



# Workstream 4

## Monitoring of substance content

### *Final report*

---

*The TRIMBOS Institut*

**Coordinators:**

Tibor Brunt (TRIMBOS)  
Agnès Cadet-Taïrou (OFDT)  
Magali Martinez (OFDT)

**Main contributories from partners:**

Emmanuel Lahaie (OFDT)  
Simon Brandt (LJMU)  
Katerina Grohmannova (Czech Focal Point)  
Artur Malczewski (SWPS)  
Thomas Nefau (OFDT)

Co-funded by  
the European Union



**Date:** 25/11/2015

## **Contributions to WS4**

### **WS leader**

Tibor Brunt

### **WS4 leaders by country**

*Emmanuel Lahaie then Thomas Néfau (Fr)*

*Simon Brandt (UK)*

*Katerina Grohmannova (Cr)*

*Artur Malczewski (Pl)*

*and*

*Vendula Belackova (Cr)*

*Agnès Cadet-Tairou (Fr)*

*Hanna Fidesova (Pl)*

*Marta Jabłońska (Cr)*

*Michał Kidawa (Pl)*

*Magali Martinez (Fr)*

*Viktor Mravcik (Pl)*

*Daan Van Der Gouwe (NI)*

### **Toxicological laboratories partners**

*Roland Archer (UK)*

*Agata Blazewicz (Cr)*

*Luc Humbert (Fr)*

*Pavel Tomíček (NI)*

## Table of contents

<b>Introduction</b> .....	4
<b>Objectives</b> .....	4
<b>Methodology</b> .....	5
<b>Results</b> .....	8
<b>Figure 1.</b> Percentages NPS detected in NPS samples that were labelled as such.....	11
<b>Figure 2.</b> Purity of all NPS per country. ....	11
<b>Figure 3.</b> Purity per NPS across all countries measured.....	12
<b>Lessons learned and encountered difficulties</b> .....	13
<b>Conclusions</b> .....	17
Annex 1 – Selection of NPS round1 per I-TREND partner .....	19
Annex 2 – Selection of NPS round2 per I-TREND partner .....	20
Annex 3 –Online shops per I-TREND partner .....	21
Annex 4 –Protocol of ordering NPS.....	23
Annex 5 –European sample transmission form - Council Decision 2001/419/JHA .....	26

## ***Introduction***

The trade and online marketing of new psychoactive substances (NPS) is unregulated in most EU countries, since a lot of these substances are not legislated and it mostly eludes the attention of authorities as of yet. Besides, NPS follow each other up in rapid succession and it is virtually impossible to keep track of what is being sold or marketed from year to year. Most buyers of NPS online anticipate their product to be 99% pure, as most of these substances are synthesized in commercial (Asian) laboratories and directly shipped to Europe. However, as this is no regulated market, there is no control of what is being sold under the different names of NPS. Especially, when NPS are being sold under specific brand names (like “Spice” or “Bath Salt”) there is basically no guarantee of what it contains, this may be various different substances or a mix of substances.

## ***Objectives***

Therefore, I-TREND aimed at analysing NPS obtained from different online shops and sold under various names, both chemical names and brand names, to investigate if what is being sold actually contains the substance or another one(s) instead.

Basically, the following objectives of analysing NPS were identified on forehand:

- To investigate whether the contents of an obtained NPS matches that of what is mentioned on the online shop
- To investigate whether the purity differs between the EU countries
- To identify unknown substances present, which may be previously unidentified NPS
- To see whether a network can be set up between toxicological laboratories across the EU for analysis and validation purposes
- To communicate possible detrimental outcomes of substance analysis to drug consumers

## **Methodology**

### *Reference standards*

Reference standards are samples of pure substances required to calibrate equipment of laboratories. It makes possible the quantification of the amount of this very same substance contained in a sample of any product. As most NPS are new, toxicological laboratories do not have them. It was then necessary to supply partner's laboratories with reference standards matching the NPS samples that were planned to be purchased. A list of all required reference standards was built upon the Top list of the most circulating substances in one's country, elaborated by each partner within WS5.

Reference standards (50 mg) for the different NPS were ordered and purchased by the OFDT from a common supplier, LGC standards™ (LGC Standards, Middlesex, Teddington, UK). Ordering reference standards from one supplier helps to check the fit between standard and sample and creates a uniform measure of calibration among the different partner laboratories. It also provided the chance to validate each other's methods or results by the different partner laboratories. Last but not least, it was expected to get better prices if purchases were pooled.

It had been planned that the OFDT Partner's laboratory should receive all the reference standards samples (one for one substance to analyse), to prepare a dilution and dispatch it among all the partners laboratories. Thus, this process was dropped for a part of standards, due to several reasons (see Lessons learnt) and supplier sent them directly to the different laboratories. Unanticipated authorizations had to be requested by partners to allow chemical standard substances to travel, even if not illegal occurring 1 to 3 month of delay.

### *NPS samples*

For the ordering of NPS, a protocol was designed by the OFDT of the procedure how to order NPS, based on methods of payment and methods of shipment (see Annex 3, page 21). However, a few partner institutes met with some trouble while using this protocol (see "Lessons learned", page 14).

The objective was to define a protocol allowing simultaneously to protect researchers of police investigations and to offer the best administrative transparency. No safe way was found to purchase online substances and partners had to do it with personal credit cards and to organize the delivery to personal homes.

One exception was the Trimbos-institute that did not order NPS online, but had NPS handed in by consumers through the regular weekly routine of the DIMS. Drug consumers were offered the opportunity to have their NPS quantified in exchange for exact information about the online purchase, such as price and website.

