

I-SEE Project Final Conference

Florence, December 16th 2016

Church of San Jacopo in Campo Corbolini
Via Faenza, 43

The Final Conference of the I-SEE Project was held, thanks to the courtesy of Fabrizio Guarducci, in the awesome Church of San Jacopo in Campo Corbolini in Firenze. All the project partners from Slovenia and Croatia participated at the event and about 130 participants attended it. The work began with the welcomes by Prof. Luigi Dei, Rector University of Florence, followed by Prof. Marco Bindi, Pro-Rector Scientific Research, Dr Pierluigi Tucci, Medical College of Florence, Prof. Pierangelo Geppetti, Director of Department of Health Sciences and Prof. Elisabetta Bertol, Director of Forensic Toxicology Unit and I-SEE Project Coordinator. Prof. Donata Favretto was the Chair of the Event. Dr Justice Tettey, United Nations Office on Drug and Crime (UNODC) made the opening lecture presenting the NPS phenomenon at global level.

Then, the presentations about the activities and the results of all partners followed as indicated by the attached program. The contents of their lectures are reported in attachment.

The Round table seen the participation of Prof. Bertol, Dr Justice Tettey, Prof Thomas Keller and, over all, Mr. Zeljko Petkovic, Croatian Office for Combating Drug Abuse and Mrs. Marjeta Ferlan Istinic, Slovenian Ministry of Labour, Family, Social Affairs and Equal Opportunities.

Coordinator



Beneficiary partners



Coordinator



Department of Health Sciences



Co-funded by the Prevention of and fight against
Crime Programme of the European Union
JUST/2013/ISEC/DRUGS/AG/6426



Beneficiary Partners



National Forensic Laboratory and
Criminal Police Directorate - Slovenia



**Preiscrizione obbligatoria
via email:
project.isee@dss.unifi.it
alessia.fioravanti@unifi.it**

**New Psychoactive Substances
I-SEE Project
Final Conference**

Segreteria scientifica

Fabio Vaiano Tel. 328 4217120
Valeria Catalani Tel. 320 0629459
Diego Palumbo Tel. 366 3301549

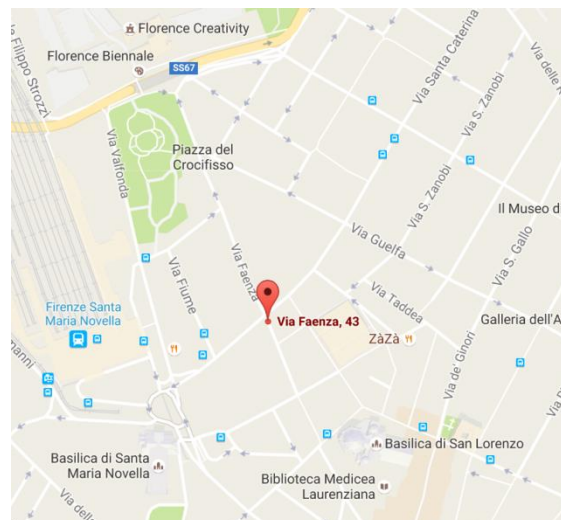
Segreteria organizzativa:

Alessia Fioravanti Tel. 340 6369370

Florence, December 16th 2016

**Church of San Jacopo in Campo Corbolini,
Via Faenza 43**

by courtesy of Fabrizio Guarducci



URITON
Unità di Ricerca
dedicata a Tindari Baglione

Program

Chair: **Donata Favretto**

9.15 – 9.45

Welcome and introduction

L. Dei Rector University of Florence
M. Bindi Pro-Rector Scientific Research
P. Bechi Pro-Rector Medical-Health Area
M. Calamai General Director AOU Careggi
M. T. Mechi Tuscany Region
Quality of Services Office

A. Panti President of Medical College
of Florence

P. Geppetti Director of Department of Health
Sciences

E. Bertol Director of Forensic Toxicology
Unit - I-SEE Project Coordinator

9.45 – 10.15

The NPS phenomenon at global level

J. Tettey United Nations Office on Drugs
and Crime - UNODC

10.15 – 10.45

EU strategies to tackle the NPS phenomenon

A. Kosnikowski European Commission
Anti-Drugs Policy Unit

10.45 – 11.05

Two years of I-SEE project: from the beginning to the end

E. Bertol University of Florence, Italy

11.05 – 11.25

The enlargement of the Slovenian EWS network and the collaboration among health sector, law enforcement and NGOs

A. Hočevar National Institute of Health, Slovenia
Gromm

11.25 – 11.45

Implementation of NPS sample collecting procedure in NGO focal points in Slovenia

S. Šabič Association DrogArt, Slovenia

11.45 – 12.05

Chemical characterizations of collected samples in NFL – analytical background

S. Šavelj Ministry of Interior Police, Slovenia
S. Klemenc National Forensic Laboratory, Slovenia

12.05 – 12.25

Clinical-toxicological network on NPS in Croatian EWS

M. Definis-Gojanović University of Split – School of Medicine
Croatia

12.25 – 13.00

Tools for information exchange and NPS analysis, dissemination and evaluation

F. Vaiano Forensic Toxicology, DSS, UNIFI
V. Catalani Forensic Toxicology, DSS, UNIFI
C. Rimondo NPS EWS system

13.00 – 14.00

Light Lunch

14.00 – 15.00

Round Table and Conclusions

“Project value, future applicability and development”

Chair: **Donata Favretto**

E. Bertol Forensic Toxicology,
DSS, UNIFI

J. Tettey United Nations Office on Drugs
and Crime - UNODC

A. Kosnikowski European Commission
Anti-Drugs Policy Unit

J. Hren Slovenian Ministry of Health
T. Keller TIAFT Member Representative
for Austria

Ž. Petković Croatian Office for Combating
Drug Abuse

M. Ferlan Istinič Slovenian Ministry of Labour,
Family, Social Affairs and
Equal Opportunities

15.00 – 16.00

Press Conference

All Partners



UNODC

United Nations Office on Drugs and Crime

New Psychoactive Substances

A Global Update

Dr. Justice Tettey
Chief, Laboratory & Scientific Section

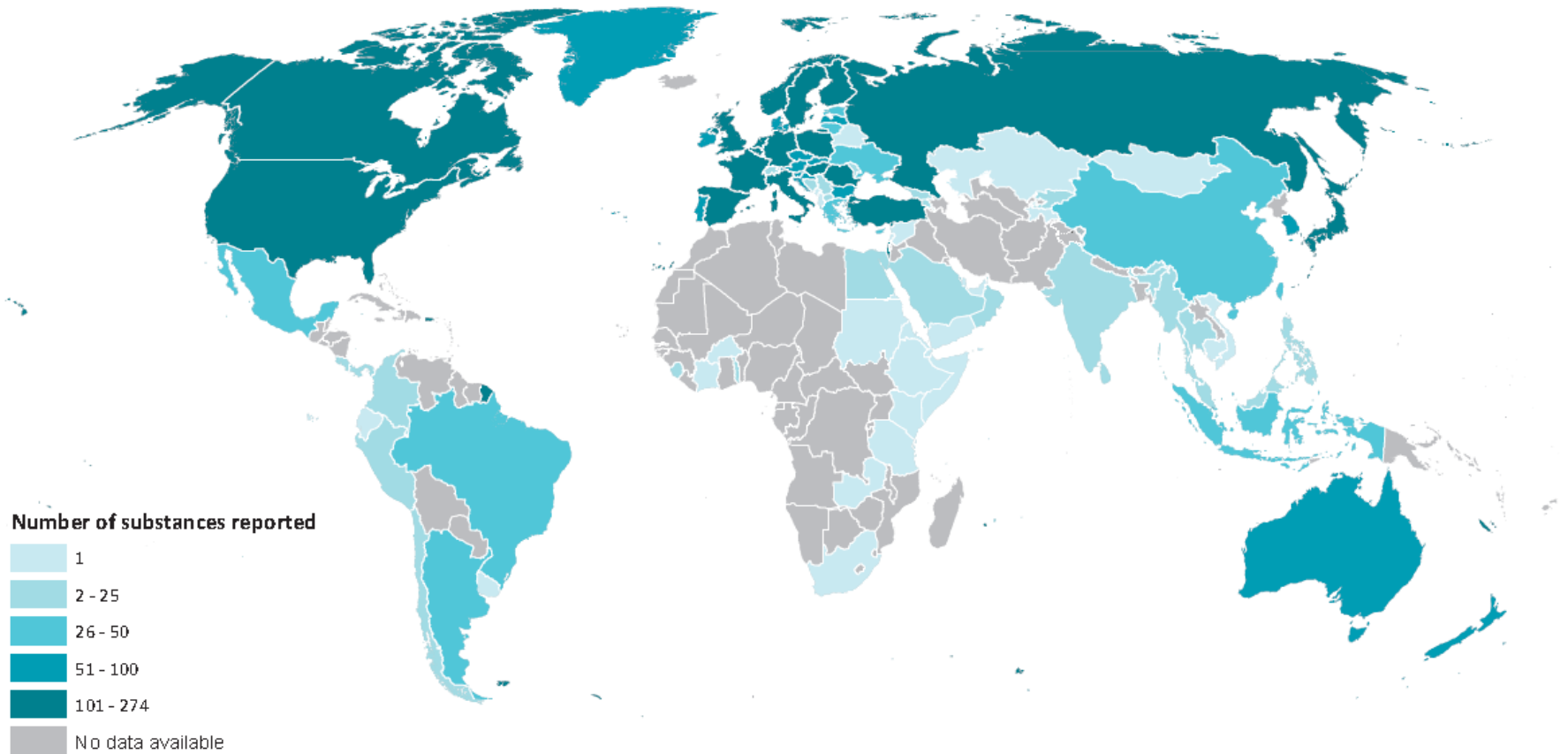
I-SEE European Project on NPS
University of Florence, Italy
16 December 2016



UNODC

United Nations Office on Drugs and Crime

Scope of the NPS problem

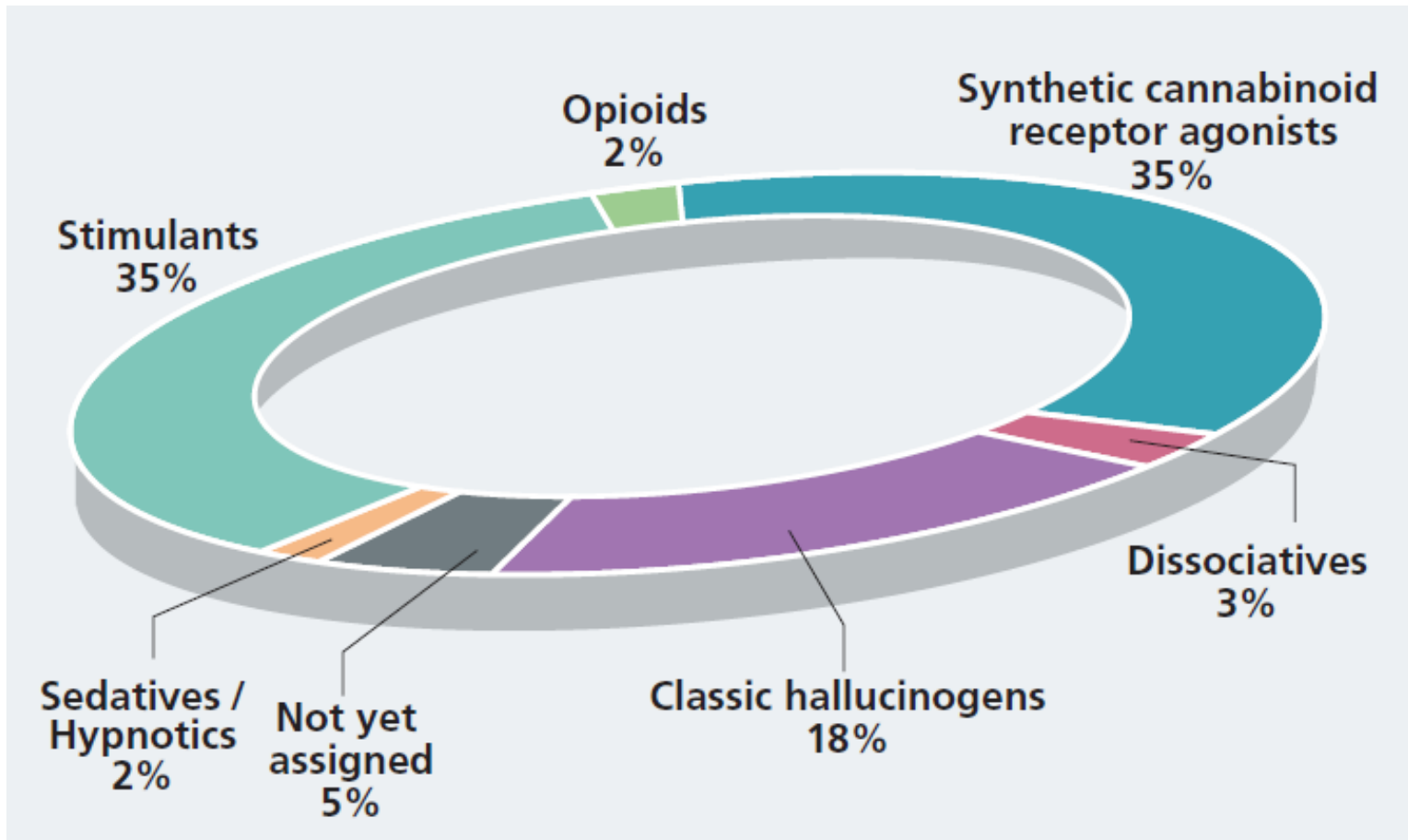




UNODC

United Nations Office on Drugs and Crime

NPS - by 'effect'





UNODC

United Nations Office on Drugs and Crime

Notable Recent Trends – 2015/6

- **Synthetic Opioids – Fentanyl analogues** ↑
 - 14 Fentanyls since 2008
 - 9 Fentanyls since start of 2015
- **Sedative/Hypnotics – Benzodiazepines** ↑
 - 17 Benzodiazepines since 2008
 - 10 Benzodiazepines in the past year
- **Modified Pharmaceuticals – Methylphenidate (7 derivatives)**
 - Methylphenidate derivatives (7)
 - Phenmetrazine derivatives (7)
- **Implementation of the scheduling decisions**

