration can affect obtaining a paid job, finding accommodations, or getting a driver's license. Furthermore, people fear stigmatisation and discrimination. Harm reduction services remain focussed on people who use traditional drugs, especially heroin, and they do not address the needs of people who use NPS.

The respondents named the following needs: psychological support for people who use NPS, housing, rehabilitation centres, and online counselling. Furthermore, they mentioned the need for comprehensive educational and informational material on NPS, including associated risks and overdose prevention. Harm reduction services should expand their activities to include paraphernalia that meet the needs of people who use NPS (including pipes, water-based lubricants, and condoms). Finally, respondents also mentioned the need for an EWS, similar to EMCDDA's REITOX EWS.

20



Among NPS groups in Lithuania, respondents mentioned that they predominantly know of synthetic cannabinoids and synthetic opioids, with rare knowledge of synthetic cathinones. For cannabinoids, the names spice and "sprayed tobacco" were mentioned. However, many respondents stated that they do not like the effects of cannabinoids and do not use them. With regard to synthetic opioids, fentanyl was surprisingly mentioned as an NPS, and carfentanil seemed to be the predominant synthetic opioid. Respondents mentioned knowledge of use of cathinones by young people, as well as the use of substances with hallucinogenic effects (dissociative and classic), including 2C-B and ketamine. GHB/ GBL was mentioned by some respondent to be NPS. NPS use was mentioned to be common in prisons. Respondents mentioned various reasons for using NPS. Some actually did not know or did not want to take NPS, but it was present in substances sold as traditional substances (based on the effects). Another reason for NPS use may be because traditional substances disappeared from the market or are of poor quality or more expensive than NPS; some people use it out of curiosity or because it is easy to access. Finally, NPS are used by sex workers to be able to perform their work.

Respondents identified two main groups of people who use NPS:

people who are experienced (and mainly use synthetic opioids as a substitute for classic opioids) and

people (mostly young) who use occasionally (and mainly use a broader variety of NPS).
A third groups of people who use NPS was also identified: incarcerated people.

Inmates use synthetic cannabinoids, synthetic cathinones, and synthetic opioids. People with experiences in use of other drugs use NPS by injection (carfentanil) or smoking (synthetic cannabinoids). Young people and those who occasionally use NPS mainly snort or swallow NPS, with cannabinoids not often used by this group. In prisons, synthetic cannabinoids and synthetic opioids (for example, carfentanyl

patches) are mostly used. Synthetic cannabinoids are sprayed onto documents, pictures, and other papers; as such they enter the prison and are given to inmates and rolled and smoked.

In Lithuania, the combined use of NPS and other substances is not common. Nevertheless, it is possible that some people unwillingly and unknowingly take several substances at once. That is, many substances available on the drug markets in Lithuania contain various other substances, including NPS. NPS are usually bought from (street) dealers, sometimes bought directly from the street, and sometimes obtained via intermediaries. Online purchasing, including through social media, is not common given the harsh punishment if one gets caught, especially when purchased from abroad. Such a case is treated as drug smuggling, and many are aware of this. In Lithuania, no drug checking services exist, and many do not know what they are taking, although one non-governmental organisation (NGO) distributes reagent testing kits. This situation is even more troublesome when substances are combined. According to the respondents, the lack of reliable information on content and composition of NPS can leading to health risks and consequences.

In Lithuania, the combined use of NPS and other substances is not common. Nevertheless, it is possible that some people unwillingly and unknowingly take several substances at once.