## *Chemical analysis*

### **France**

The OFDT laboratory use a method based on exact mass measurement using an ultra-performance liquid chromatography quadrupole time of flight mass spectrometry (UPLC–qTOF) for the simultaneous detection of different compounds in the samples.

Mass spectrometric conditions: positive electrospray ionization (ESI), acquisition with MSe scan mode: scan range 100-1000 m/z for the function 1 and 50-1000 m/z, collision energy ramp 10-40 eV for the function 2, infusion of calibration solution lockmass (Leucine enkephaline) for the function 3.

NPS samples were weighed and each sample was dissolved in fixed volumes (25 mL) of methanol and filtered through a 0.20 µm filter paper. 1 mL of this solution was diluted to 10 mL with HPLC grade methanol. 1 µL of each sample was injected into the UPLC–qTOF-MS system.

The identification is based on knowledge of molecular formula, analysis of the isotopic mass, retention time in the chromatographic conditions and ideally the exact masses of one or more specific fragment obtained after collision induced dissociation.

Powerful software packages allows features and research previously impossible or incomplete. A compound can be suspected, knowing its exact mass without use of a pure standard for characterizing. The analyse by a software (Massfragment) of the fragments obtained is necessary for confirmation in silico modelling. Internet databases are accessible and open vast fields of investigation.

### **Poland**

The SWPS had their NPS analysed by OFDT's laboratory.

### **Netherlands**

The DIMS laboratory utilized several methods for detection and analysis, gas chromatography coupled with mass spectrometry (GC-MS) equipment was used for detection of different compounds in a NPS sample. In addition, liquid chromatography with diode array detection (LC-DAD) was used for the exact quantification of compounds.

Samples were pulverized and homogenized by using a mortar and pestle. Then, for the GC-MS qualitative analysis, the powders (10-15mg) were dissolved and extracted in an aqueous basic solution and re-extracted using a nonpolar organic solvent. The organic extract was analyzed by GC-MS. Compounds are separated using a nonpolar GC column. The GC-MS method is suitable for detecting analytes at a concentration equal to or larger than 1% (m/m). GC-MS identification (structure proposals) is based on the EI mass spectrum match against commercial EI databases, against the custom made DIMS EI MS database, against EI spectra reported in literature or by mass spectra interpretation. For known analytes present in the DIMS EI MS database the

identification was also based on their known and measured retention times, given the fact that the GC-MS method is retention time locked. A system suitability test (1% m/m) containing 10 target analytes was analyzed before and after each sample series. This test was used to check the sensitivity of the system, the chromatography, the mass spectra and the retention times.

For LC-DAD analysis, the reference standards (10-15mg) were dissolved and extracted in methanol, centrifuged and directly analyzed by LC-DAD. Ten target analytes were calibrated (9 point calibration series) for the quantitative analyses. A system suitability sample was analyzed before each sample series. This test is used to check the calibrations and the chromatography.

## **UK**

The LJMU laboratory utilized gas chromatography coupled with mass spectrometry (GC-MS) for detection of different compounds in a NPS sample. In addition, single-point calibration GC was done for quantitative analysis. In short, concentration calculations were based on a single point calibrator, using the reference standards as the internal standards. From this a linear calibration curve was created and amounts of NPS could be calculated based on this curve.

## **Results**

In total, 184 NPS were analysed by the I-TREND partner institutes. The UK succeeded in purchasing the most NPS (84) followed by The Netherlands (53), France (29) and Poland (18). The Netherlands showed most diversity in number of online shops where NPS were purchased (22 different shops), followed by France (11), Poland and the UK (5). Poland and France purchased 9 different NPS, the UK 16 and The Netherlands obtained 15 different ones. Table 1 gives a qualitative representation of which NPS were obtained per country and which NPS were detected therein.

As can be seen in Table 1, many NPS were not pure or even contained the NPS that they should contain. Therefore, in Figure 1 the percentages are shown of NPS obtained per country that contained their labelled product. Figure 2 shows the average purity of all NPS detected per country. As visible there are large differences between the countries and in many countries you don't always get what you order, especially The Netherlands and Poland (Fig. 1). In general, the UK seems to be the best online market place to purchase NPS, as both the goods delivered contain what is labelled and the purity is relatively high (Figs. 1 & 2). Purity is generally quite low in Poland. It was also investigated if there were any differences in purity per analysed NPS, regardless of online shop. This seemed to differ considerably per NPS, with some NPS falling below 50% purity (e.g. 6-APB and UR-144) and some reaching almost 100% purity (Fig. 3). However, it has to be mentioned that the techniques used for chemical analysis were quite different between countries (see methods). Nonetheless, there was considerable variety in analysis result, also within the NPS analysed by the same country.