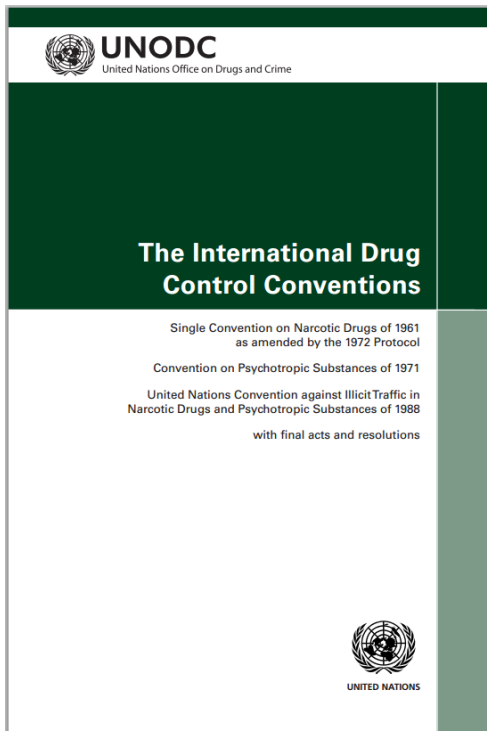


UNODC

United Nations Office on Drugs and Crime

UNODC and the International Drug Control Conventions

Protect health and welfare of mankind



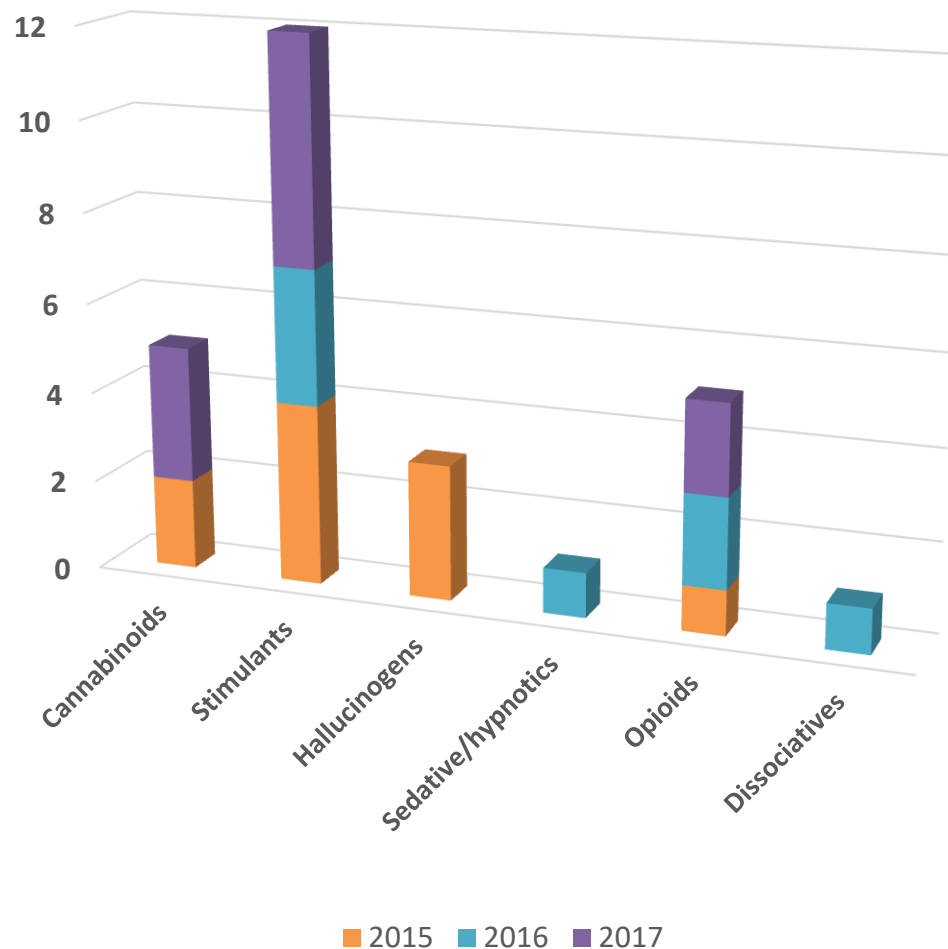
- Single Convention on Narcotic Drugs of 1961, as amended by the 1972 Protocol (1961 Convention)
- Convention on Psychotropic Substances of 1971 (1971 Convention)
- UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 (1988 Convention)



UNODC

United Nations Office on Drugs and Crime

International Scheduling Decisions/Recommendations 2015 – 2017



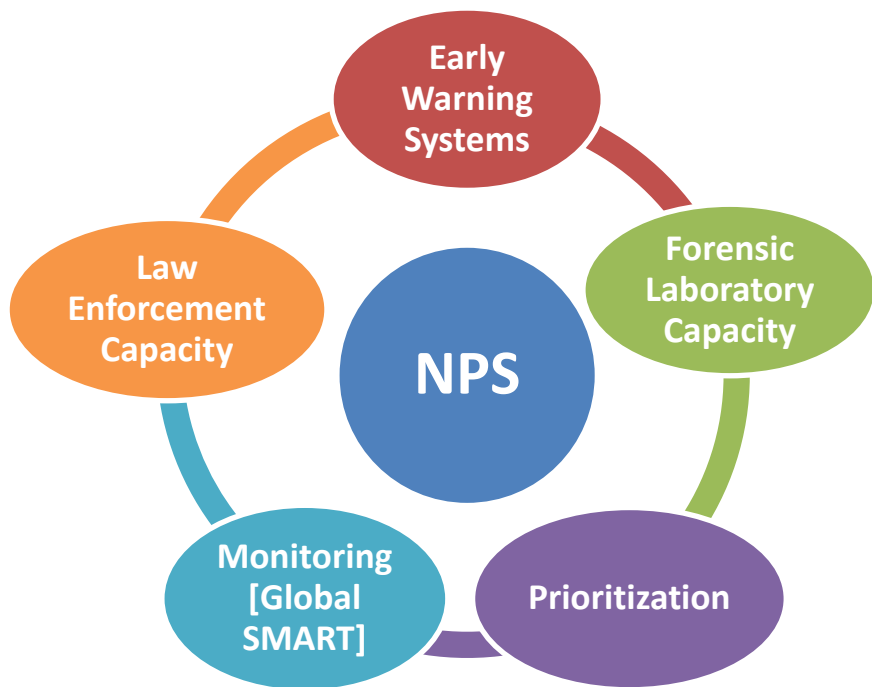


UNODC

United Nations Office on Drugs and Crime

United Nations General Assembly Special Session on Drugs [April 2016]

Our joint commitment to effectively addressing and countering the world drug problem

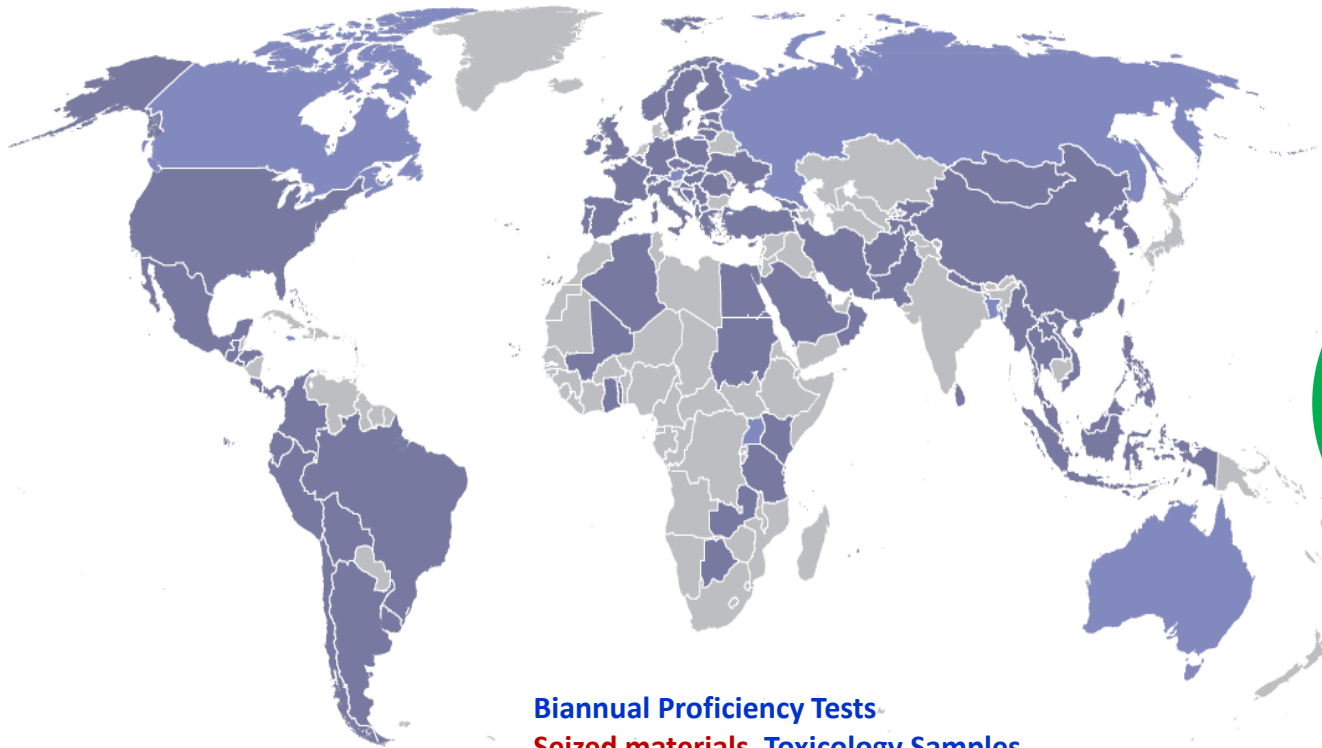




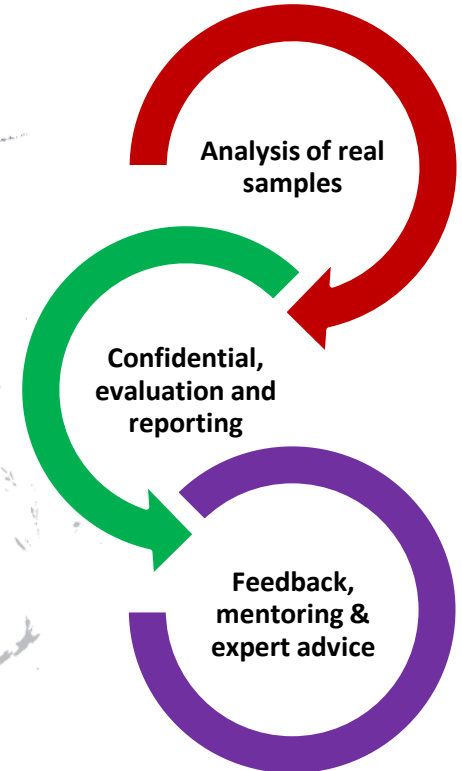
UNODC

United Nations Office on Drugs and Crime

Enhancing National Forensic Laboratory Capacity: The UNODC International Collaborative Exercises



Biannual Proficiency Tests
Seized materials, Toxicology Samples
Chemical Reference Standards





UNODC

United Nations Office on Drugs and Crime

UNODC Early Warning Advisory



Ensure healthy lives and promote well-being for all





UNODC

United Nations Office on Drugs and Crime





UNODC

United Nations Office on Drugs and Crime

Pilot Project for data collection on harm related to the use of NPS

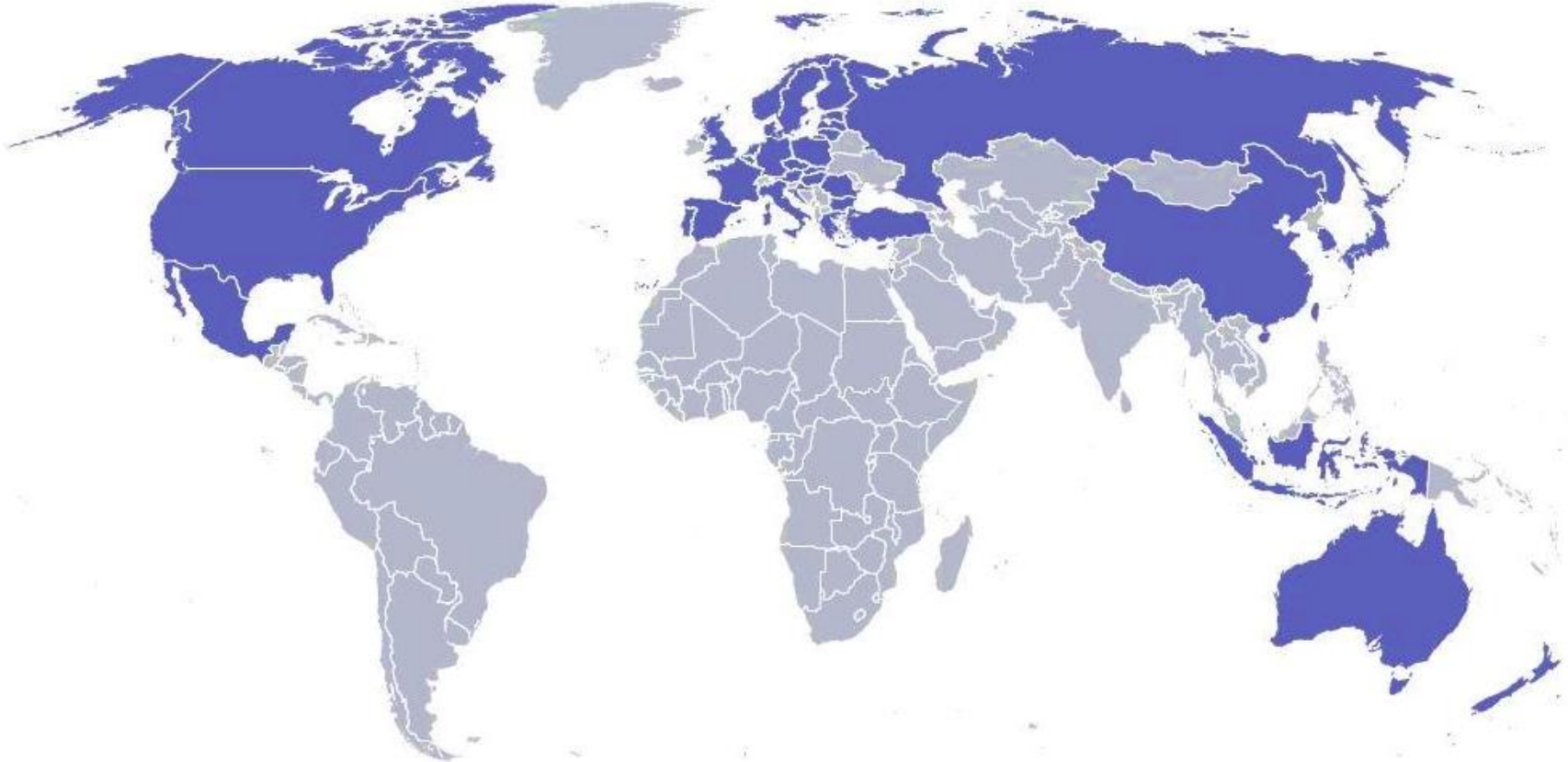
- **UNODC Expert Consultation on Forensic Toxicology and Drug Control**
 - 30 internationally recognised scientists
 - Including international organisations (EMCDDA, INCB)
- **Innovative TIAFT-UNODC collaboration**
- **Pilot**
 - July to August 2016
 - Defined indicators
 - Data on harm



UNODC

United Nations Office on Drugs and Crime

Reports of 4-MEC from the UNODC Early Warning Advisory (2009-2014)

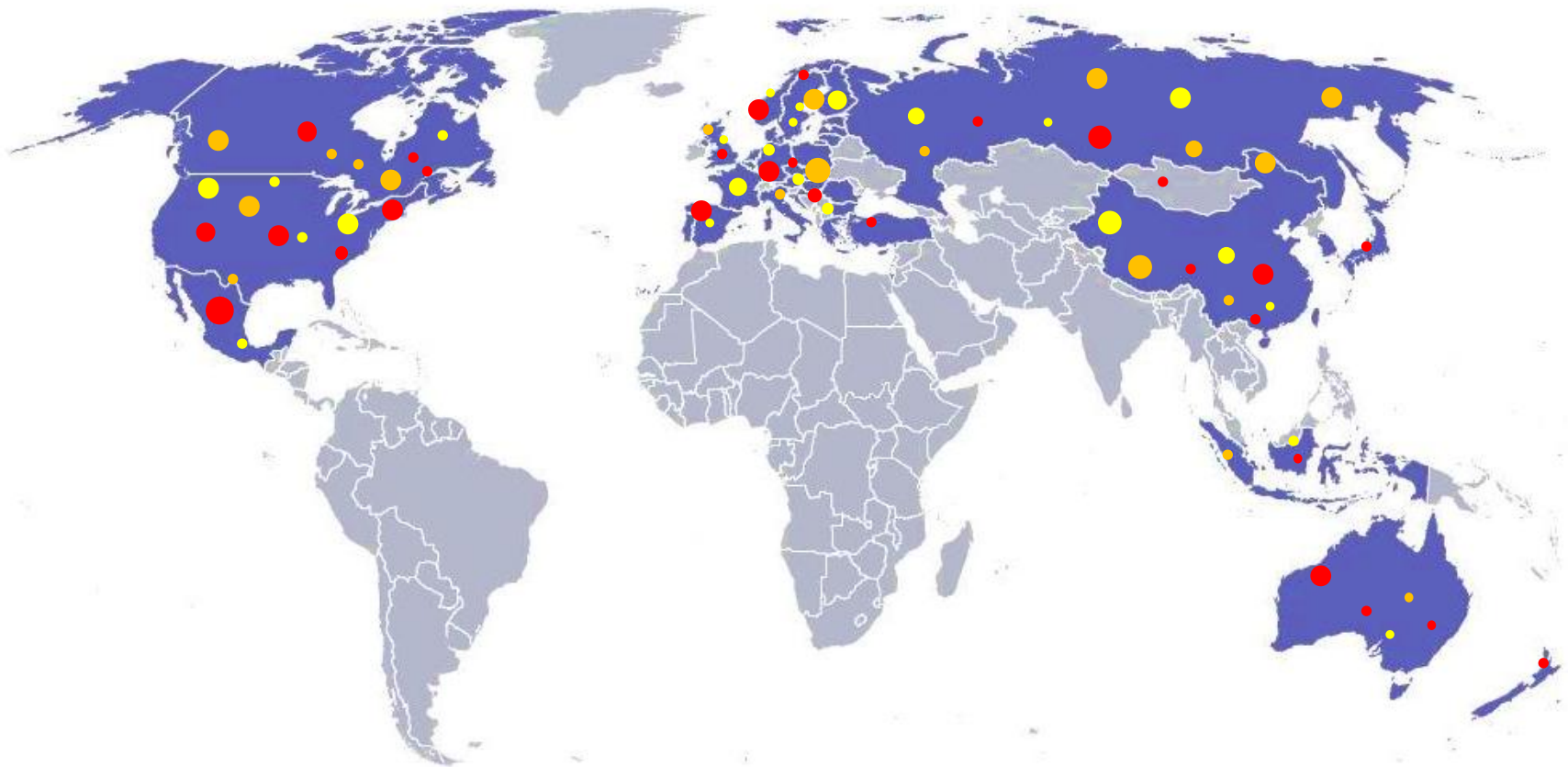




UNODC

United Nations Office on Drugs and Crime

Early Warning Advisory





UNODC

United Nations Office on Drugs and Crime

NPS – Current and Future Challenges

- **Identification and detection of substances**
- **International Cooperation in data collection and sharing**
- **Reporting by Member States**
- **Implementation of the scheduling decisions**



UNODC - Making the world safer from drugs, crime and terrorism

Two years of I-SEE project: from the beginning to the end

Coordination of the project

Elisabetta Bertol, Project coordinator

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and
Criminal Police Directorate



WHEN IT ALL BEGAN...