Risks of NPS use mentioned by respondents including the following: overdose (especially on carfentanil), physical discomfort, HIV (because of multiple injections and sharing of needles), and STDs (because NPS use stimulates the libido and people may engage in long, intense sexual practises without using condoms). Respondents also mentioned various mental health issues due to NPS use, such as psychotic episodes and paranoia. In Lithuania, there are no specific treatment or other programs available for people who use NPS. Those who seek treatment are treated similarly to people with substance use disorders from traditional drugs such as opiates and stimulants. Even if specific treatment programs were available, respondents stated that people who use NPS would probably not attend. Stigmatisation and discrimination in health institutions and judgmental attitudes toward people who use drugs in these situations, including from the general public, remain barriers for those who may need these services. Furthermore, existing harm reduction services (for people who use opiates) are considered to be of poor quality, have limited funding and long waiting lists, and do not meet the demand of people who use NPS. There are a few NGOs that provide some harm reduction services that are specifically for people who use NPS. These services are provided at festivals and include providing information about drugs and their risks and some psychological help for those who had adverse health events during the festival after use of NPS. Another NGO provides reagent testing kits and some drug use paraphernalia (straws, gelatine capsules, vitamins). However, these services remain rare and fragmented. Respondents stated the need of more harm reduction services that provide more paraphernalia as well as distilled water and the need to reduce barriers to access (for example, have open hours during weekends). The need for more shelters and places to sleep was also mentioned. Drug checking is considered essential in order to know what one is using and to anticipate expected effects or risks, including the risk of overdosing. Finally, respondents also mentioned that more psychological support is needed, as well as educational-informational programs to raise awareness and provide evidence-based knowledge on NPS and related risks.

10.7 MOLDOVA

Respondents mentioned that use of NPS has increased in Moldova in recent years, mainly of synthetic cannabinoids (spice, JWH) and synthetic cathinones (mephedrone, PVP, salts). Main reasons why people use NPS are the low price compared with traditional drugs, ease in obtaining, and their general lack of detection in blood or urine.

Respondents identified two main groups of people who use NPS:

 young people with no prior record of drug use who start with NPS (who mainly smoke synthetic cannabinoids or inhale NPS) and people with prior history of drug use (who mainly inject synthetic cathinones).

This second group use NPS mainly because of low availability of their traditional drug-ofchoice. However, NPS are especially popular among young people, that is, those aged from 16 to 35 years, according to the respondents.

Combined use is present in Moldova, especially among those who had used other substances before they started NPS (for example, opioids combined with NPS). NPS are mainly sold through social media, such as Odnoklassniki, Instagram, and Telegram, with messages marketing NPS randomly sent to people on social media. Respondents mentioned the following risks of NPS use: overdoses, psychotic reactions, HIV and HCV (because of multiple injections, sharing needles and unsafe sex), STDs (due to multiple injections and increased numbers of unprotected sexual contacts), heart attacks, and strokes. Although NPS-related overdoses are reported, evidencebased responses are still not available and there is no perspective for action.

Existing treatment and harm reduction services (including syringe exchange, distribution of condoms and disinfectants, overdose prevention, testing for HIV and other infections, and psycho-social assistance) are not equipped to respond to people with mental health or behavioural disorders due to the use of NPS. There is a lack of knowledge among health professionals, harm reduction staff, and people who use drugs about the effects and risks of NPS.

Respondents mentioned the need for measures to reduce health risks associated with NPS use, including information and prevention activities. Raising awareness is also needed, as well as treatment and harm reduction services that address the specific needs of people who use NPS. Needed services include access to clean water to dilute salts; blood pressure control as a part of harm reduction programs; development and distribution of information materials on the use of NPS and its risks and consequences; and training programs for employees of harm reduction programs, narcologists, and emergency doctors.

10.8 Serbia

There is no common perception and little knowledge regarding what NPS are among respondents. Only one NGO is involved in NPS and keeps up to date with recent insights. The NPS group considered to be used most in Serbia is GHB. Before the law on NPS, synthetic cannabinoids were very popular (and both legal and cheap); after the law, they are no longer popular. Although mephedrone, alpha-PVP, 2C-B, and 25I-NBOMe are available, their use is considered relatively rare. The low level of popularity of NPS in Serbia is linked to the poorer financial situation in the country compared with Western European countries and the "unknown nature" of NPS (that is, not knowing what one is buying).

NPS are often used unintentionally, with respondents stating that felt effects of the substance used were (much) different from expected effects. However, some use of NPS is intentional, including curiosity leading people to use NPS and bringing it in from abroad. A final reason for use of (some) NPS, such as GHB, is that it may increase libido.

There are two major groups in Serbia that use NPS:

MSM using GHB/GBL (chemsex scene) and

• people who occasionally use NPS (for example, at parties and festivals, both intentionally and unintentionally).