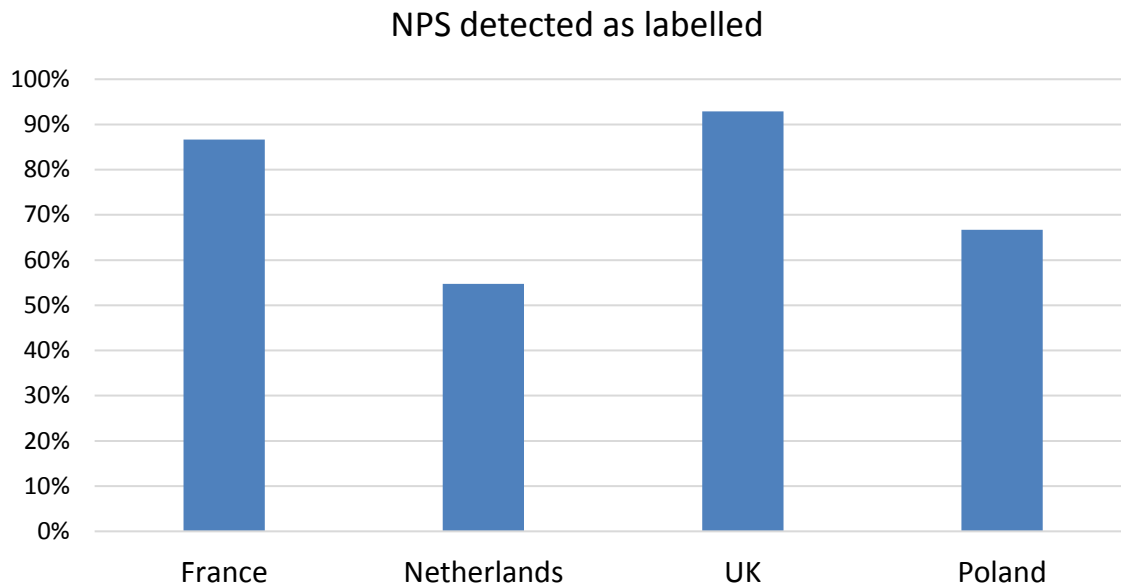


**Table 1.** Number of NPS obtained per country and number of NPS detected therein.

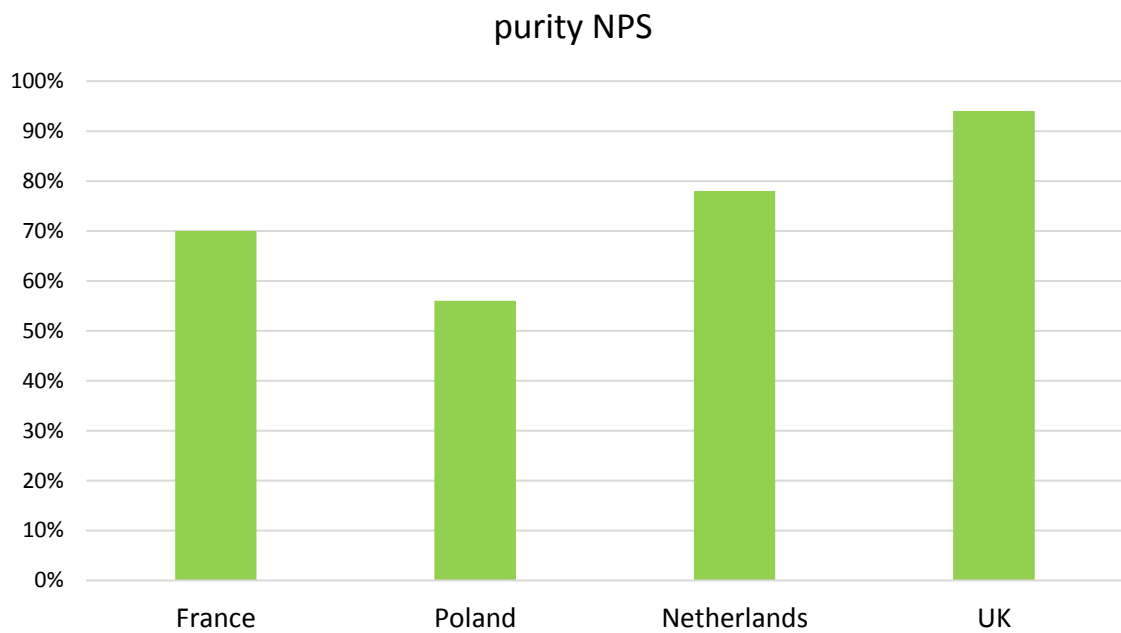
<b>The Netherlands</b>		<b>United Kingdom</b>		<b>Poland</b>		<b>France</b>	
Purchased as (N):	Detected (N):	Purchased as (N):	Detected (N):	Purchased as (N):	Detected (N):	Purchased as (N):	Detected (N):
25I-NBOMe (6)	25I-NBOMe (2); 25C-NBOMe (2); 25B-NBOMe (1); DOC (1); NBOH (1)	5F-AKB48 (2)	5F-AKB48 (2)	3-MMC (2)	3-MMC (2)	5-APB (5)	5-APB (2); 5-EAPB (1)
3-MMC (2)	3-MMC (2); mephedrone (1)	5F-AKB49 (1)	5F-AKB48 (1)	Ethcathinone (4)	Ethcathinone (2); pentedrone (2)	25I-NBOMe (3)	25I-NBOMe (2); 25C-NBOMe (2)
4-FA (15)	4-FA (12); 3-FMC (1); 3-MMC (2)	5F-AKB50 (1)	5F-AKB48 (1)	Pentedrone (2)	Pentedrone (2)	5-MeO-DALT (5)	5-MeO-DALT (2)
4-MEC (1)	2C-E (1)	5F-AKB51 (1)	5F-AKB48 (1)	3,4-DMMC (2)	Pentedrone (2)	Ethylphenidate (7)	Ethylphenidate (4)
5-APB (2)	3,4-DMMC (1); 6-APB (1)	5F-AKB52 (1)	5F-AKB48 (1)	pMPPP (1)	Pentedrone (1)	6-APB (3)	6-APB (1); 5-MeO-DALT (1)
6-APB (6)	5-APB (4); 6-APB (4); MDPV (1); 5-APDB (1)	5F-AKB53 (1)	5F-AKB48 (1)	Alpha-PVP (2)	Alpha-PVP (2)	Barium (1)	-
5-EAPB (1)	5-APB (1)	5F-AKB54 (1)	5F-AKB48 (1)	UR-144 (2)	UR-144 (2)	Orange Dutch (1)	-