During two previous meetings, the partners began to speak about the NPS issue.



Zagreb (Croatia), 27-28 May 2013



Ljubljana (Slovenia), 15-16 Jan. 2014



Office for Combating
Drugs Abuse



European Monitoring Centre
for Drugs and Drug Addiction

NIJZ
Nacionalni inštitut
za javno zdravje

THE SITUATION AT THAT TIME



- University of Florence, DSS – TF as member of the Italian EWS.
- Long experience in NPS detection.
- Availability of NPS database.
- Collaboration with health professionals and law enforcement.
- Need to boost info exchange with neighbouring countries.

This project was based on a collaboration with two important partners as Slovenia and Croatia which needed to improve their knowledge about NPS.

In particular:



for Slovenia, to enlarge health professionals and LEA network involving also NGOs to establish information exchange mechanism and to create a national NPS database



for Croatia, to improve their EWS, clinical network, labs skills for NPS detection in biological samples and, of course, to strengthen information flows and procedures

SUBMISSION OF THE PROJECT TO THE EUROPEAN COMMISSION

JUST/2013/ACTION GRANTS – DG Migration and Home Affairs (ex DG Justice)



I-SEE

Project for strengthening information exchange between **Italy** and **South East Europe** neighbouring countries on New Psychoactive Substances

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and
Criminal Police Directorate



THE APPROVAL

September 2014:
formal approval
by the EC



January 2015:
beginning of
project activities

KICK OFF MEETING

- Brussels, 10th February 2015
- Organized by the DG Migration and Home Affairs, EC



KICK OFF MEETING



- To learn:
 - Best practices for project management
 - Financial issues and reporting requirements
- Report to partners (.ppt presentations shared with partners)

TECHNICAL MEETINGS

- 20nd February 2015 – web Conference
- 25th January 2016 – Ljubljana (SLO)
- 15th September 2016 – Split (CRO)



PARTNERSHIP AGREEMENT

- After the signature of the Grant Agreement between University of Florence and EU, the Agreement with all partners was also signed.
- Main contents:
 - Role and obligations of the coordinator and of each beneficiary
 - Money transfer from coordinator to partners
 - Confidentiality issues
 - Ownership and exploitation of results
 - Reporting

TWO PRESS CONFERENCES

1st April 2015
Split (CRO)



22nd February 2016
Ljubljana (SLO)



ORGANIZATION OF A STUDY VISIT TO ITALY

14-18 December 2015

- Florence:
 - University of Florence
 - Forensic Toxicology Unit
 - Medical Toxicology Unit
- Pavia:
 - Poison Control Center
 - S. Matteo Hospital Lab
- Roma:
 - Carabinieri Research Investigation Unit
 - Central Directorate for Antidrug Services



REPORTING

- The Co-beneficiaries sent financial and activity reports:
 - 20/07/2015 (05/01/2015 – 05/07/2015)
 - 15/12/2015 **Mid-term** (06/07/2015 – 30/11/2015)
 - 20/07/2016 (01/12/2015 – 05/07/2016)



Still one report to go

- 20/01/2017 **Final**
(5/07/2016 – 04/01/2017)

**Submission to EC within
03/03/2017**

BUDGET REVISION AFTER 1^o YEAR

- After 1 year the budget was revised
- The new budget was approved by EC
- The revised budget was forwarded to all the partners



OTHER GENERAL ACTIVITIES PERFORMED

Keeping contacts with the European Commission:

- About bureaucratic issues
- With periodical reports
- Asking about extra-activities



Managing project funding:

- Keeping track of project expenditures
- Periodical meetings with the administrative person, who we thank for her patience

WS0: ACTIVITIES TO GO

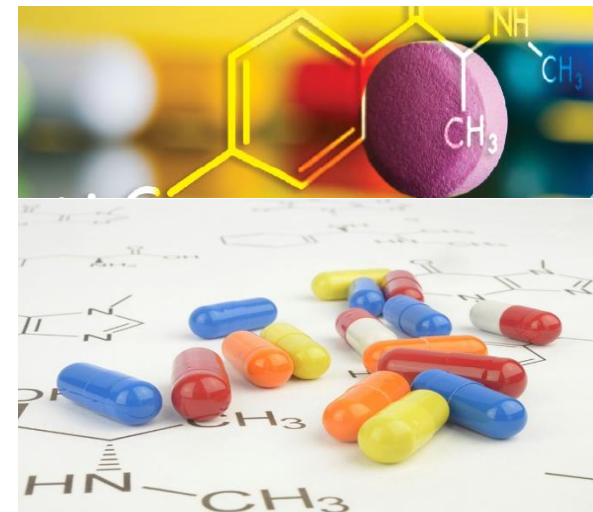
- Dissemination of project results at national and EU level – December 2016/January 2017
- Production of final activity and financial report for the EC – March 2017



I-SEE PROJECT MAIN OUTCOMES

According to the European Pact against Synthetic Drugs (EPDS), the I-SEE project:

1. Contributed to a more **coordinated and effective operational response to NPS phenomenon**;
2. **Developed evidences** which can be used to identify transnational criminal networks;
3. Allowed the **creation of transnational networks** where health professionals, toxicologists, LEA, NGOs may benefit from information gathered by each other;
4. **Reinforced coordination and information sharing** and enhanced regional cooperation;



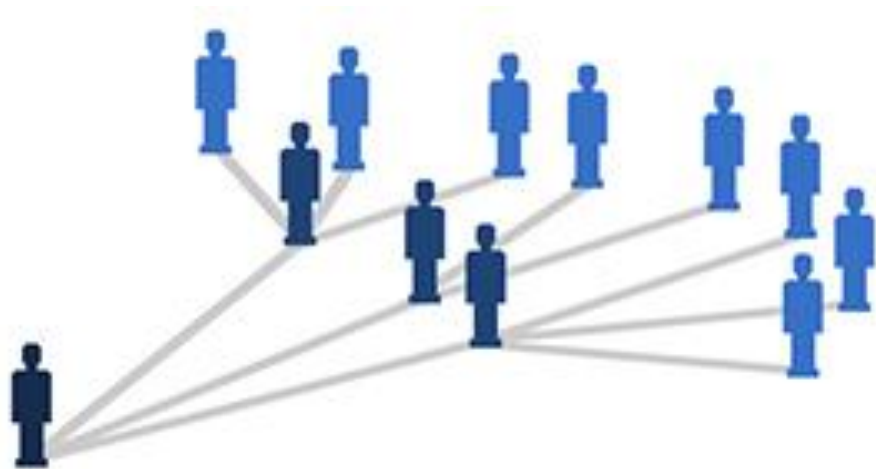
I-SEE PROJECT MAIN OUTCOMES

5. Enabled participating countries **to boost the circulation of information about NPS** among national professionals, national authorities, EC and EMCDDA;
6. Established a **fruitful cooperation** between Italy, Slovenia and Croatia that we intend to maintain to carry on scientific research and to increase our reciprocal knowledge and experience on NPS.

UNFORESEEN ACTIVITIES

The EC authorized the participation in the frame of the I-SEE project to two international meetings.

EC recognized these dissemination activities as an added value for the I-SEE project.



May 10th - 11th 2016, Bled,
Slovenia



Co-funded by the Prevention of and Fight
against Crime Programme of the European Union



ENFSI DRUGS WORKING GROUP
**22nd ENFSI-DWG
Meeting**



Hosted by the Slovenian National Forensic Laboratory



Dr Sonja Klemenc
(host)



5th Croatian Congress of Toxicology with International Participation

Organized by the Croatian Society of Toxicology

A very important product of the I-SEE project was the establishment of a

**“Unit of Research and Innovation
in Forensic Toxicology and Neuroscience of Addiction”
(U.R.I.To.N.)**

**U.R.I.To.N.
Research Unit
Dedicated to Tindari Baglione**

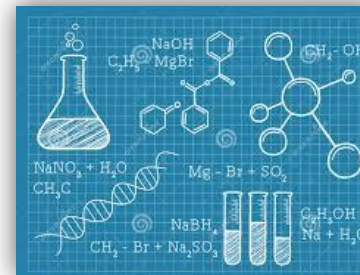


U.R.I.To.N. was founded in July 22nd 2015

It is the first highly specialized Unit, in Italy and in Europe, entirely focused on all aspects of drugs of abuse (especially NPS) by means of a multidisciplinary approach.

In this Unit, groups from three different University Departments are involved :

- Health Sciences (DSS);
- Neurosciences, Psychology, Drug Research;
- Chemistry “Ugo Schiff”



New Drugs

Last April an important Symposium was held in Florence on:

“Addiction” and Identification of New Psychoactive Substances

with a great presence of representatives from

- **Law Enforcement Agencies**
- **Universities**
- **Students.**

The enlargement of the Slovenian EWS network and the collaboration among health sector, law enforcement and NGOs

National Institute of Public Health Project Outcomes



Ada Hočevar Grom

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and Criminal Police Directorate

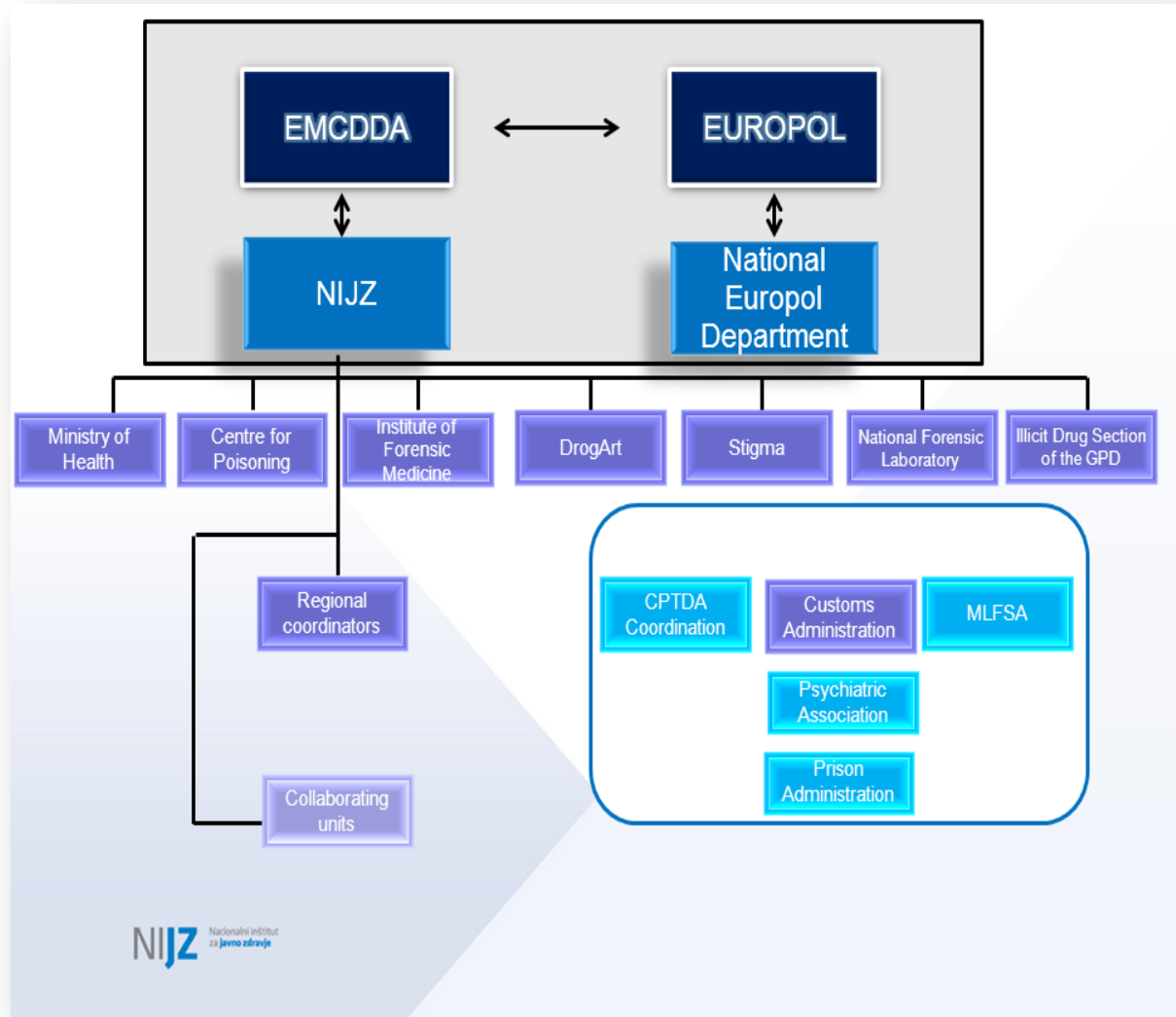


Slovenian Early Warning System on NPS

- 2005 - first model of Slovenian EWS established, upgraded later.



- 2007 - the EWS is adopted at national level by the Ministry of Health. Coordination of NEWS under NIPH.
- 2014 - plans for development of regional EWS networks



I-SEE Slovenia: What we wanted to achieve?



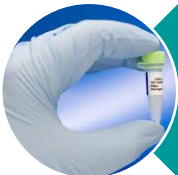
to build up regional networks involving law enforcement, NGO's and public health professionals



to detect NPS in an early phase of their appearance and in individual regions



to enable anonymous collection of NPS samples in regions



to speed up the procedure of anonymous collection of NPS samples and their analysis



to speed up the response in terms of informing the users and take adequate measures to tackle the problem

NIPH: What was done in 2015?

4 trainings: 115 professionals

17. April 2015 1st national meeting

- tasks to be done in the project & timeline
- dates, places and content of trainings for public health, NGO & police professionals
- participants agenda



NIPH: What was done in 2015-2016?



8 regional coordinators of EWS were appointed

task: to establish and coordinate regional EWS network

8 regional early warning systems started to operate



NIPH: Regional EWS networks & NPS collecting points



NIPH: What was done in 2016?