In Serbia, NPS are used by ingestion, snorting, smoking, and inhalation. Injection of any drug is rare but occurs in the chemsex scene and is called "slamming." Combined use of different substances is common. NPS used in chemsex scenes are bought from dealers and sometimes through Grinder. NPS are sometimes brought in from abroad. Darknet and social media platforms are not popular locations to buy NPS, as not all people have access to it; in addition, there is fear of being caught by police. According to the respondents, the biggest risks of use of NPS are the adverse health consequences, as well as the lack of transparency and lack of available data regarding composition, effects, and risks. With the absence of drug checking services, people who use NPS run extra risks (for example, because of variations in potency, duration, and overall effects between different NPS). These unknowns could lead to an overdose. Both bystanders and health professionals have no perspective for action for an overdose, except for perhaps a GHB overdose. When an overdose occurs, people usually do not call for medical help but try to find a solution themselves. It is necessary for civil society organisation staff to be trained to better deal with overdose and overdose prevention and other drug-related health problems.

Most people who use NPS are those who occasionally use and would seek drug treatment if they have problems. Respondents who use drugs also stated knowing that specific treatment protocols for NPS do not exist, although they would not seek treatment because of fear for being stigmatised as a "drug user." More information about NPS is needed for everyone. An EWS exists, but respondents mentioned that it does not function. Drug checking is considered absolutely necessary. Harm reduction services and treatment programs need to be improved to include information on NPS. Better education and information aimed at people who use NPS are necessary.

11. Recommendations

11.1

Introduction

As elsewhere in the world, NPS are an important and relevant topic in the EECA region. Although general population surveys measuring the use of drugs are not common in the EECA region, surveys aimed at use of NPS in specific communities could be an option for information gathering. Although a few small and fragmented studies have reported the use of NPS, these data are not suitable to make reliable assumptions on the nature and extent of use of NPS in all the countries of the EECA region. Another concern is the general lack of evidence-based, comprehensive information about these substances, such as their risk profiles, despite multiple reports of risky patterns of intravenous use of NPS, in particular synthetic cathinones, alongside unsafe sexual practices. Furthermore, young people with no prior history of drug use are attracted to the use of NPS (because of their easy access, wide availability, low prices, and innocent image). Although some may have basic knowledge of effects and risks of more traditional drugs, such as cannabis, many of these young people who use NPS are exposed to extra risk while using NPS, with no reliable information available, except for some self-reports by their peers. Consequently, in these groups, as well as among people with experience in use of drugs, many adverse health events are reported, including overdoses, for which no information or perspective for action is available.

11.2

Overall Recommendations

Support, don't punish

To prevent further unwanted and problematic situations, such as outbreaks of HIV and/ or HCV among people who use NPS, and to reduce other adverse health events among people who use NPS, immediate action is urged throughout the EECA region. However, these recommendations are only effective in a political and juridical climate that does



not criminalise people who use drugs, but instead treats people who use drugs as people who may need care, support, and help. The decriminalisation of use and possession of drugs, including NPS, is therefore a prerequisite to all efforts addressing the emergence of use of NPS in the EECA region. It is essential that law enforcement agencies do not focus on punishment by arresting and incarcerating people who use NPS. Instead, law enforcement agencies should address the aggressive marketing of NPS throughout the EECA region.

Acknowledgement and ownership of the phenomenon

Governments of countries in the EECA region first and foremost need to acknowledge that the issue of NPS, and new drug trends in general, is a relevant and emerging topic that needs adequate responses at local, regional, and national levels. National governments need to prioritize funding and initiate effective and evidence-based measures that address the emergence of use of NPS, especially because of the risky practises involved, both in use and in marketing of NPS. Data-driven and science-based drug policies are needed to implement best practice interventions targeting people who use NPS.

Banning NPS (either by substance or by group type) often leads to adulteration of the substance [11], thus increasing adverse health events, and may not necessarily affect the demand for NPS. People who have an interest in NPS will most likely move to other, potentially less known NPS. Therefore, drug policies addressing NPS should also address the demand for NPS.

Recommendations include scale-up of activities in data collection and monitoring; information, education, communication (including skills and capacity building); harm reduction and prevention; and drug treatment. Recommendations in each of these domains are discussed below.

Data collecting and monitoring

Set-up of a regional Early Warning System

For a data-driven and science-based preparedness and response to the emerging threats posed by the use of NPS, it is essential to set up a structure that facilities data collection and disseminates information on NPS. It is therefore strongly recommended to establish a regional EECA EWS, which can gather accurate and detailed data on new, emerging drug trends. Such a system usually has four pillars:

 the monitoring of substances appearing on the market;

risk analysis or assessment of substances entering the market;

dissemination and communication of evidence-based information on those new substances, and

capability to respond in cases when there is a need.