JUST/2012/DPIP/AG/3641 - I-TREND WS4 Monitoring substance contents

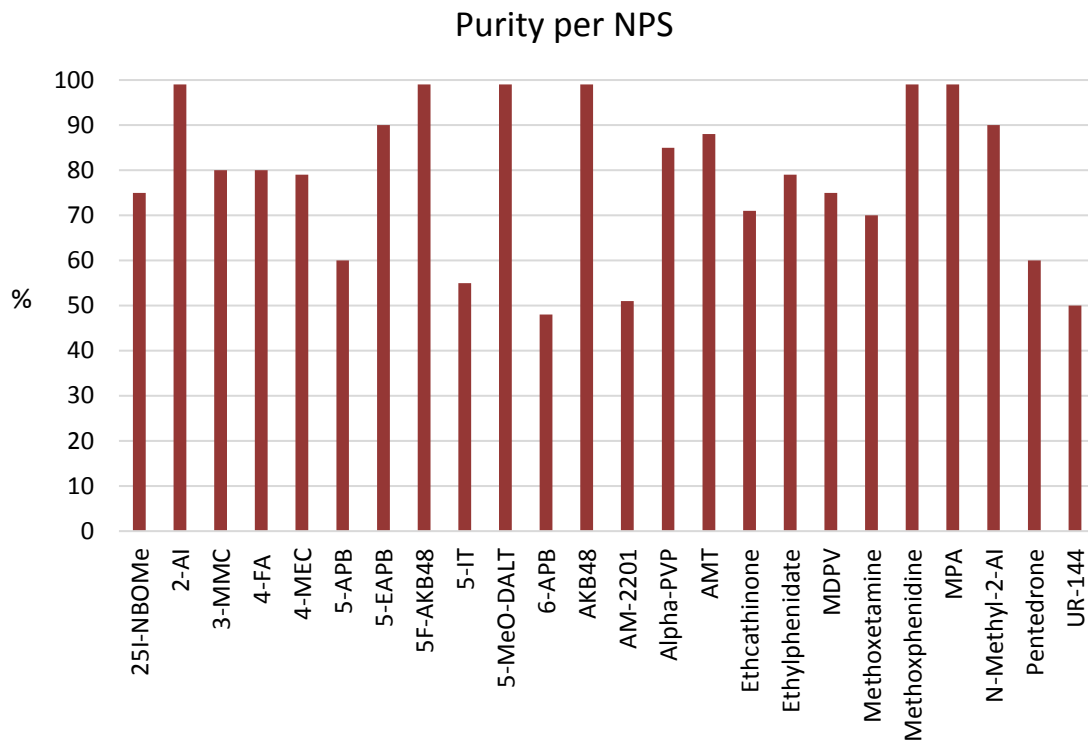
5-IT (1)	5-IT (1)	MPA (8)	MPA (8)	AM-2201 (2)	AM-2201 (2)	UR-144 (2)	UR-144 (1)
5-MeO-DALT (2)	2,5-dimethoxy-phenylethylamine (1); DOC (1)	Ethylphenidate (8)	Ethylphenidate (8)	Brephedrone (1)	Pentedrone (1)	AM-2201 (2)	AM-2201 (1)
Black Romantic (1)	4-MEC (1)	AMT (8)	AMT (8)				
Flux CD cleaner (1)	4-FA (1)	5-MeO-DALT (8)	5-MeO-DALT (8)				
Ketamine (7)	Methoxetamine (4); phenacetin (2); 4-MEC (3);	Etizolam (8)	Etizolam (8)				
Methoxetamine (3)	Methoxetamine (3); MDPV (2); phenacetin (1)	5-EAPB (8)	5-EAPB (8)				
LSD (2)	25I-NBOMe (2)	Methoxphenidine (8)	Methoxphenidine (8)				
MDPV (4)	MDPV (4)	N-methyl-2-AI (8)	N-methyl-2-AI (8)				
		AKB48 (4)	AKB48 (4)				
<b>Total (53)</b>		<b>Total (84)</b>		<b>Total (18)</b>		<b>Total (29)</b>	



**Figure 1.** Percentages NPS detected in NPS samples that were labelled as such.



**Figure 2.** Purity of all NPS per country.



**Figure 3.** Purity per NPS across all countries measured.

### ***Lessons learned and encountered difficulties***

It was planned to do 2 rounds of NPS selection and subsequently 2 rounds of analysis. It is clear from the results that this was not achieved by most I-TREND partners, except by the United Kingdom. One of the main reasons is that changes in Top lists of most circulating substances were quite moderate between the two rounds. Furthermore, encountered difficulties had occurred an important delay and samples would not have been analysed before the end of the project.

#### *Online ordering*

- There were some obstacles encountered that hindered the ordering and analysis of NPS. The OFDT and CUNI tried to build a procedure allowing to secure the personal responsibility of the researchers and favoured an administrative transparency in the expenditure. For instance, one attempt was to deliver the purchased NPS directly at the OFDT office, but packages were never received. Strategies were also tried to avoid using personal credit cards. Pre-paid credit cards were tried but were not accepted as a payment method in many online shops, and notably in shops selected for the purchases<sup>1</sup>. No solution was found, except the opening of personal bank accounts dedicated to substances purchase. Furthermore, two credit cards were hacked and had to be opposed.