16. June 2016

2nd national meeting

17 members of newly established regional EWS networks

- overview of the work done in the project
- guidance for anonymous NPS samples collecting
- issues regarding collecting procedure
- informing on dangerous NPS
- monthly reporting
- work plan for 2017



NIPH: What was done in 2016

development of **national NPS base**

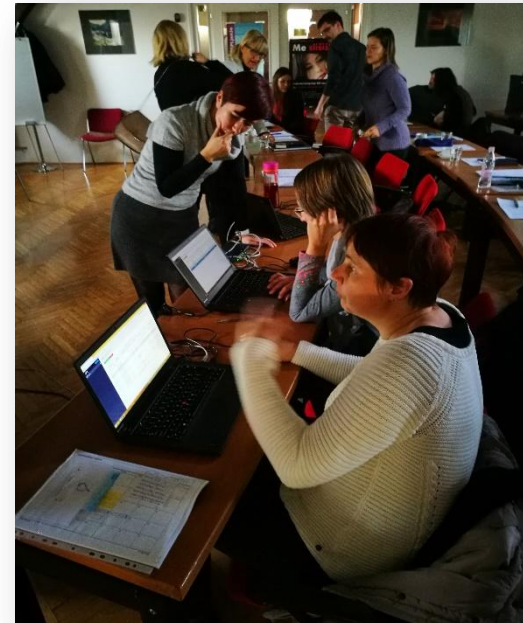


2. December 2016

3rd national meeting

25 members of regional EWS networks

- presenting and testing the national NPS base



NIPH: What was done in 2016

- 6 alerts on dangerous NPS
- 10 monthly reports of regional EWS networks

Obvestilo Sistema za zgodnje opozarjanje na pojav NPS

Nevarni sintetični kanabinoidi MDMB-CHMICA raznan tudi v Sloveniji
MDMB-CHMICA v devetih državah EU povzroča živilne zastrupitve in smrti

V okviru Sistema za zgodnje opozarjanje na pojav novih psihoaktivnih snovi je bil sintetični kanabinoid MDMB-CHMICA raznan na območjih Maribora, Celje in Novoga mesta. Pojavil se je v obliki razstrelke mešanice in v obliki pastozne snovi črne barve. V nekaj primerih je bila ta snov pridelana tobaku.

Devet držav članic EU je v povezavi s snovjo MDMB-CHMICA poročalo o 29 smrtnih in 42 zastrupitvah. Uporabniki, ki so se zadržali s to snovjo, so imeli naslednje znake: različne senice, pospešeno bitje srca, slabost in bruhanje, paranoje, halucinacije, zmedenost, vznemirjenost, zasoplost, zaspanost, nezavest ali koma, resno poslabšane motorne spretnosti, izgubo nadzora nad zaščevanjem urina in blata.

MDMB-CHMICA je sintetični kanabinoid, ki se pojavlja tudi v obliki belihga prašica oziroma prahu in kot mešanica za kajenje. Na evropskem trgu drog je bilo odbrnih več kot 20 izdelkov (slika 1), ki so vsebovali snov MDMB-CHMICA, včasih tudi v kombinaciji z drugimi sintetičnimi kanabinoidi. MDMB-CHMICA se prodaja še tudi pod drugimi imeni, npr. kot MMB-CHMICA.

Slika 1. Nekaj primerov izdelkov, ki vsebujejo MDMB-CHMICA

Obvestilo Sistema za zgodnje opozarjanje na pojav NPS

Pojav nevarnega sintetičnega opioida 4-fluoro-butirfentanila v Ljubljani

V Ljubljani se je pojavil nevaren sintetični opioid 4-fluoro-butirfentanil.

4-fluoro-butirfentanil, za katerega se uporabljajo tudi imena 4F-BF, 4-FBF, p-FBF, je derivat fentanila in povzroča enake neželene učinke: srbenje, slabost ter tudi resno respiratorno depresijo (piskno in upočasnjeno dihanje), ki je lahko življenjsko ogrožajoča.

4-fluoro-butirfentanil je izredno potentna snov, ki je lahko nevarna v že zelo majhnih odmerkih. Pojavlja se v obliki prahu, tablet ter pršila za nos.

18. 10. 2016 je Društvo Svät Petri dobilo dva vzorca, ki naj bi se prodajala kot prehransko dopolnilo (matrilijev kalcijev). Ob uporabi se je pojavil pretiran glavobol in mučiločenje srca. V enem paketu je bila vsebovana tudi v prahu, v drugem so bili tudi kocki.

3. 11. 2016 je NPS potrdilo, da je v obsej paketi kokain.

Sistem za zgodnje opozarjanje na pojav NPS – regije

Mesečno poročilo – oktober 2016

DE Celje	Zavod za preprečevanje mladostniškega zlorabe in karni zapora Celje poroča o pojavljanju THIC, ki je dokazan tudi s urinskimi testi. Uporabniki so poročali tudi o neželtem kokainu, ki povzroča nervozno, razdražljivost. Zgodilo se je tablet nemarne vsebnosti 5,6 g THIC.
DE Kranj	Oktober Uporabniki programov zmanjševanja škode na področju drog in Obalo-trajne regije poročajo o slabem trendu in o občasnem pojavljanju zelo čistega heroina (Droga, 100%). Ni je prenehanje in osveženje. Po njihovih besedah, se da dokazi heroin, ki je do 7x močnejši, kot heroin, ki je v običajnem obseju. Informacij o uporabi NPS med uporabniki ni. Po prepovedovanju informatorji, naj bi konec meseca oktobra bili trije fantje, ki so uporabili kokain, obravnavani v bolnišnici. Za štiri dni so uporabniki sili, vendar je ne uporabljajo, predelavajo pa, da jo morda uporabljajo večkrat mlajše osebe, s katerimi nimajo stika.
DE Maribor	Zdrava pot poroča o rezultatu testiranja vzorca NPS. Datum prevzema vzorca: 26.9.2016 Rezultat v mesecu oktobru: laboratorijsko testiranje je pokazalo, da je bila prejeta tableta (Droga). Ni vpliva v skupno analizo. To zdravilo se uporablja za zdravljenje bolečin s simptommi, kot so priložni, priredni ali občutni. Ni niso povezani z resnostjo, imata pripravljeno, nenaadna sumničavost in postopno izgubljanje socialnega vitosa. Tableta je NPS, ni bila domača izdelava, kar je navadno uporabnik, ampak je bila kupljena v lekarni in samo prodana kot domaća tableta.
DE Murska Sobota	15. novembra 2016 smo na NIIZ O.E.M. Sobota organizirali drugo srečanje na vzpostavljeni regijske mreže (Promer) namenjeno NVO. K obsejbi smo povabili vse vključne NVO, ki v regiji delujejo na področju drog ter medinske centre, klube in društva. Srečanje so se udeležili predstavniki Droga in društva Zdrava pot, kar je za nas ključnega pomena. Pogrebi smo predstavili mladinskih organizacij (vseh odred), zato jih bomo skušali še dodatno motivirati za vključitev v mrežo. V mesecu decembru (15.12.2016) planiramo sklopnost srečanja na tematski delavnosti na radii O.E.M. v sodelovanju z CSO MS, s sodelovanju vseh vključenih v mreži.

Sistem za zgodnje opozarjanje na pojav NPS – regije

Mesečno poročilo – oktober 2016

DE Celje	V mesecu oktobru (26. in 28. 10. 2016) sta bila med člani regijske EWS poročevani dva najni obvestili. Septembar Društvo Pot - Ilirka Bistrica je poročalo, da uporabe NPS pri njihovih uporabnikih niso zasledili in da uporabniki poleg klasičnih drog (kokain, heroin, kosepiji) uporabljajo hupostane in pomirjiva ter dajaboli. Na terenu med mladimi, ki niso vključeni v društvo, se je povečala uporaba kokaina in gaga. Tudi med uporabniki Društva Babilot, Solana ni zasledil uporabe NPS. Uporabniki Društva Svet Koper poleg klasičnih drog (heroin, kokain, kosepiji) uporabljajo alkohol in gaga. Ni uporabnikov krogu smo ugotovili, da naj bi na območju Obale različne vrste skupaj uporabljali različne kokain, mlata vodice (vrta ekstrakt), sintetični heroin, kristalke «LED» (bristaki), ki se uporabljajo za pospeševanje rasti rell; «Mikrotablete» (heroinne tablete za kipe), kokain (na naj bi bil med gaga) obkrovi v Koprki pricestni strokovni. Informatorji s terena navajajo tudi primere, ko je šlo za spletni nakup substance pod imenom «Bila Milla». Med mladimi v Kopru in Izoli naj bi bil poleg alkohola, konjace in kokaina v poratu uporabi Droga, MDMA-je.
DE Kranj	Ljubinski Kranj – Center za pomoč, terapijo in socialno rehabilitacijo zasvojenih poroča: V septembru smo bili ki na terenu. Nismo zaznali večjih posebnosti: greva tako radi uporabniki niso poročali o težavah povezanih s prepovedanimi drogami oz. NPS. Uporabnica je v testiranje prinesla vzorec tabletk, ki ji je bila posrejena kot ekstaza. V sodelovanju s PP Kranj je bila ugotovljeno, da ne gre za psihoaktivno snov. V začetku meseca smo spregli prvi občutni sestanki aktivnih članov regijske mreže sistema za zgodnje opozarjanje NPS za področje Gornjske.
DE Maribor	Zdrava pot poroča o rezultatu testiranja vzorca NPS. Datum prevzema vzorca: 26.9.2016 Rezultat v mesecu oktobru: laboratorijsko testiranje je pokazalo, da je bila prejeta tableta (Droga). Ni vpliva v skupno analizo. To zdravilo se uporablja za zdravljenje bolečin s simptommi, kot so priložni, priredni ali občutni. Ni niso povezani z resnostjo, imata pripravljeno, nenaadna sumničavost in postopno izgubljanje socialnega vitosa. Tableta je NPS, ni bila domača izdelava, kar je navadno uporabnik, ampak je bila kupljena v lekarni in samo prodana kot domaća tableta.
DE Murska Sobota	15. novembra 2016 smo na NIIZ O.E.M. Sobota organizirali drugo srečanje na vzpostavljeni regijske mreže (Promer) namenjeno NVO. K obsejbi smo povabili vse vključne NVO, ki v regiji delujejo na področju drog ter medinske centre, klube in društva. Srečanje so se udeležili predstavniki Droga in društva Zdrava pot, kar je za nas ključnega pomena. Pogrebi smo predstavili mladinskih organizacij (vseh odred), zato jih bomo skušali še dodatno motivirati za vključitev v mrežo. V mesecu decembru (15.12.2016) planiramo sklopnost srečanja na tematski delavnosti na radii O.E.M. v sodelovanju z CSO MS, s sodelovanju vseh vključenih v mreži.

Slovenia



Implementation of NPS sample collecting procedure in NGO focal points in Slovenia

I-SEE, press conference, Florence, 16. 12. 2016

Simona Šabić, Association DrogArt

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and
Criminal Police Directorate



The role of NGO in SI-EWS

- Connection between the users and the system.
Quality contact with users and the system is essential.
- Providing to the EWS information about detected drug emergence, changed patterns of drug use, users' needs → **planning effective responses.**
- Providing to the users EWS information and alerts.

I-SEE project: implementing this role on regional levels.

Drug checking as a harm reduction activity

- Unknown content in the illicit drugs, new psychoactive substances with unknown affects and risks, high purity of drugs → **preventing risks, overdoses and deaths.**
- Opportunity to make quality contact with users, providing them **information and counselling.**
- **Reaching hidden population** of drug users (NPS specifically).
- Encouraging **responsible and less risky decisions** among users.

Warnung: XTC mit verschiedensten Inhaltsstoffen

Datum: April 2015



Name	Smiley
Gewicht	293.8 mg
Durchmesser	9.0 mm
Dicke	3.7 mm
Bruchrille	Ja, Kreuz
Farbe	rot
Inhaltsstoff	Amphetamin*HCL: 35.4 mg Coffein: 22.7 mg MDMA*HCL: 5.0 mg Ketamin: 3.5 mg 4-Methylamphetamin 0.6 mg Biamphetamin 1-Benzyl-3-methylnaphthalan
Getestet in	Zürich, April 2015

DrogArt

Posted by Simona Šabić (?) · 10 February ·

V Angliji opozarjajo na ekstazije z zelo visoko vsebnostjo MDMA. Gre za rumene tabletko v obliki ščita z logotipom UPS. Zaradi uporabe je bilo šest ljudi hospitaliziranih.



Tabletke s tremi zvezdicami vsebujejo EAPB in MAPB

4.9.2014

Tabletka se prodaja kot ekstazi s tremi zvezdicami, premerom 10 mm in debelino 2 mm (glej slike). Laboratorijska analiza je pokazala, da vsebuje EAPB in MAPB.



We Could Have Prevented Those PMMA Deaths In The UK With Drug Checking

'Superman' pill deaths spark calls for dangerous-drugs alert system

The Netherlands issued early warnings about lethal pills believed to have subsequently killed four in UK over the festive break



 Dancers at a rave, which is typically associated with the taking of the 'feel-good' drug ecstasy. Photograph: Franck Prevel/AP

Five days before the first of four people in Britain died of a drug overdose, researchers at a Dutch laboratory organised a nationwide alert over the "Superman" pills that are now believed to have killed those who thought they were taking ecstasy.

Drug testing - monitoring drug use

- Insight in NPS phenomena and emergence in different local environments.
- Insight in the drug use patterns (local environments and hidden populations).

Drug testing procedure

- Samples are **anonymously** collected from users in the NGO.

Anonymity and confidentiality are essential.

- Providing information and counselling to users.
- Cooperation with the police.
- Sample analysis in National Forensic Laboratory (NFL).
- Communicating results back to users.

I-SEE project: implementing drug testing procedure in NGOs in other regions.

Main project achievements

- **4** trainings for NGOs from all Slovenian regions
- **6** newly established NGO focal points
- Until november 2016 NFL analyzed **122** anonymously collected samples in NGO, in **48** samples NPS was detected
- Development of **guidelines** for NPS sample collecting procedure
- Improved cooperation, information and good practis exchange between organizations, institutions and proffesionals on regional and national level
- Connecting important stakeholders on the topic of NPS and drug testing

CHEMICAL CHARACTERIZATIONS OF ANONYMOUSLY COLLECTED SAMPLES IN NFL - ANALYTICAL BACKGROUND

Dr Sonja Klemenc
sonja.klemenc@policija.si

RS Ministry of the Interior - Police, General Police Directorate,
National forensic laboratory (NFL)



NACIONALNI FORENZIČNI LABORATORIJ
NATIONAL FORENSIC LABORATORY

Presented by
Dr Fabio Vaiano

Forensic Toxicology Division, Department of Health Science, University of Florence, Italy

Coordinator



Department of Health Science

Beneficiary partners



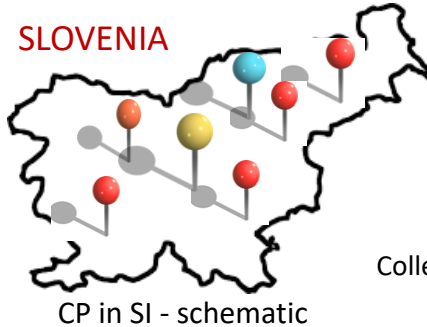
Ministry of Interior
Republic of Slovenia



COLLECTION AND ANALYSES OF SAMPLES (overview)

1. SI EWS collection points (CP)

established at different SI regions (anonymously collected samples)



Collected samples: powders, tablets, liquids, blotters, plant materials

2. Law enforcement units (LE) -Police

Collected samples are seized at the (CP) and shall be protected (inline with the instructions of the NFL document CFP-017, version 1.7, 2012) in evidence protection bags (provided by NFL) and afterwards samples are delivered to NFL.



Law enforcement officers



Evidence protection bags

reporting

3. Forensic chemists

National Forensic Laboratory (NFL)

- a) Chemical characterizations and reporting.
- b) Further manipulation of samples – send them to storage or if samples are spend during analyses this shall be written in the report.