The EECA region should develop a system on NPS similar to the REITOX EWS [12] (EMCDDA) in the European Union or to the UNODC Early Warning Advisory [13], which would have a network of national focal points that regularly contribute to the network and share data on new and potentially risky substances or situations. Sharing existing data between various laboratories and other stakeholders is essential for a good understanding of the nature and extent of the prevalence of use of NPS in the region. In the Netherlands, this triangulation of data from its drug checking services, the Forensic Institute and the Customs Laboratory, has led to a detailed understanding of production, trafficking, and use of NPS; the combination of these data with data from its poison centres has added valuable content to the risk profiles of NPS [14].

Action needed from national governments, including national and local stakeholders and regional organizations.

Pilot drug checking services

There is a crucial need for the establishment of regional drug checking pilot projects. Currently, people use substances without knowing what they actually take, leading to many adverse health events and overdoses. Drug checking is gaining ground worldwide and is increasingly recognised as an essential risk reduction strategy for any evidence-based drug policy. Furthermore, drug checking services have been a valuable tool to monitor drug markets and changes in those markets. Drug checking services in the European Union are often part of an EWS, often allowing communication about risky substances on the market to communities of people who use drugs and health professionals. This practice has largely contributed to the prevention of many drugrelated incidents and fatalities. Drug checking services have also been useful in reaching groups of people who use drugs, who would otherwise not be reached. For example, during communication of lab analyses with the person submitting the sample, essential information about the substances is shared; depending on the result, the person may be advised not to use the substance. This advice is often followed up [15]. Staff of drug checking services also play an important role in referring people who may need support and care services or communicating any necessary or available treatment. Finally, another option in the absence of such services, people who use drugs may consider using the International Drug Testing Service [16], run by the Spanish drug checking service Energy Control, although there are costs and, in some countries, also risks³ involved.



³ Depending on the country of origin, sending illicit substances by mail may be illegal and the sender may be faced with legal repercussions.

Even drug checking in its most basic form (just colorimetric reagent tests) would already be of added value. It could allow for a consultative talk when communicating a test result to the person who submitted the sample, regardless of the result, valuable harm reduction information about the use of drugs, and interpretation of the result from the staff.

There are various colorimetric reagent tests already available that can be used to identify number of psychoactive substances, а including some NPS [17,18]. Because there are no drug checking services (which use chemical analysis such as gas chromatography-mass spectrometry or Fourier transform infrared spectroscopy [FT-IR]) in the EECA region, the provision of such colorimetric tests to people who use NPS might be considered. However, EMCDDA currently monitors over 800 unique NPS, most of which cannot be yet detected with these tests. For traditional drugs and if used properly, it may be "better than nothing." These tests can qualify (test whether the supposed substance present) but not quantify (test how much of the substance is present in the sample). The reagent cannot indicate the purity of the sample. It also cannot determine whether the sample also contains other substances. Therefore, introducing colorimetric tests may give people a false sense of safety, especially if they do not draw the right conclusions to the test results [19]. An alternative could be the introduction of a handheld FT-IR device; such a device can provide valuable and reliable information about a substance at an affordable cost [18].

> Action needed from national governments, including national and local stakeholders, regional organizations, donors.

11.4

Information, education and communication

Development and distribution of evidencebased and comprehensive information on NPS

In the EECA region, there is a general lack of evidence-based information about NPS for all layers of society, from law enforcement agencies to health professionals and from harm reduction staff to communities of people who use drugs, including NPS. Comprehensive, accurate. detailed, and evidence-based information should become available in all languages of the countries in the region. Clinical characteristics of several NPS, such as alpha-PVP [20,21] and mephedrone [22,23], are becoming increasingly known and available in the literature. For both alpha-PVP and mephedrone, risk assessments have been drafted by the EMCDDA [24,25], containing valuable evidence-based information on both substances, which could be used as communication tools for both health professionals and people who use these Similarly, substances. risk assessments have been drafted for several synthetic cannabinoids, synthetic opioids, and other NPS [26]. Their dissemination should be accompanied by skills and capacity building on every aspect of the phenomenon of NPS: effects, risks, treatment options, legal issues, recognition of dependency, overdosing and best practice responses and perspective for action, and safer use and other harm reduction techniques. In the development of materials and training, the active involvement of communities of people who use drugs is essential, as they speak the language and may have additional, lived experiences on this topic. It is recommended to make use of the growing body of literature, best practices, and resources and tools available online, for example, through UNODC's www.nps-info.org or the EMCDDA portal on new psychoactive substances (https://www.emcdda.europa.eu/topics/nps).