The United Kingdom had a simple solution for this, instead of ordering through “neutral” mailboxes or credit cards, the ordering was simply done by the researchers themselves to their home addresses, this caused no suspicion and delivery was prompt and accurate. Finally, OFDT and Poland used the same process than the United Kingdom but it should be considered that a legal risk weigh directly on the researchers. .

It should also be considering that it was difficult to get clear accounting as debited amount were different of displayed amount when ordering and retailer accounting references on the notification of debit of credit card did not match with the shop name. For instance, on the online web shops, one amount was indicated in euros but the debit was done with the rate of Chinese device.

- A problem was related to scheduled substances. It appeared it to be not possible to obtain authorization to purchase illegal substances without taking serious personal risks. French partner were forbidden to do it by its hierarchical authority. For English partners the encountered problem was that newly scheduled substances were no longer available on sales shops from the surface web. These problem has lead I-Trend team to focus monitoring on “operational top-lists” i.e. only including non-scheduled substances.

---

<sup>1</sup> These shops were considered as the most popular for each country. They have been selected with the methodology used in the workstream 2.

- Another problem was the absence of certain NPS after the top 10 was selected for round 1. In The Netherlands only a few NPS appeared popular until the end of the I-TREND project. A few of the less frequently encountered ones at the DIMS and the forensic institute (AMT and 5-IT) were not available at any online shop anymore at the time the substances were demanded for round 1.

Whatever the countries, it is clear that monitoring online sold substances remains a “borderline” activity, non-scheduled in legal texts and that all the responsibility is backed by individuals.

- Parallel to toxicological results, some changes could be observed concerning delivery; e.g. for France, in opposition to what was observed before the I-Trend project some substances ordered on so-called “commercial” shops<sup>2</sup> and displayed online with attractive packaging and marketed names were received in austere packaging with just the molecule name which typifies “RC shops”<sup>3</sup>. This is one of the elements suggesting it exist connections between “commercial” shops and so-called “RC shops”. The impact of this packaging evolution is that packages from commercial shops are less visible than they used to be and so, they are more difficult to spot by the customs services. On the opposite, one received package was exaggeratedly visible, coated with a glossy colour as a gift.
- The fact that branded names are sent with simple plastic pouch make them less visible in source of information such as the seizure of the customs. For instance, at the beginning of the project each times that a sample was seized with a commercial package, a picture and a track were done. Today customs provide less information about the importance of the branded products among the seizures, as they are no more visible

#### *Standard references obtaining and shipment*

- An issue that seriously hampered the maintenance of the round1 was the fact that the reference standards took a long time to be obtained from the reference standard laboratory.
- Some substances were really new so that reference standards were not commercially available from the standards supplier which had to synthesize them (2-methoxydiphenidine for example). It has been finally decided to use another way to obtain standards for round 2: having these compounds produced by toxicological laboratories by concentration of purchased online NPS on the condition they be pure. This method was used by some partners (UK) to circumvented difficulties and it seems the most appropriate one to analyses very new NPS.

---

<sup>2</sup> Online shops whose main target is NSD users with poor knowledge about NSD, mostly young people and which display substances wit attractive names and attractive coating.

<sup>3</sup> Online shops which only deals with molecular names with few marketing effort on substances coating.

- Authorization to make the standard reference cross borders: it was planned that the laboratory partner of the OFDT should receive all the samples, share those requested by several countries to save money and dispatch them toward the different EU partner laboratories. We specially expected that this way of proceeding would ease the shipment process because transfers for research purpose between public entities were allowed by the European protocol defined by Council decision 2001/419/JHA (see Annex 5). This measure also aimed to reduce the shipping costs, and to increase the control of the calibration. Unfortunately, the procedure proved to have never been used by health Agencies and it was decided that standards would be directly delivered from the reference standards supplier to each laboratories partners. Furthermore it appeared than laboratories had different equipment and needed different form of reference standards (liquid, powder...). This changes implied that each laboratory had to request an official authorisation from their national Health Agency for the import of classified substances. It appeared that national procedures were different in one country from the other and that laboratories were not all well informed about those as well as I-Trend researchers.

This time lapse resulted in some NPS being controlled or simply removed from the market, as the example above illustrated. This is an issue that has to be considered when doing research into a rapidly changing market, such as the NPS market.

Difficulties met in organizing reference standards shipment were met again when it came to make Polish NPS samples travel from Poland to French laboratory. This adjustment has been decided due to the very reasonable cost (under the real cost) proposed by the French toxicological laboratory of the University Hospital of Lille in opposite to very expensive cost required by Polish laboratories. To avoid further delay samples were sent as any private mail by the national mail services despite the risk.

*Building a laboratories network*

A secondary objective of that workstream was to initiate a kind of partnership between toxicological laboratories interested in NPS in order to enable further collaboration and references standards sharing.