To the request sender (LE)



To other stakeholders

CHEMICAL CHARACTERIZATIONS (BACKGROUND)

NFL task WS1: Characterization of anonymously collected samples by the *routine* laboratory methods:

1. GC-MS – retention time locked method ISO- 17025 accredited in flexible scope (from 2010):

- > **450 compounds** (*certified reference materials and NMR confirmed compounds from other sources*) with the known **retention time** and corresponding **mass spectrum** and **detection limit defined** are currently included in the NFL internal GC-MS data repository. Some numbers:
 - **NPS*** (synthetic cannabinoids (>110), cathinones (77), phenethylamines including classical (84), benzodiazepines (26), tryptamines (17), opioides (13), arylalkylamines (15), aminoindsnes (5), Arylcyclohexylamines (9)...etc.)
 - Classical drugs and many common adulterants are covered by the method as well
- Commercial MS spectral libraries as well as ENFSI, SWGDRUG and Cayman MS libs are the complementary tools applied for identifications (based on MS spectrum only, if applicable).

* **I-SEE project** reference materials : (26 out of 37 delivered were new for NFL) kindly provided by University of Florence and additional 28 acquired and purchased from the I-SEE project budget by NFL have been implemented into GC-MS data repository and solid samples to NFLs FTIR spectral database as well.

CHEMICAL CHARACTERIZATIONS II (BACKGROUND)

2. FTIR-ATR

- > 350 NPS are included in the NFL internal data repository
- search against libraries from other providers is possible as well

3. **Other methods** *were implemented for identifications of active ingredients for few collected samples (those analyses were covered in the frame of a complementary project (RESPONSE) from the same call - coordinated by the National Forensic Laboratory. So far three joined reports (RESPONSE + I-SEE) have been issued .*

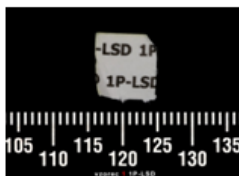
- HPLC-TOF (determination of exact monoisotopic and suggested empirical formula) in NFL
- NMR (^1H , ^{13}C , ^1H - ^1H gs-COSY, ^1H - ^{13}C gs-HSQC, ^1H - ^{13}C gs-HMBC, ^1H - ^{15}N gs-HMBC), analyses and interpretations are done in Faculty of Chemistry and Chemical Technology (FKKT), University Ljubljana in the frame of the [RESPONSE project](#).

EXAMPLE 1: IDENTIFICATION OF 1P-LSD and ETH-LAD in anonymously collected BLOTTERS

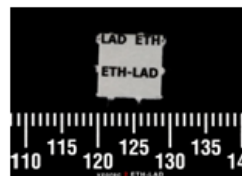
(Simple case example: mass spectra and RT data of both compounds were already available in NFL spectra repository)

Administrative data (NGO/LE unit/NFL)

sample authority:	type/collecting	Collected/ NGO Infopeka
Date of seizure:		05/09/2016
place:		Maribor
seized by:		Police (LE unit in Maribor)
evidence bag No.		A 38046
No of samples		4
Other info:		Blotters purchased through the website from China (5€/blotter).
NFL Case ID		233-3768/2016
received in NFL:		13. 9. 2016
NFL report issued		16.09. 2016



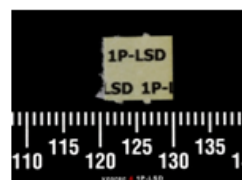
Slika 1: pivnik vzorec 1



Slika 2: pivnik vzorec 2



Slika 3: pivnik vzorec 3



Slika 4: pivnik vzorec 4

Foto: National forensic lab.

Chemical characterizations in NFL:

Extraction of each blotter: in MeOH

Methods applied: GC- MS and HPLC - TOF



Results upon analyses (identification based on internal NFL databases)

Samples 1 and 4: **1P-LSD**

Samples 2 and 3: **ETH-LAD**

Report to the customer (LE)

Reports to EMCDDA and SI EWS (NIJZ contact point)

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA NOTRANJE ZADEVE
POLICIJA
Generalna policijska uprava
Nacionalni forenzični laboratorij

Co-funded by the Prevention of and Fight against Crime Programme of the European Union

Policijska uprava Maribor
3F331

Stevilka: 233-3768/2016/2 (2P502-14)
Datum: 16. 9. 2016

T: 01 428 44 93
F: 01 428 49 86
E: ml@police.si

POROČILO O PREISKAVI "ANONIMNI VZORCI"

ZVEZA: Zaposlilo št. 2312-196/2016-1 (3F331-06) z dne 6. 9. 2016

Naročnik preiskave: PU Maribor
Datum zaseda: 5. 9. 2016
Datum prejema v NFL: 13. 9. 2016
Kontrolna št. vrečke (ZM): A 38046

Vzorce neznane snovi je dne 5. 9. 2016 predstavniku SKP PU Maribor izročila odgovorna oseba zavoda Infopeka v Mariboru. Na podlagi delovanja mednarodne delovne skupine Sistema za zgodnje opazovanje na pojav novih psihoaktivnih snovi sta vzorca vključena v projekt I-SEE.

REZULTAT PREISKAVE

uporabljene metode: PT , GC-MS , FTIR , HPLC-TOF , NMR , drugo: GC-MS-FTIR



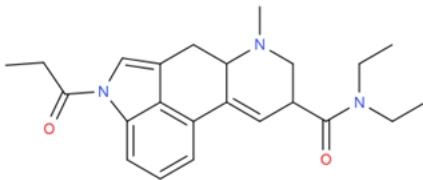
oznaka vzorca	količina	emb	opsi snovi	PO	NPS	ostalo
1	1	kom.	pivnik (Slika 1)	/	1P-LSD (dietilamid 1-propionil) (zdravilne kisline)	/
2	1	kom.	pivnik (Slika 2)	/	ETH-LAD (6-etil-5-nor-dietilamid) (zdravilne kisline)	/
3	1	kom.	pivnik (Slika 3)	/	ETH-LAD (6-etil-5-nor-dietilamid) (zdravilne kisline)	/
4	1	kom.	pivnik (Slika 4)	/	1P-LSD (dietilamid 1-propionil) (zdravilne kisline)	/

Rezultat preiskave se nanaša na vzorec, kot je bil prejet v laboratorij. Dokument se sme distribuirati samo med člani EWS.

Stran 1 od 2

Figure: NFL -REPORT (special template was designed for reporting I-SEE project result; page 1 of the report is shown)

NFL filled EUROPOL/EMCDDA reporting form and sent it to EMCDDA and SI EWS

	<p align="center">REPORTING FORM ON NEW PSYCHOACTIVE DRUG</p> <p>In accordance with Council Decision 2005/387/JHA of 10 May 2005 on information exchange, risk assessment and control of new psychoactive substances.</p>		<p>Identifying authority:</p> <p>Date: _____ Place: _____</p> <p>Collected sample(s)² <input checked="" type="checkbox"/> Specify amount (weight, number of tablets, etc): 2 blotters</p> <p>Collecting authority: NGO (Infoneka) / Police</p> <p>Date: 5.9.2016 Place: Maribor, Slovenia</p> <p>The samples possessed drug addict and purchased through the website from China.</p> <p>Samples were collected for anonymous testing in the frame of EU-cofunded project I-SEE (JUST/2013/SEC/DRUGS/AG/6426).</p> <p><u>Other substances present</u> (if more than one case, specify for which one):</p> <p>Psychoactive ingredients:</p> <p>Other ingredients:</p>
<p>This section should be filled in by Europol or EMCDDA</p> <p>Transmitted by Europol <input type="checkbox"/> Transmitted by EMCDDA <input checked="" type="checkbox"/></p> <p>Ref. n°: OEDT (16) 10502 Date of transmission: 22/09/2016</p>			
<p>The following sections should be filled by the Europol National Units (ENU) or REITOX National Focal Points (NFP) based on the information available and their respective competences</p>			
<p>1. Member State:</p> <p>Ref. n°: 325-24/2009/233 NFL case no. 233-3768/2016 Samples No. 1 and 4</p> <p>Date: 21.09.2016</p>	<p>Reporting authority:</p> <p>ENU <input type="checkbox"/> REITOX <input checked="" type="checkbox"/></p>		
<p>2. Chemical name: N,N-diethyl-7-methyl-4-propanoyl-6,6a,8,9-tetrahydroindolo[4,3-fg]quinoline-9-carboxamide</p> <div style="text-align: center;">  </div> <p>Mw (g/mol): 379,50 Formula: C₂₃H₂₉N₃O₂</p> <p>Other name(s): Street name(s):</p>			<p>4. Physical description (in case of seizure/collection)</p> <p>Form: powder <input type="checkbox"/> tablet <input type="checkbox"/> capsule <input type="checkbox"/> liquid <input type="checkbox"/> other (specify): <u>blotters</u></p> <p>Colour: <u>one blotter white with printed text '1P-LSD and another blotter yellow printed text '1P-LSD</u></p> <p>For dosage unit: weight: _____ diameter: _____ shape: _____ logo/markings: _____</p>
<p>3. Source of information (fill one or more as appropriate)</p> <p>Seizure(s) <input type="checkbox"/> Specify amount (weight, number of tablets, etc.): _____</p> <p>Seizing authority:</p> <p>Date: _____ Place: _____ Biological sample(s)¹ <input type="checkbox"/> Specify type: _____</p>			<p>5. Circumstances: production <input type="checkbox"/> trafficking <input type="checkbox"/> distribution <input type="checkbox"/> use <input checked="" type="checkbox"/></p> <p>6. Price: retail (per dosage unit): 5€/blotter wholesale: _____</p> <p>7. Chemical precursors:</p> <p>8. Patterns of use:</p> <p>9. Other possible uses³:</p> <p>10. Effects in man</p> <p>Objectively observed:</p> <p>Subjective (described by users):</p> <p>11. Context of use</p> <p>User group(s):</p>
<p>¹ Biological (human) samples e.g. body fluids (urine, blood), tissues, hair, etc.</p>			<p>² Actively collected by drug monitoring systems for monitoring or research purposes ³ For example, for medical, industrial, ritual, cosmetic, etc., purposes</p>

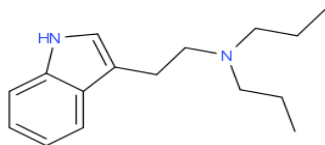
Beside the test purchased sample of 1P-LSD performed by National forensic laboratory (2015 in the frame of the RESPONSE project), this was the first identification of 1P-LSD in Slovenia. Therefore, the report was sent to EMCDDA and SI EWS in cc. The second substance ETH-LAD was processed on the same manner. Reporting form for ETH-LAD is not shown.

EXAMPLE 2: Identification of 2-(1H-indol-3-yl)-N,N-dipropylacetamide (Complex case)

Administrative data (NGO/LE unit/NFL)

sample type/collecting authority:	Collected/NGO DrogArt
Date of seizure:	6.1.2016
place:	Ljubljana
seized by:	SKP LJ
evidence bag No.	027954
No of samples	5
Other info:	Sample 30 (off white powder) was purchased via internet as DPT
NFL Case ID	233-108/2016
received in NFL:	8. 1. 2016
NFL report issued	29.1.2016

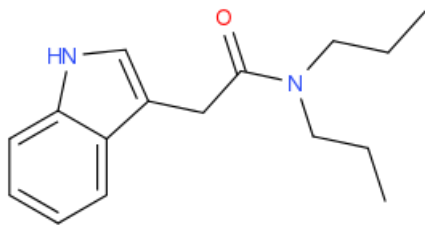
Expected compound **DPT** (tryptamines class)



C₁₆H₂₄N₂
Mw=244,38 g/mol
Exact mass: 244.19395

[2-(1H-indol-3-yl)ethyl]dipropylamine

Identified compound: 2-(1H-indol-3-yl)-N,N-dipropylacetamide (tryptamines class)



C₁₆H₂₂N₂O
Mw: 258.36 g/mol
Exact mass: 258.1732

Chemical characterizations in NFL:

Methods applied: GC- MS and HPLC – TOF, FTIR-ATR

↓
Results upon analyses

GC-MS:

- no hits in spectral libraries,
- MS fragmentation pattern is **NOT** consistent by **DPT** structure)

FTIR-ATR:

- no hits in libraries, clear indication of carbonyl group (-C=O) present which is **NOT** consistent by **DPT** structure)

HPLC-TOF:

- no hits in NFL library
- exact mass: 258.1732 (does **NOT** correspond to **DPT**)
- Empirical formula: C₁₆H₂₂N₂O (does **NOT** correspond



RESPONSE to **DPT**

Structure elucidation by NMR at FKKT, University Ljubljana

Structure elucidation was based on **1D and 2D NMR experiments:** 1H, 13C, 1H–1H gs-COSY, 1H–13C gs-HSQC, 1H–13C gs-HMBC, 1H–15N gs-HMBC.

Result

↓
REPORTING

EXAMPLE 2: REPORTING of 2-(1H-indol-3-yl)-N,N-dipropylacetamide

Three types of reports were issued: for the customer, for EMCDDA and SI EWS, for NPS database (open to public)

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA NOTRANJE ZADEVE
POLICIJA
Generálna policijska uprava
Nacionalni forenzični laboratorij

Vodovodna 95, 1000 Ljubljana

Co-funded by the Prevention of and Fight
against Crime Programme of the European Union
Grant agreements no.: JUST/2013/ISEC/DRUGS/AG/6413
and AG/6426

Generálna policijska uprava
Uprava kriminalistične policije
- 2201

Stevilka: 233-108/2016/2 (P502-12)

Datum: 29. 1. 2016

T: 01 428 44 93
F: 01 428 49 56
E: m@policija.si

POROČILO O PREISKAVI "ANONIMNI VZORCI"

ZVEZA: Zaprlo št. 2312-15/2015/58 (2201-03) z dne 6. 1. 2016

Naročnik preiskave:	GPU UKP
Datum zaseda:	6. 1. 2016
Datum prejema v NFL:	8. 1. 2016
Kontrolna št. vrečke (ZM):	027954

REZULTAT PREISKAVE

uporabljene metode: PT GC-MS FTIR HPLC-TOF NMR drugo: GC-FTIR, IC

oznaka vzorca	količina	vrsta	opis snovi	PD	NPS	ostalo
30	0,12	g	praškasto-grudasta snov krem barve (Silka 1)	/	2-(1H-indol-3-yl)-N,N-dipropylacetamid hidroklorid	/
31	0,14	g	kristalinična snov bele barve (Silka 2)	/	3-fluorofenotrazin hidroklorid	/
32	0,14	g	praškasta snov umazano bele barve (Silka 3)	/	N-ethylpropionimid hidroklorid	/
33	1	kos	črna bel papirnata pivnka velikosti 5mm x 5mm (Silka 4)	/	floropropilamid in slobamazol	/
34	3	kos	diva bela papirnata pivnka velikosti 6mm x 6mm in en potiskan (z molvom jagode) velikosti 6mm x 2mm (Silka 5)	/	slonazolam	/

PD – pregledane droge, NPS – nove psihoaktivne snovi

Rezultat preiskave se nanata na vzorec, kot je bil prijet v laboratorij. Dokument se sme distribuirati samo med Clasi EWS.