> Action needed from regional NGOs, national governments, local NGOs, and local authorities.

11.5 **Harm** reduction

Scale-up and broaden the scope of harm reduction services

It is recommended that harm reduction services scale-up their services and broaden the provision of safer use materials to address the needs of people who use NPS, both those who use NPS intravenously and those who use NPS through other routes of administration. For people who inject NPS, the respondents mentioned the need for more diversity in needles, including size (1, 5, 10 mm) and appearance (colours), as during some sessions of use (for example, with alpha-PVP) people may mistakenly use one another's equipment. For people who do not inject NPS, the respondents mentioned a broad scale of needed paraphernalia, including snorting tubes, smoking pipes, and mouthpieces. Throughout the world, many toolkits have been developed to meet the needs of amphetamine-type stimulants; thus a consideration is the development and dissemination of similar toolkits for people who use (stimulant) NPS, as is already done in Novosibirsk, Russia [27]. The introduction of a blood pressure control program as a part of harm reduction programs was also mentioned. For all people who use NPS, harm reduction services should expand their services with psycho-social help and support, as there is a need to integrate mental health interventions (for example, to involve psychologist) into the provision of harm reduction services and into harm reduction teams.

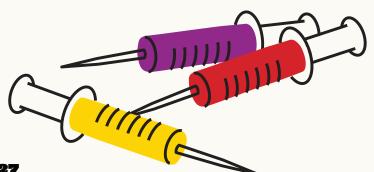
Finally, OST remains focused on people who use heroin; a stimulant substitution treatment for people who use NPS (for example, cathinones) should be considered, based on best practice interventions from elsewhere in the world [28,29].

> Action needed from national stakeholders, national and local harm reduction services, and peer-based groups.

Address the emergence of chemsex, including unsafe sex and unsafe injection practises

At both the country and regional levels, raised awareness is greatly needed among major stakeholders and communities who use NPS with regard to the risky practices of multiple injections of cathinones combined with unprotected sexual activities by many who use cathinones. To address this risk, it is essential that professionals and people involved in chemsex are trained (for example, by e-learning) [30] to get in contact with and educate people who engage in these practices. At the level of harm reduction services, it is essential to increase low-threshold access to and coverage of sufficient safe injecting equipment, such as syringes, as well as snorting tubes and other drug paraphernalia. In addition, interventions should be developed that aim at preventing people, especially young people, who may be attracted to engage in chemsex but who may be ignorant of, or indifferent to, the risks involved [31]. These interventions also require the effective input of peers. Communities who engage in chemsex, as well as general communities who use NPS, are often rather closed communities, and impose high thresholds on harm reduction service providers and other health professionals to render their services. Getting inside these communities requires specific skills [32], and involvement of peers is key. Under the flag of harm reduction services, implementation of self-help groups consisting of people with lived experiences is considered as an effective empowerment tool.

> Action needed from regional NGOs, local authorities, local NGOs, and communities who use drugs.



Address aggressive marketing of NPS

Immediate action is recommended to address the current aggressive marketing of NPS to young people and in public spaces in most of the EECA region. This includes direct action (for example, re-painting walls, as done by harm reduction services in some areas) but also the targeting of online shops that sell NPS. Law enforcement should also consider actions that address the sale of NPS, in particular, their aggressive marketing. Focusing on closing shops in itself does not necessarily lead to a reduction in use, as people will just buy elsewhere. As long as the demand remains, the supply will follow. Therefore, at the level of NGOs who provide services to people who NPS, other actions to consider (for example, based on experiences in Europe) are to address web shops or online platforms that facilitate the sale of NPS directly, pointing to their responsibilities, especially when chemical analyses of samples sold through these shops show that substances are, mistakenly or deliberately, miss-sold as other substances.

> Action needed from regional organisations, national law enforcement agencies, local authorities, and local NGOs.