This didn't really occur. One main reason was that no meeting had been scheduled in the project to create links between laboratories. Toxicological laboratories had been involved in the survey more as service suppliers than as active partners. Another one is related to the delay to obtain standards references that had lead laboratories to proceed quickly the analyses without any communication between them. [To encourage the creation of such a network, a further project should involve laboratories as active partners, better formalise the way the cooperation should take place and forecast a financial input to allow at least one meeting between laboratories.](#)



## **Conclusions**

I-TREND attempted to resolve some objectives, which are stated in the introduction of this report:

- To investigate whether the contents of an obtained NPS matches that of what is mentioned on the online shop;
- To investigate whether the purity differs between the EU countries;
- To identify unknown substances present, which may be previously unidentified NPS;
- To see whether a network can be set up between toxicological laboratories across the EU for analysis and validation purposes;
- To communicate possible detrimental outcomes of substance analysis to drug consumers

From the analysis results it has become clear that consumers do not always get what they bargain, especially in certain EU member states the purity of the NPS obtained is low and many packages contain different substances than what is labelled on the package. The online shops targeting UK market<sup>4</sup> apparently offers online shops with a high general purity and package contain the substance that is labelled. For shops targeting French users, samples often contain what is labelled but purity is not so high. In Poland and The Netherlands the mostly used online shops are of questionable quality, from the user's point of view and packages often contain other substances or adulterations than what is labelled. In the practice of the DIMS (Netherland), this has led to quite some instances in which a consumer had to be warned off a certain NPS that they'd bought online and the online shop was also contacted to inform them of a potential dangerous case of wrong identity. For example, in one instance there was 6-APB purchased that contained MDPV instead, another instance involved 4-FA that turned out to be 2C-E, these could be potentially dangerous switches when substances don't lead to the same effects.

So, this monitoring appears to provide useful information in a harm reduction perspective and should be pursued for the purposes of identification of dangerous substances or warning of drug consumers. It should be useful to monitor trends but also to get further knowledge such as variability of the composition of the same substance bought several times on the same NPS.

Methodological conclusions have been drawn from the I-Trend experience and the practical issues that hindered the process have to be taken into consideration. I-TREND' findings should facilitate the continuation or setting up the monitoring. However, no process has been found that could prevent researchers to take personal risks when ordering and receiving substances at their own home (such as to be spotted by customers services).

Moreover, the absence of legal procedure for sharing reference standards among laboratories from different countries is a slowdown factor that limits substance contents monitoring. An international legal frame should forecast the possibility for authorized or governmental research program to have legal or illegal controlled substances travelling easily, in the respect of a relevant protocol.

---

<sup>4</sup> See Workstream 2

Because of difficulties in ordering NPS online and the long period of time before reference standards could be dispersed to each partner laboratory as well as a lack of formalised contacts between laboratories (see Lessons learned), there hasn't been a lot of communication between partner laboratories unfortunately as was envisaged beforehand the project started. But the network is potentially available and could easily be set-up for another similar initiative or project. To encourage the creation of such a network, a further project should involve laboratories as active partners, better formalise the way the cooperation should take place and forecast a financial input to allow at least one meeting between laboratories.

*Annex 1 – Selection of NPS round1 per I-TREND partner*

Poland	Netherlands	UK	France	Czech Republic
UR-144	4-Fluoroamphetamine (4-FA)	Etizolam	AM-2201	3-MMC
AM-2201	MDPV	4-MEC	UR-144	4-Fluoroamphetamine (4-FA)
Pentadrone	4-MEC	MPA	MDPV	4-MEC
3,4-DMMC	3-MMC	Ethylphenidate	4-MEC	6-APB
Brephedrone	25I-NBOMe	PMA	25-I NBOME	Alpha-methyltryptamine (AMT)
MPPP	5-(2-Aminopropyl)indole (5-IT)	Pentadrone	5-MEO-DALT	Methylone
MDPBP	Alpha-methyltryptamine (AMT)	Phenazepam	6-APB	Ethcathinone
Alpha-PVP	5-MEO-DALT	AM-2201	5-APB	MDPBP
3-MMC	6-APB	AKB48	Ethylphenidate	Methoxetamine
Ethcathinone	5-APB	5-APB	Methoxetamine	MPPP
Mephedrone	Methoxetamine			
	5-(2-Aminopropyl)indole (5-IT)			

*Annex 2 – Selection of NPS round2 per I-TREND partner*

Poland	Netherlands	UK	France	Czech Republic
UR-144	4-Fluoroamphetamine (4-FA)	2-AI	AM-2201	3-MMC
AM-2201	MDPV	Ethylphenidate	UR-144	4-Fluoroamphetamine (4-FA)
Pentedrone	4-MEC	5-MeO-DALT	MDPV	4-MEC
3,4-DMMC	3-MMC	Methoxyphenidine	4-MEC	6-APB
Brephedrone	25I-NBOMe	N-Methyl-2-AI	25-I NBOME	Alpha-methyltryptamine (AMT)
MPPP	5-(2-Aminopropyl)indole (5-IT)	5F-AKB48	5-MeO-DALT	Methylone
MDPBP	Alpha-methyltryptamine (AMT)	5-EAPB	6-APB	Ethcathinone
Alpha-PVP	5-MEO-DALT		5-APB	MDPBP
3-MMC	6-APB		Ethylphenidate	Methoxetamine
Ethcathinone	5-APB		Methoxetamine	MPPP
Mephedrone	Methoxetamine			
	5-(2-Aminopropyl)indole (5-IT)			