Stran 1 od 3

Collected sample: K. Sample amount (weight, number of units, etc.): 0,12 g
Collection facility: Podgorica DUG analytical laboratory in the frame of the Prevention of and Fight against Crime Programme of the European Union Grant agreements no.: JUST/2013/ISEC/DRUGS/AG/6413
Use information: sample was purchased as DPT (EU-Indol-3-yl)propylpropylamine

Date: 08/01/2016
Power: 1000W, Slovenia

SEARCHED INDEXED INFORMATION REPORTED
PREVIOUS RESULTS: Other languages

4. Physical description of sample of individual(s):
Form: powder tablet capsule other (specify):
Color (if other):
Color (if other):
No. of bags/pack: weight: amount: shape: appearance:
5. Concentration: amount: volume: L: amount: L: amount: L: amount: L:
6. Purity: real (or average %): substance:
7. Contaminant(s):
8. Pesticide(s):
9. Other possible user:
10. Photo (if any):
11. Other analytical:
12. Significant (precision by error):
13. Comments:
User/group:
Solvent(s):
Accuracy of concentration:
12. Illustration of possible risks

REPORTING ONLY ON NEW PSYCHOACTIVE DRUGS
In accordance with Council Decision 2005/618/JHA of 13 July 2005 on the prevention, combating and investigation of drug trafficking and the related activities.
This section should be filled in by Clasi or EMCDDA.
Transmitted to Clasi or EMCDDA
Information: Clasi or EMCDDA
For reporting, relevant information should be provided in the following table (for further information, please refer to the Clasi or EMCDDA website).
EMCDDA
Clasi

1. Name of the substance: N,N-dipropylacetamide
2. Chemical name: 2-(1H-indol-3-yl)-N,N-dipropylacetamide
3. Structure of the molecule (if not a name is appropriate)
4. Specific analytical method (if applicable, etc.):
5. Mass: 250.366 Exact mass: 256.1720 Formula: C18H22N2O
6. Molecular weight:
7. Structure:
8. Source of information (if not a name is appropriate)
9. Remarks:
10. Source facility:
11. Date:
12. Submitted to Clasi or EMCDDA:
13. Reporting authority:

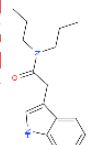


Fig.2: Report for EMCDDA and SI EWS, only first two pages are shown

RESPONSE
European Project
Co-funded by the Prevention of and Fight
against Crime Programme of the European Union

NFL
NACIONALNI FORENZIČNI LABORATORIJ
NATIONAL FORENSIC LABORATORY

Vodovodna 95
1000 Ljubljana
SLOVENIJA

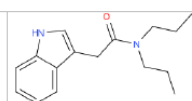
T: +386 (0)1 428 44 93
E: m@policija.si
www.policija.si

ANALYTICAL REPORT*
2-(1H-indol-3-yl)-N,N-dipropylacetamide (C16H22N2O)
2-(1H-indol-3-yl)-N,N-dipropylacetamide

Remark – other NPS detected: none

Sample ID:	1504-16 (Lab. note 233-108/2016; ppt-30)
Sample description:	powder - white
Sample type:	collected /NGO-collected
Date of sample receipt (M/D/Y):	1/6/2016
Date of entry (M/D/Y) into NFL database:	2/10/2016
Report updates (if any) will be published here:	http://www.policija.si/apps/nfl_response_web/seznam.php

Substance identified - structure* (base form)



Systematic name
2-(1H-indol-3-yl)-N,N-dipropylacetamide

Other names
Formula (per base form)
C16H22N2O
M_w (g/mol)
256.37
Salt form/anions detected
HCl
StetinChKey
AEPITCZBIULDE-UHFFA0YSA-N
Compound Class
Indolylalkylamines (6-tryptamines)
Other NPS detected
none
Add info (purity...)
pure by GC, HPLC-TOF, NMR

* Sample was collected and GC-MS screened in the frame of EU co-funded project I-SEE (JUST/2013/ISEC/DRUGS/AG/6426) and the compound structure was further verified in the frame of the RESPONSE project (JUST/2013/ISEC/DRUGS/AG/6413) Both projects run with the financial support of the Prevention of and Fight against Crime Programme of the European Union. The contents of this report are the sole responsibility of the National Forensic Laboratory and can in no way be taken to reflect the views of the European Commission.
* Created by OPSIN free tool: <http://opsin.ch.cam.ac.uk/>; DOI: 10.1002/C1009840

Stran 1 od 4
ID1604-16

Fig.3: Joined report I-SEE + RESPONSE published at WEB (full characterization data (MS, FTIR, NMR spectra) are included in this report – only page 1 one is shown here.

Collected samples - some preliminary statistical data

Number of requests received so far (87 + 8 partially processed within the scope of another project, where non routine methods had been applied for characterizations).

Number of the reports to the customer issued (note: some reports contains information for more than one sample): 95

Total number of samples processed (multiple analytical methods have been applied on each sample): 141

- samples where at least one NPS was detected (65; from this number 3 NPS were novel*)
- samples where only classical drugs (like cocaine, amphetamine, MDMA, cannabis etc..) were identified and in limited number of samples quantified as well (59)
- samples without any active ingredients (17)

Number of reports related to I-SEE project to EMCDDA and SI EWS (only when the compound is detected for the first time in Slovenia): 5 + few pending

*For 3 collected samples it was not possible to confirm the structure of active ingredient in the NFL (reference materials were not available). Samples were sent to NMR in the frame of the RESPONSE project. Joined reports of the "RESPONSE + I-SEE" projects were issued and chemical characterization data (spectra) have been published here

http://www.policija.si/apps/nfl_response_web/seznam.php : ([Mexedrone](#) , [N-ethylhexedrone](#) and [2-\(1H-indol-3-yl\)-N,N-dipropylacetamide](#)).

Collected samples – NPS identified (examples)

2-MAPB, 3-Meo-PCP, ketamin, clonazolam, nifoxipam, FUB-AMB + 4MeO-PV9, 3-MMC, alpha-PVP, Etylone and Etylone in combination with 4-MeO-PV9 and SDB-005, mexedrone, 1P-LSD, 2-(1H-indol-3-yl)-N,N-dipropylacetamide, DMT, 4F-BF, 3F-fenmetrazine, ETH-LAD, LSD, fluoroamphetamine, ethylphenidate...



2-MAPB



3-Meo-PCP



Nifoxipam



FUB-AMB + 4MeO-PV9



Etylone + 4-MeO-PV9
+ SDB-005



Etylone

Pictures of some collected tablets (Foto NFL)

Conclusions

There is no doubt that the results presented here will rise understanding on NPS situation among users in Slovenia and on the other hand also rise the awareness when dangerous samples are detected in the field. So far several alerts have been issued.

Sharing of information has already strengthened the cooperation between three countries.

Dissemination of results “outside the project geographical borders” will contribute to general understanding of NPS phenomena also globally.

I-SEE PROJECT FINAL CONFERENCE

Florence, December 16th, 2016

Clinical-toxicological network on NPS in Croatian EWS

University of Split/School of Medicine, Croatia

Marija Definis-Gojanović

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and
Criminal Police Directorate



I-SEE Croatia: What did we want to achieve?



To evaluate of current situation on identifying NPS



To increase knowledge, competences and skills



To create effective monitoring system of NPS

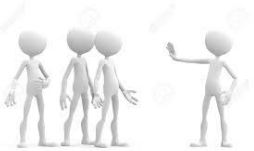


To improve the efficiency of EWS network

I-SEE Croatia: How did we plan to achieve it?



to launch of a pilot project on identifying NPS in biological samples in Split-Dalmatia County



to raise warning campaign among medical professionals (and medicine students) on NPS effects, harm and dependence



to develop a national model of monitoring health consequences of NPS use



to set up a Clinical network of the national EWS on NPS in formal and operational sense



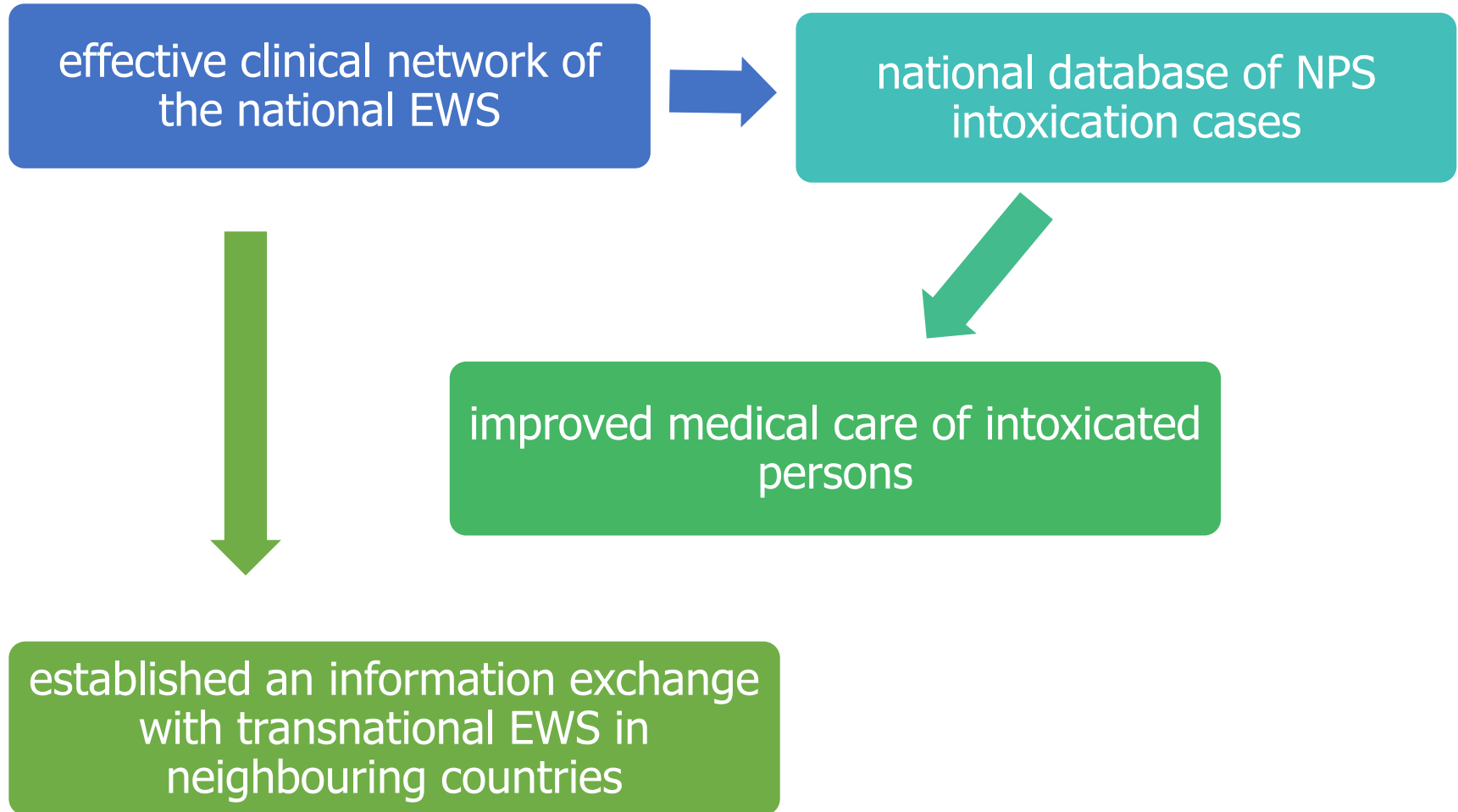
to establish a reference centre of the national EWS Clinical network (e.g. Split University School of Medicine)



to set up a national base of NPS



I-SEE Croatia: Expected results



Done!

**1st Press Conference
Split, April 1, 2015**

**Study visit of Slovenian delegation
Split, September 13-14, 2016**

**2st technical meeting
Split, September 15, 2016**



SPLIT

Objavljeno 01.04.2015. u 20:44

U SPLITU PREDSTAVLJEN PROJEKT

Teror "dizajnerskih droga": ima ih sve više, legalno se nabavljaju i probao ih je svaki četvrti mladić u zemlji

 Like  Tweet  +1



Prema izvješću Europskog centra za nadzor droga i ovisnosti o drogama, u zadnjih pet godina dogodio se dosad neviđen porast u broju, tipu i dostupnosti novih psihoaktivnih droga u Europi. Tijekom prošle godine u europskim zemljama otkrivena je 101 takva tvar, dok ih je u našoj zemlji otkriveno 18.

Prema istraživanjima provedenim u Hrvatskoj, svaki je četvrti mladić i svaka deseta djevojka srednjoškolske dobi probao je neku od novih supstancija.

Najpopularnije sredstvo je "galaxy", koje su kozumirali čak i učenici viših razreda osnovnih škola, i to oko dva posto dječaka i jedan posto djevojčica. Nove droge u pravilu se nabavljaju u "smart shopovima", kojih u Hrvatskoj ima 15-ak, smještenih uglavnom na lokacijama gdje se okupljaju mladi.



- 1. National education on NPS
Split School of Medicine
Split, May 20, 2015**
- 2. National education on NPS
City library "Juraj Šižgorić"
Šibenik, November 28, 2015**
- 3. National education on NPS
Split School of Medicine
Split, July 02, 2016**





KLINIČKI BOLNIČKI CENTAR SPLIT
TEMELJNE INFORMACIJE O PACIJENTIMA INTOKSICIRANIMA S NOVIM PSIHOAKTIVNIM
TVARIMA (NPT) - FORMULAR

1. Osnovni demografski podaci: šifra pacijenta				
spol:	M	Ž	Datum prijema:	
dob:			Potpis osobe na prijemu:	
dolazi iz:	Zemlja		Grad	

2. Klinička slika kod intoksikacije NPT (popunjava liječnik)

1. Stanje svijesti

- Smetenost
- Pospanost
- Somnolencija
- Delirij
- Koma

2. Neurološka s

- Vrtoglavica
- Glavobolja
- Dezorijentiranost
- Amnezija
- Gubitak koordinacije
- Nesiguran hod
- Hiperrefleksija
- Hiporefleksija
- Tremor
- Povremeni gubitak svijesti

3. Oftalmološka s

- Zamagljen vid
- Midrijaza
- Mioza
- Nistagmus

4. ORL s

- Suha usta
- Metalni okus u ustima
- Hipersalivacija
- Ukočenost jezika
- Škripanje zubima
- Trizmus
- Bol, svrbež nosa
- Epistaksa
- Šumovi, zujanje u ušima

5. Kardiovaskularna s

- Bol u prsima
- Palpitacije
- Aritmije

6. Respiratorna s

- Nepravilno disanje
- Kratkoća daha
- Dispneja

7. GIT s

- Bol u trbuhu
- Gubitak apetita
- Mučnina
- Povraćanje
- Proljevi

8. Genitourinarna s

- Anorgazmija
- Eretilna disfunkcija
- Povišeni libido
- Dizurija

9. Muskuloskeletna s

- Bol u leđima, mišićima, zglobovima
- Mišićna napetost
- Ukočenost
- Hladnoća udova
- Drhtavica
- Grčevi

10. Psihološka s

- Konfuzija
- Nemir
- Euforija
- Logoreja
- Povećanje energije
- Empatija
- Ubrzanje misli
- Ljutnja
- Agresija
- Strah
- Paranoja
- Napadaji panike
- Sklonost ozljeđivanju
- Nesanica
- Noćne more
- Suicidalne misli
- Vremenska iskrivljenost
- Slušne i vidne halucinacije
- Poremećaj pažnje
- Poremećaj pamćenja
- Poremećaj govora
- Opsesivno ponašanje
- Bizarne reakcije
- Flash back-ovi
- Depersonalizacija
- Psihoza
- Relaksacija
- Sedacija
- Umor
- Disforija
- Depresija
- Blok misli
- Analgezija
- Smanjen osjećaj gladi i žeđi
- Autistično ponašanje

11. Koža

- Promjena boje

(_____)

- Suha
- Vlažna
- Svrbež
- Osip
- Piloerekcija

12. Vidljive sluznice

- Promjena boje

(_____)

- Suha
- Vlažna

13. Ostalo

14. Ozljede

- Ima

(_____)