Promote less risky routes of administration

In the EECA region, many NPS (some cathinones, in particular) are administered by injection; these cathinones have been shown to involve a much higher frequency of injection than needed for people who inject heroin. To reduce the chances of contracting HIV or other infectious diseases from intravenous drug use, it is recommended to initiate targeted campaigns that promote less risky routes of NPS administration (for example, switching from injection to snorting or smoking on foil), although all routes of administration include risks. The availability and accessibility of sufficient clean, hygienic drug paraphernalia at services providing harm reduction and through outreach work in these communities [31] are especially important. In Germany, for example, a similar campaign successfully changed opiate consumption patterns from injection to inhalation [34]. In Czech Republic empty gelatine capsules were distributed as an oral alternative of drug use for those injecting methamphetamine [33].

Action needed from regional NGOs and local authorities.





NGOs to update outreach work by "going online" (internet outreach work)

NGOs working with people who use drugs and harm reduction services are recommended to explore ways to conduct online outreach work. During recent decades, drug markets have undergone dramatic changes. Harm reduction service staff need to be informed about current online drug markets and their online practices to better understand people who make use of these markets and to improve harm reduction services according to today's needs. To improve these services in line with the changing needs of communities of people who use NPS, it is strongly recommended that NGO staff take note of current online drug markets, including recent research [35] on social media [36] such as Telegram [37], and get to know the various modalities in which NPS are marketed. UNODC recently organised a series of webinars targeting the promotion of an internet-based information dissemination tool for this purpose [38]. The use of platforms and channels where NPS are offered is a possible space for harm reduction workers or peers to provide harm reduction messages and answer questions on NPS, as is happening in one of the EECA countries to a certain extent. The drug checking service Energy Control from Spain and, more specific Dr. X pioneered years ago, has provided online harm reduction advice through several Darknet markets [39].

Action needed from national governments, local NGOs, and peer groups.

Promote peer-based interventions among people who use NPS

is recommended that peer-based lt interventions among communities of people who use NPS are implemented at the country level to increase the level of knowledge, especially in young people, about NPS and to promote safe sex and safer use strategies among communities of people who use drugs [40,41], such as self-control techniques [42,43]. Another added value of peers is that they can find and connect people who use drugs with health and care providers through their contacts with hard-to-reach populations.

The provision of educational materials and drug paraphernalia promoting safer drug use can be used as a tool to reach groups, especially young people, who often are part of closed communities. Young Wave in Lithuania [44] and Unity in the Netherlands [45] are examples of successful peer-driven interventions.

> Action needed from governments, local NGOs, and communities of people who use drugs.

11.6 Mrcetr

Treatment

Adjust treatment facilities to respond to the needs of people who use NPS

In the EECA region, the access to (and coverage of) facilities for the treatment of people with mental health or behavioural disorders due to the use of illicit substances is low. Mandatory registration in the Narcological Register in many of the countries in the region is an obstacle for effective drug treatment. It is strongly recommended that concerned countries adopt and implement measures to reform the drug treatment system and modernize the system according to best practise outlined in the European and International Standards of Treatment of Drug Use Disorders [46]. Furthermore, as mentioned earlier, current drug treatment centres are not equipped to treat mental health and behavioural disorders as a result of use of NPS. Focus has remained

on treatment of people with disorders related to the use of classic drugs, especially heroin. Therefore, it is strongly recommended that treatment programs extend their treatment modalities to allow for effective and evidencebased responses to the needs of people who use noninjected NPS, especially for disorders related to the use of synthetic cannabinoids and/or synthetic cathinones. One could argue whether specific treatment should be established to address the treatment demands of those who use NPS. Although there is a growing understanding that many of the problems and behaviours of people who use NPS are similar to problems associated with stimulant use and alcohol use, updated and expansion of existing treatment are needed to meet the needs of people who use NPS [47]. Although treatment may be similar

(symptomatic), professionals should be educated about the effects and risks of NPS use. With already a history of use of NPS (for example, in Western Europe), several guidelines for the treatment of NPS-related disorders have already been developed and implemented [48-51] and case studies have been described [52]. Existing protocols should be examined and improved to include effective treatment of those with mental health or behavioural disorders from the use of NPS and make use of already existing guidelines [53].

Action needed from national stakeholders and national and local treatment centres.



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31

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