*Annex 3 –Online shops per I-TREND partner*

Poland	Netherlands	UK	France	CZ
<a href="http://kolekcjoner.nl/">http://kolekcjoner.nl/</a>	<a href="http://www.drsmart.nl">http://www.drsmart.nl</a>	<a href="http://www.plantfoodpalace.com/">http://www.plantfoodpalace.com/</a>	<a href="http://www.shayanashop.com/">http://www.shayanashop.com/</a>	
<a href="http://pl.r-c.com/">http://pl.r-c.com/</a>	<a href="http://www.biochemdistribution.co/secureshop/nbome/13-25i-nbome.html">http://www.biochemdistribution.co/secureshop/nbome/13-25i-nbome.html</a>	<a href="http://chemicalwire.com/">http://chemicalwire.com/</a>	<a href="http://www.magic-mushrooms-shop.com/">http://www.magic-mushrooms-shop.com/</a>	
<a href="https://researchchemicals.net.pl/">https://researchchemicals.net.pl/</a>	<a href="http://www.chemicalmasters.nl">http://www.chemicalmasters.nl</a>	<a href="http://www.discofood.com">www.discofood.com</a>	<a href="http://www.officialbenzofury.com/">http://www.officialbenzofury.com/</a>	
<a href="http://legalchem.pl/index.php">http://legalchem.pl/index.php</a>	<a href="http://www.researchchemicalshop.eu/">http://www.researchchemicalshop.eu/</a>	<a href="http://www.chemicalservices.net/buy-research-chemicals.html">http://www.chemicalservices.net/buy-research-chemicals.html</a>	<a href="http://www.buyanychem.com/">http://www.buyanychem.com/</a>	
<a href="http://rc-24.pl/">http://rc-24.pl/</a>	<a href="http://www.officialbenzofury.com/">http://www.officialbenzofury.com/</a>	<a href="https://www.brc-finechemicals.com/">https://www.brc-finechemicals.com/</a>	<a href="http://www.plantfoodpalace.com/">http://www.plantfoodpalace.com/</a>	
	<a href="http://4-fa-kopen.com/">http://4-fa-kopen.com/</a>		<a href="http://www.chemicalwire.com/">http://www.chemicalwire.com/</a>	
	<a href="http://www.4fa-5apb.com/">http://www.4fa-5apb.com/</a>		<a href="https://researchchemicals.net/">https://researchchemicals.net/</a>	
	<a href="http://www.trufflemagic.com/">http://www.trufflemagic.com/</a>		<a href="https://www.chemicalservices.net/">https://www.chemicalservices.net/</a>	
	<a href="http://rcnederland.eu/index.php?option=com_virtuemart&amp;page=shop.browse&amp;category_id=24&amp;Itemid=128&amp;vmcchk=1&amp;Itemid=128">http://rcnederland.eu/index.php?option=com_virtuemart&amp;page=shop.browse&amp;category_id=24&amp;Itemid=128&amp;vmcchk=1&amp;Itemid=128</a>		<a href="https://www.get-rc.to">https://www.get-rc.to</a>	
	<a href="http://www.rechem.co/4-fa.html">http://www.rechem.co/4-fa.html</a>		<a href="http://fr.buzz-wholesale.co/index.php">http://fr.buzz-wholesale.co/index.php</a>	
	<a href="http://another-idea.me/">http://another-idea.me/</a>		<a href="https://rcnet-chemicals.com/customer/account/index/">https://rcnet-chemicals.com/customer/account/index/</a>	

	<a href="http://www.sensearomatics.eu/">http://www.sensearomatics.eu/</a>			
	<a href="http://wiet.startkabel.nl/forum/?id=216847">http://wiet.startkabel.nl/forum/?id=216847</a>			
	<a href="http://royalalchemist.com/">http://royalalchemist.com/</a>			
	<a href="http://www.buyanychem.com/">http://www.buyanychem.com/</a>			
	<a href="http://rschemicals.nl/">http://rschemicals.nl/</a>			
	<a href="https://silkroad.silkroad.tor">https://silkroad.silkroad.tor</a>			
	<a href="http://ravegardener.org/">http://ravegardener.org/</a>			
	<a href="http://www.tatanka.nl/martshop/happy-caps">http://www.tatanka.nl/martshop/happy-caps</a>			
	<a href="http://sciencesuppliesdirect.com/">http://sciencesuppliesdirect.com/</a>			
	<a href="http://www.aromaticpoder.net/4mec-rice-grain.html">http://www.aromaticpoder.net/4mec-rice-grain.html</a>			
	<a href="http://growshop.startkabel.nl/forum/?id=3638">http://growshop.startkabel.nl/forum/?id=3638</a>			

## *Annex 4 –Protocol of ordering NPS*

### **Objectives**

In the framework of device SINTES and project I-TREND, the objective is to be able to buy NPS (New synthetic products) directly on the online shops to analyze the toxicological composition in laboratory by decreasing the risks of fraud to the bank card.

### **Option 1: Chart transcash**

Refillable prepaid card (<http://www.trans-cash.fr/fr/accueil.html>)

**Advantages:** count blocked, Inscription without identity card - > assumed name possibility of holder of account

**Disadvantage:** According to Luc Strohman, person in charge of the unit cyberdouanes (met with the meeting MILDT NPS on May 23rd, 2013 then in their buildings Friday, June 14, 2013) these charts wake up too many suspicions in the salesmen who do not give following the purchases carried out.

Conclusion: this option is isolated.

### **Option 2: prepaid card of the Postal bank**

[https://www.labanquepostale.fr/particuliers/au\\_quotidien/moyens\\_de\\_paiements/Cartes\\_bancaires\\_internationales\\_prepayees/carteprepayee.Mode\\_emploi.html](https://www.labanquepostale.fr/particuliers/au_quotidien/moyens_de_paiements/Cartes_bancaires_internationales_prepayees/carteprepayee.Mode_emploi.html)

The chart is to the holder of an account CPC to which the latter is attached.