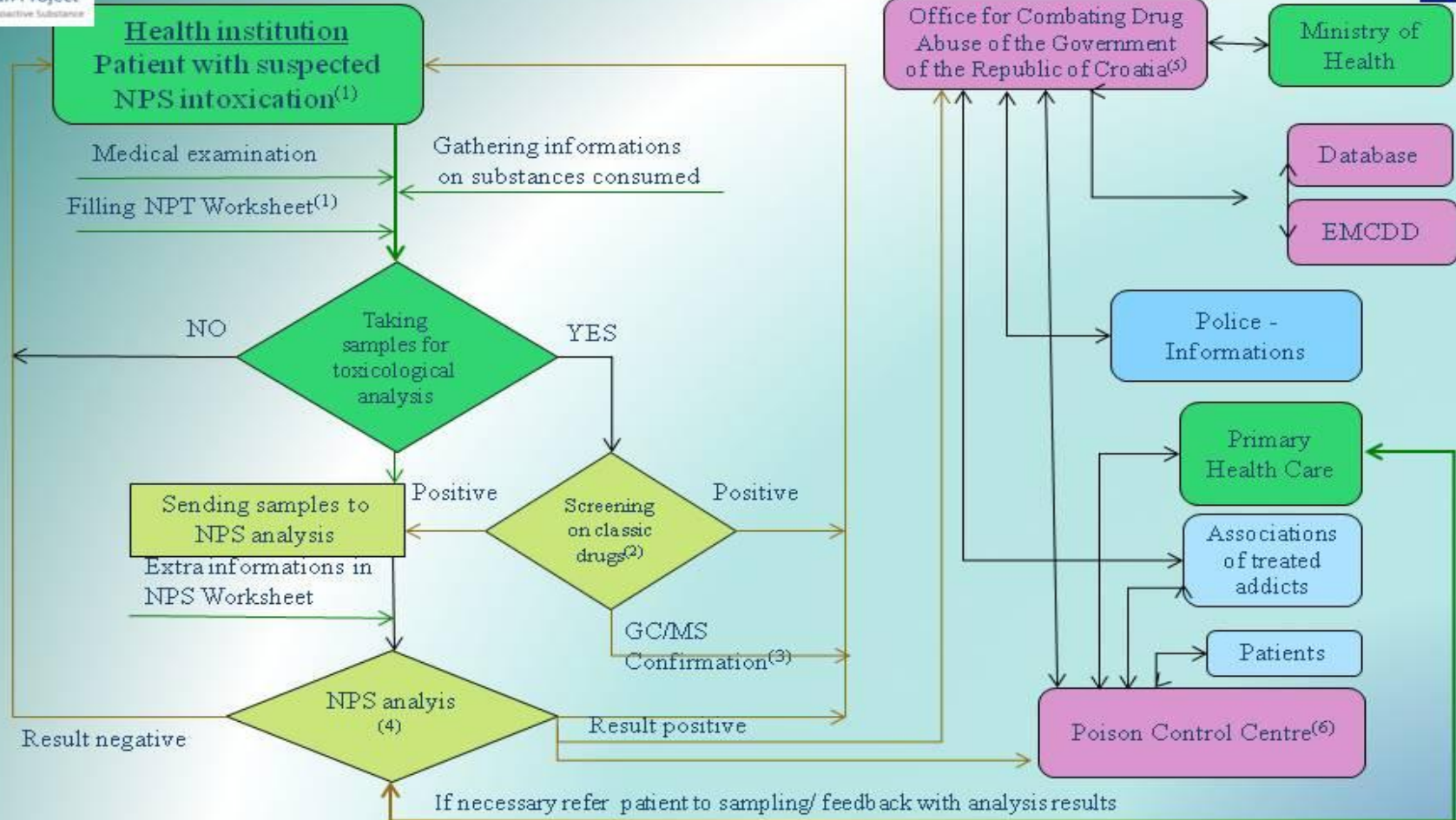
- Nema

Uzorak krvi izuzeti u biokemijsku epruvetu (crveni čep, bez konzervansa), a uzorak urina u klasični kontejner za urin. Uzorke što prije dostaviti u laboratorij. Do analize ili slanja u laboratorij, čuvati ih u hladnjaku na 4°C.

Formular uputiti uz pacijenta, odnosno izuzete uzorke.

1/2

ALGORITHM- CASE OF EVENTS FOLLOWING NPT INTOXICATIONS



Agenda:

- 1) Fulfilled by doctors who request further analysis
- 2) Laboratories of General Hospitals, Clinical Hospitals and Clinical Hospital Centers or other laboratories who do drug screening methods (regardless of the method used).
- 3) Osijek: CHC Osijek- 051/511647; Zagreb: CHC Zagreb (01/2367328), IMI - Institute for medical research and work medicine 01/4682531, Split: CHCSplit—Toxicology laboratory 021/556 777; 556 717/
- 4) Laboratory for NPS analysis: during project period 2016. g. CHC Split—Toxicology laboratory 021/556 777; 556 717/
- 5) Office for combating drug abuse of the Government of the Republic of Croatia 01/ 4878 127/
- 6) Poison Control Centre 01/2348 342/

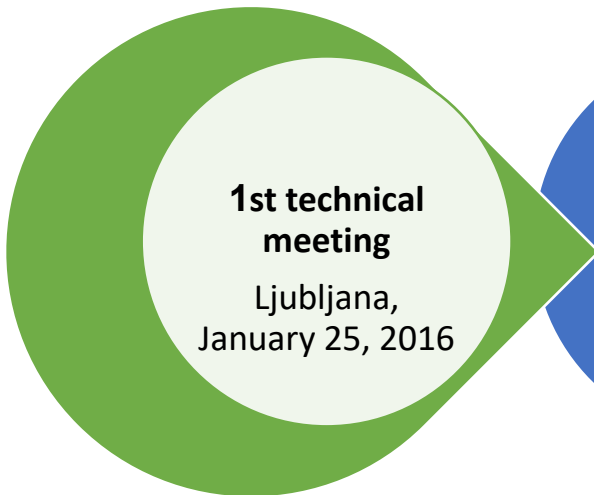
In the process....

**Guidelines for proceeding
with biological samples
in clinical network in EWS
on NPS**

**Manual for proceeding with
persons under the suspicion
on NPS intoxication**

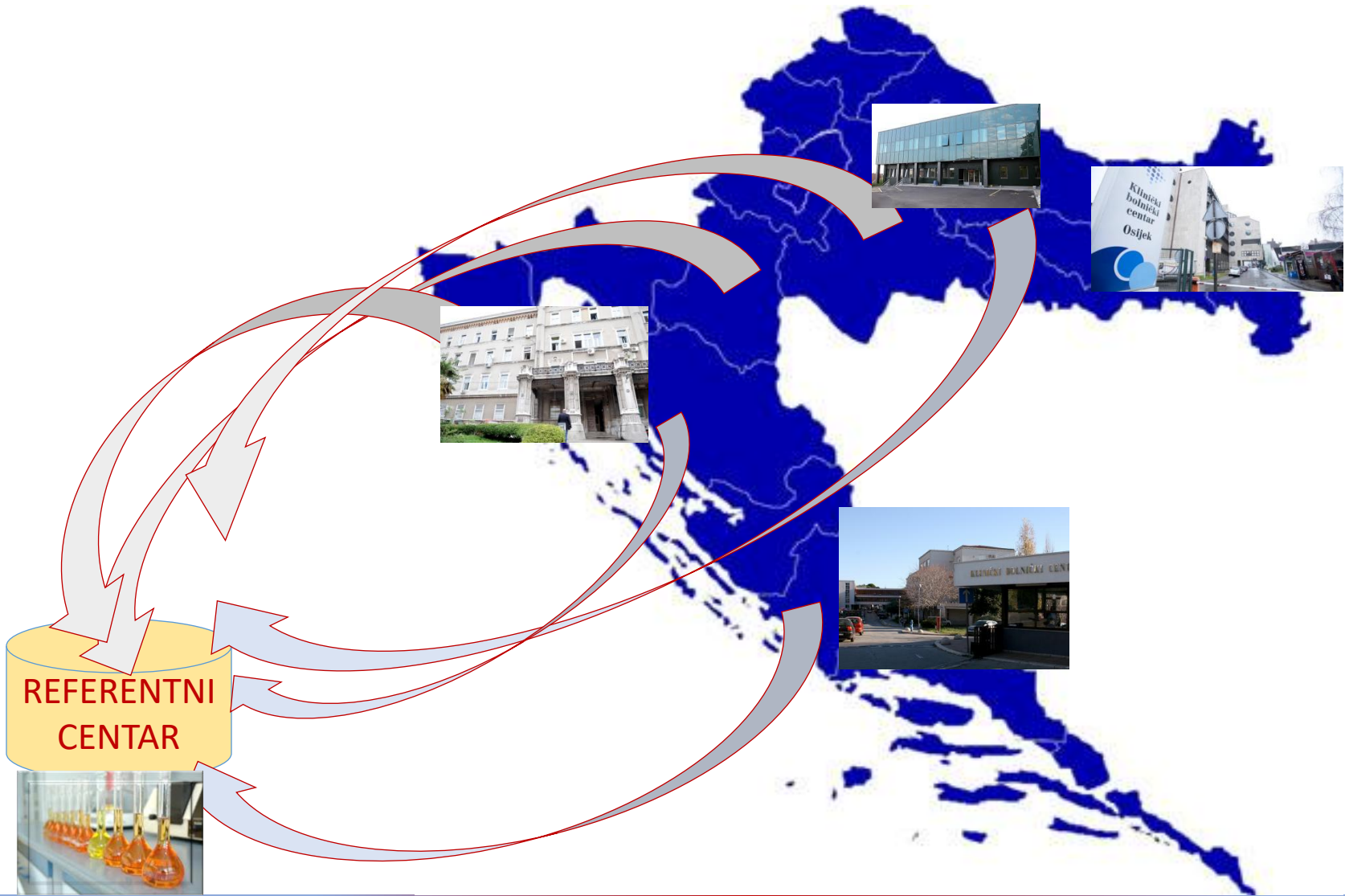
Participation in

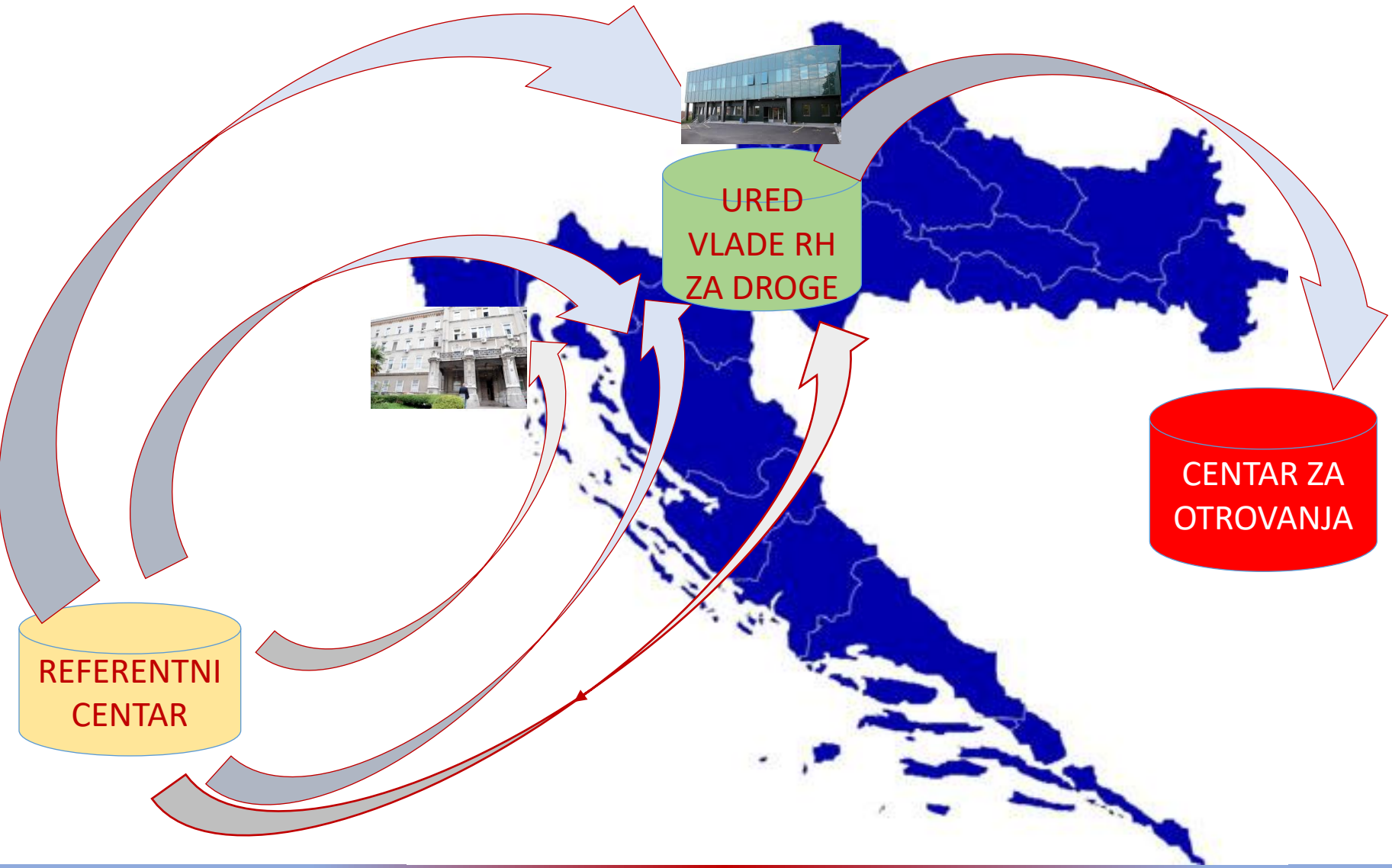
STUDY VISIT TO ITALY
December 14-18, 2015

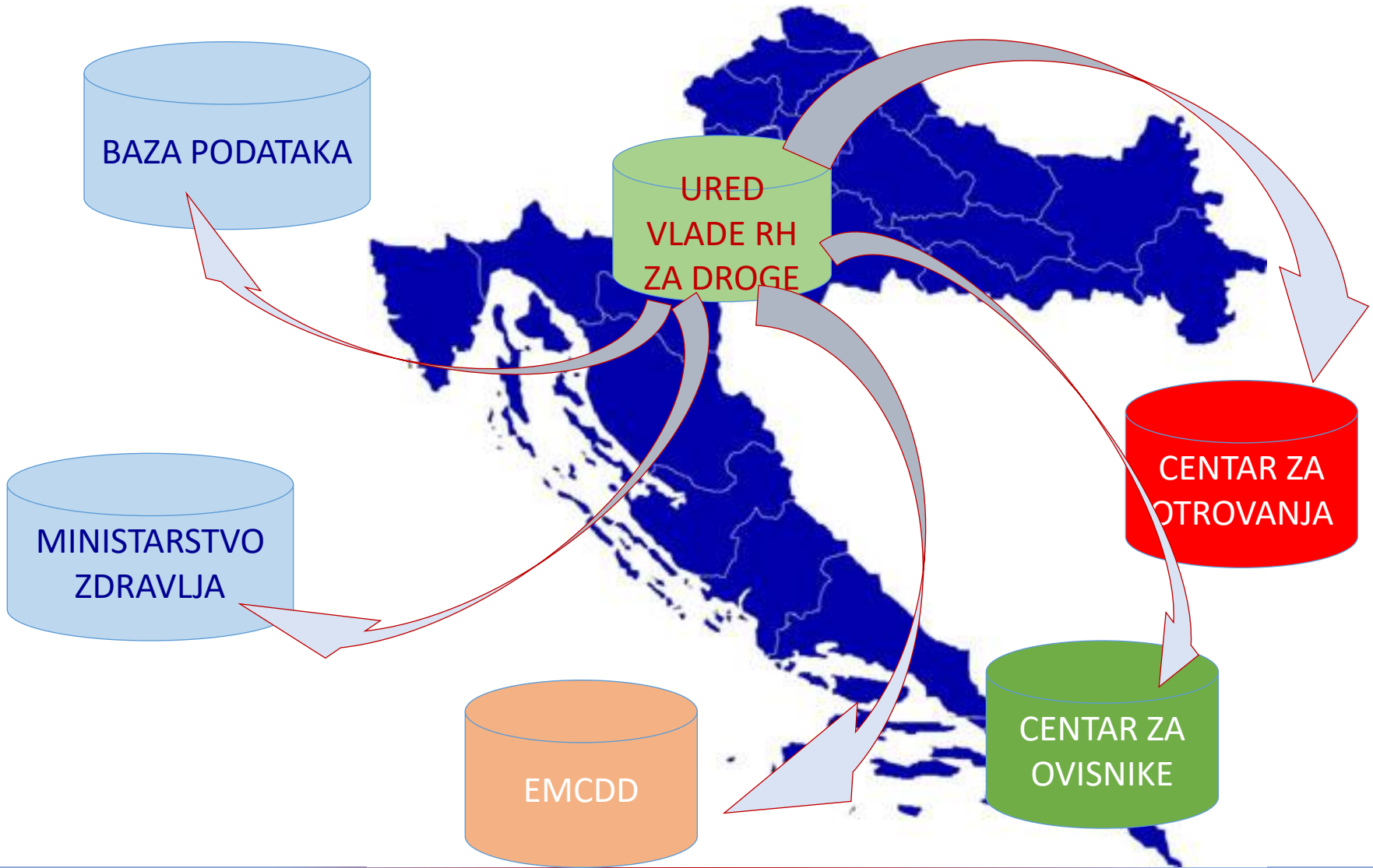


- **Receiving and analysis of standards; forming the data base**
reference materials - from the University of Florence, Italy, in January/February 2016,
instrumental analyses of all standards done
March/April 2016, the data base – library of mass spectrums for analyzed NPS formed
- **Receiving and analysis of biological samples, 2014-2016**
- **Split-Dalmatian County:** Education on NPS for sanitary inspectors; Split, June 29,
2015
- **Government of Republic of Croatia, Office for combating drug abuse:** Round
table – Intoxications with NPS; Marija Bistrica, October 2015, November 2016
- **Participation at conferences to strenght the impact of the project**