**Advantages:**

Count blocked

Credible a priori by the online shops because the Postal bank is known and recognized

Cost: 18 € at the year of subscription

### **Actions considered**

#### **Means of payment**

A titular employee of an account CPC makes the request of a prepaid card near the Postal bank. This one will be thus with its name.

*Within the framework of project SPICE II (Volker Auwarter, institute of forensic medicine, Freiburg) the chart used is the personal chart of the person in charge of the project (Volker).*

## **Name used for the purchases**

It is the name under which the transaction will be carried out. In fact, it is also the name of the recipient of the parcel: the choice thus goes towards an assumed name, whimsical.

*Within the framework of project SPICE II (Volker Auwarter, institute of forensic medicine, Freiburg) this name is that of a trainee of the laboratory not being connected a direct link with the project.*

*According to the experiment of the service of the cyberdouanes (Luc Strohman), the names and first names are not checked by the salesmen.*

## **Addresses delivery: addresses OFDT**

The address of delivery must be able to seem that of a purchasing lambda of NPS.

*Within the framework of project SPICE II (Volker Auwarter, institute of forensic medicine, Freiburg) the address of delivery is that of the laboratory.*

The purchaser (whimsical name) domiciled to the 3, avenue of the stadium of France (thus that of the OFDT) appears to be the best option of a point of considering legal and ethical.

The only condition is that the name of the purchaser does not return towards the OFDT so that the salesmen do not establish association between the purchaser and the OFDT, by a Google research for example.

## **COST**

In the framework of the *workstream 4 Substance* of project I-TREND, the activity was estimated at 40 minimum purchases a year (either 80 purchases over the two years of the project).

A purchase was estimated at 30 € on average. (= 1200 €/year.)

The purchases are envisaged between August and the month of November 2013 for the first year.

The purchases can be concentrated over only one month (what would save thereafter the cost of analysis in laboratory because to group the analyses “with the flight” makes it possible to reduce volumes of standard substances necessary).

In this case, the sum of 1200 € should be credited with account OFDT (but I-trend budget) on the user with the chart.

Case of non reception of the parcels: It may be that certain purchases are not followed by the service.



According to experiment SPICE of Volker, person in charge of project (DPIP), approximately 30% of the orders are not followed by the goods.

In preparation for these damages, 30% by 1200 € are 360 € additional must be envisaged on the total credit.

**That is to say a total budget of 1560 €**

An assessment of the inputs/outputs will have to be carried out and given at the latest on December 10th, 2013 to the accounting department.

*Annex 5 –European sample transmission form - Council Decision 2001/419/JHA*

**C. Autorité expéditrice et autorité destinataire Sending authority, receiving authority and ainsi qu’usage auquel est destiné l’échantillon intended use dans l’Etat membre destinataire**

<b>C.1. L'échantillon est expédié par / The sample originates from (sent by) :</b>
C.1.1. Nom/Name :
C.1.2. Adresse/Adress :
Tél./Tel Number :
Fax/Fax Number :
<b>C.2. L'échantillon est adressé à /The sample is intended for (sent to) :</b>
C.2.1. Nom/Name :
C.2.2. Adresse/Adress :
Tél./Tel Number :
Fax/Fax Number :
<b>C.3. L'échantillon est destiné à l'usage suivant/The sample is intended to used for :</b>
<input type="checkbox"/> a) détection d'infractions pénales/detection of criminal offences
<input type="checkbox"/> b) enquête/investigation
<input type="checkbox"/> c) poursuites/prosecution
<input type="checkbox"/> d) analyse médico-légale/forensic analysis
<input type="checkbox"/> e) autre usage/other use (please specify) :

**D. Nature de l'échantillon et quantité**

**Nature and quantity of sample**

**D.1.** Nature de l'échantillon (indiquer la composition)/Nature (e.g. amphetamine, powder, purity) :

**D.2.** Quantité d'échantillon (indiquer la quantité exacte, c'est-à-dire le poids en grammes, le nombre de comprimés, etc.) / Quantity enclosed, Total weight, Total quantity of the seizure :

**E. Moyen de transport et itinéraire**

**Means of transport and route to be used**

**E.1.** Les moyens de transport suivants seront utilisés/The means of transport are as indicated below :

- a) transport par un fonctionnaire de l'Etat membre expéditeur ou de l'Etat membre destinataire/transport by an official of the sending or receiving member State
- b) transport par porteur/transport by courier
- c) transport par la valise diplomatique/transport by diplomatic bag
- d) transport par envoi (express) recommandé/transport by registered (express) mail

**E.2.** Itinéraire (indiquer le point de départ, la destination et, d'une manière générale, l'itinéraire suivi entre ces deux points)/Route used (Starting point, destination, general description of route) :

**E.3.** Si le transport est effectué par un fonctionnaire de l'Etat membre expéditeur ou de l'Etat membre destinataire, indiquer le moyen de transport choisi (train, voiture, etc.)/Means of transport when sample is conveyed by an official (as in E.1.a) :

**E.4.** Points de contact nationaux des Etats membres à informer conformément à l'article 4, paragraphe 2/National contact point in transit Member States to be notified of the transport :

**F. Informations concernant le point de contact Receiving National contact point  
national destinataire de l'échantillon**

<b>F.1. Nom/Name :</b>
<b>F.2. Adresse/Adress :</b>  Tél./Tel Number :  Fax/Fax Number :
<b>F.3. Cachet/Stamp :</b>
<b>F.4. Signature et date/Signature-name-date :</b>