Lecture on NPS for secondary school students
Annual meeting of Working group for EWS
Students' final theses



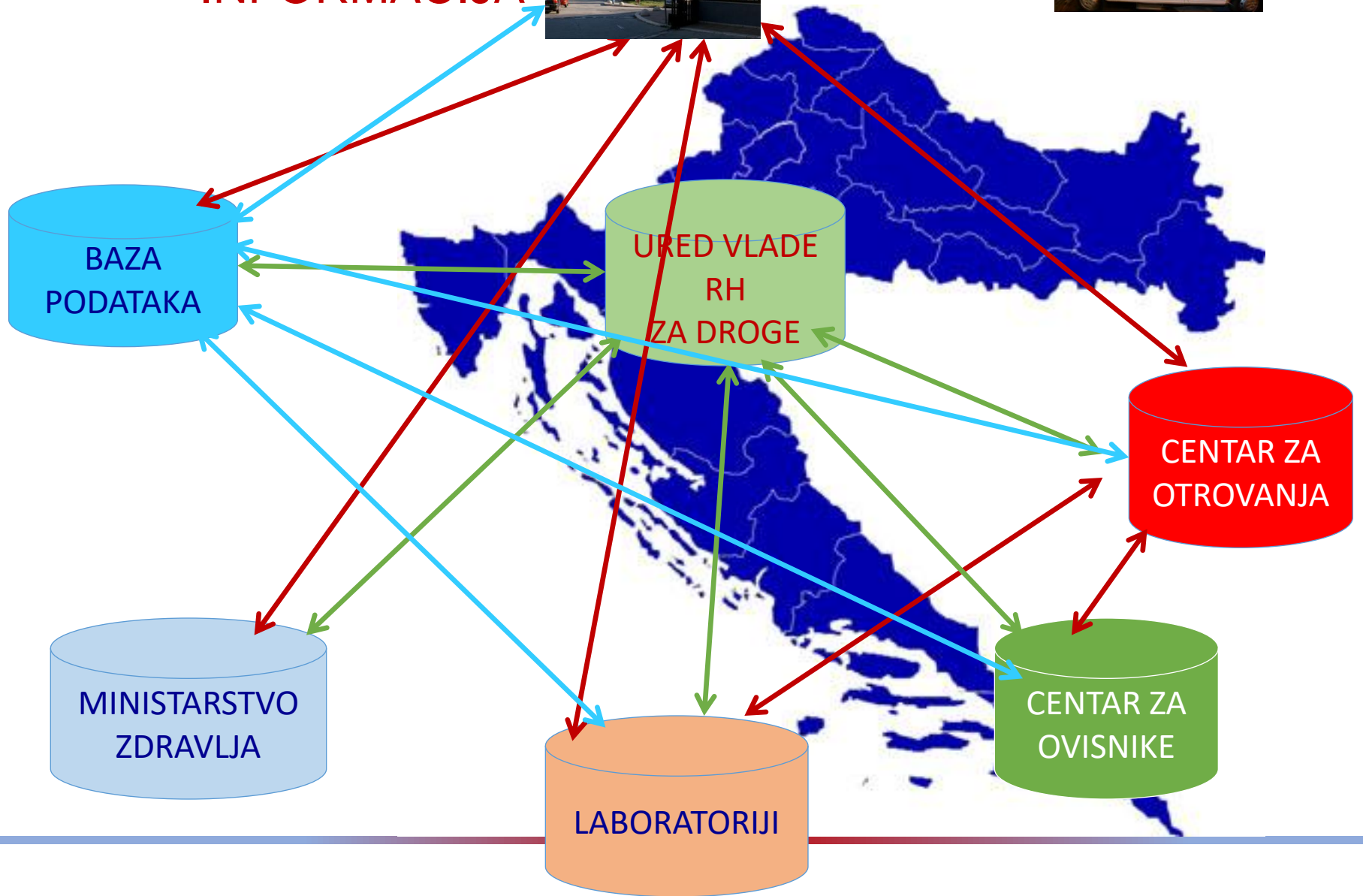




RAZMJENA INFORMACIJA



ZDRAVSTVENE USTANOVE



I-SEE Project Final Conference

Developing tools for strengthening NPS information exchange and identification

University of Florence

Fabio Vaiano, Valeria Catalani, Claudia Rimondo

Coordinator



Department of Health Science

Beneficiary partners



National Forensic Laboratory and
Criminal Police Directorate



Acquisition of reference material

- Forensic Toxicology Unit (Director Prof Elisabetta Bertol) took care about choosing and delivering NPS reference materials
- Acquisition of **51 certified analytical standards** for NPS identification – August/September 2015
- List of RM acquired:
 - 23 synthetic Cannabinoids
 - 13 synthetic Cathinones
 - 4 phenetilamines
 - 3 indanes
 - 2 piperazines
 - 2 phencyclidines
 - 2 tryptamines
 - Ketamine analogues



Selection criteria for reference material

- The chemical and pharmacological features: all compounds belonging to the most prevalent classes of NPS
- The consumption rank (actual or/and estimated) and the number of seizures in EU, and in the countries of interest
- Legal status: all compounds scheduled as “controlled substances” in at least one of the National Legislations of Italy, Croatia and Slovenia (5F-AKB48, 3-methoxy-PCP and 4-methoxy follow the criterium n°2)
- The availability as reference materials in the catalogues of the main producing Companies (LGC, Cerillant and Sigma-Aldrich)

Distribution of reference material

In order to provide Slovenian and Croatian colleagues the material, the University of Florence required them the following documents:

- the authorization/permission certificate, provided by national competent authority (usually Ministry of Health)
- a declaration stating that this certificate sent was in compliance with national legislation acquisition
- the license for possession and use of scheduled substances

Reference materials arrived to the partner in December 2015
(Slovenian National Forensic Laboratory, University of Split-School of
Medicine-Croatia)



Use of reference material

Used to:

- increase the analytical capacity of UNIFI laboratory
- reduce the time to identify NPS in analyzed samples
- provide faster responses to Law Enforcement, regarding the composition of seized material
- provide information to health professionals to facilitate diagnosis for patients intoxicated by NPS

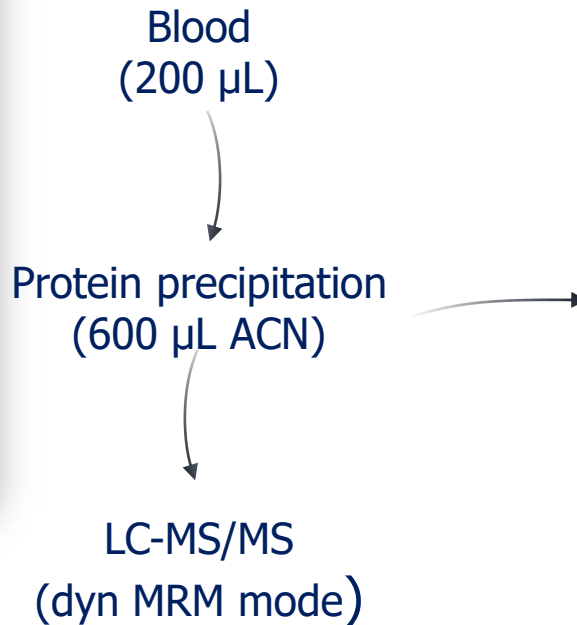


Analytical Results

New screening methods for the simultaneous detection of 64 NPS and 5 amphetamines in blood by LC-MS/MS



Procedure



Suitable for screening analysis:

- Easy to perform
- Fast
- Sensitive

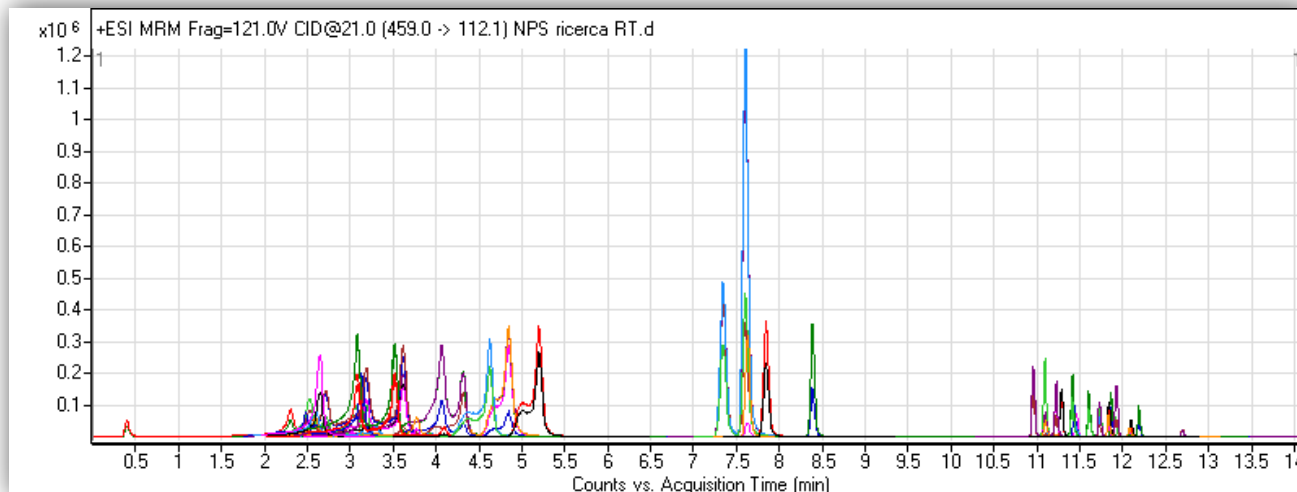
New screening method: LC-MS/MS conditions

Time <i>min</i>	%B vs %A	Flow <i>mL/min</i>
0	1	0.4
6	30	0.4
8	50	0.4
12	100	0.6
15	100	0.6

A: 5 mM HCOOH in H₂O B: ACN
Column: Zorbax Eclips Plus C18

Dynamic MRM mode enables the monitoring of transitions (two for each compound) in a **specific detection window** around the expected retention time of each compound.

Thus, **background noise** and **matrix interferences** are **reduced, improving the sensitivity** of the method.



New screening method: Compounds

28 Synth. cannabinoids *AB-FUBINACA, 5F-APINACA, ADB-PINACA, CB-13, WIN 55,212-2, 2 RCS series, 17 JWH series, 3 AM series, Pravadoline.*

19 Synth. cathinones *1-naphyrone, 2-FMC, 3,4-DMMC, 3-MMC, 4-FMC, 4-MEC, Buphedrone, Butylone, DMC, Ethcathinone, MDPV, Mephedrone, Methcathinone, Methedrone, Methylone, Naphyrone, Pentedrone, Ethylone, Pentylone.*

5 phenetilamines *25D-NBOMe, 25H-NBOMe, 2C-E, 2C-N, 4-FA.*

5 amphetamines *Amphetamine, MDA, MDEA, MDMA, Methamphetamine*

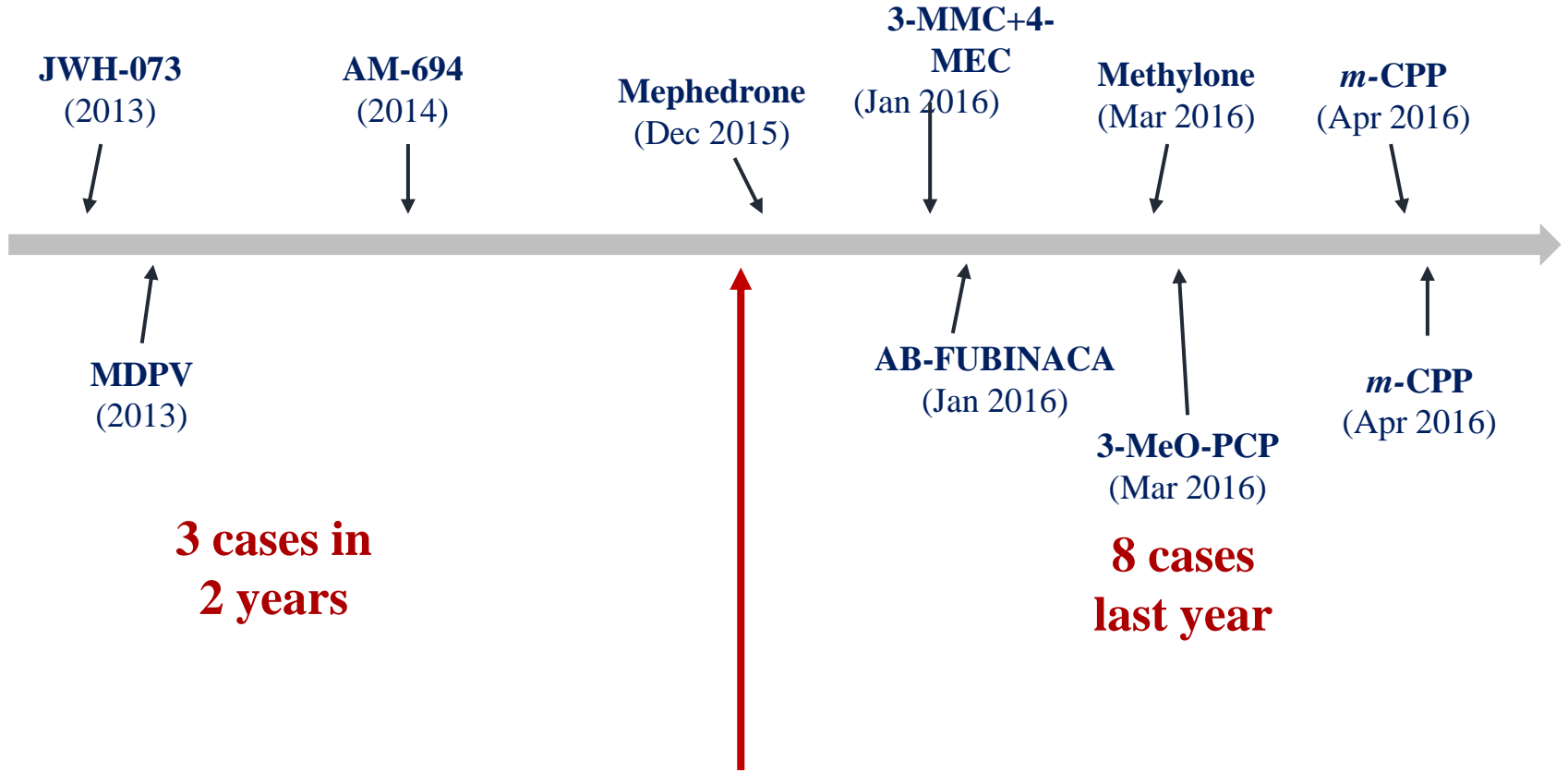
3 indanes *2-AI, 5-IAI, MDAI* **ketamines** *Ketamine, Nor-ketamine, Methoxethamine*

2 piperazines *BZP, m-CPP*

2 phencyclidines *3-MeO-PCP, 4-MeO-PCP*

2 tryptamines *4-OH-DiPT, 5-MeO-DiPT*

Detection in Biological Samples



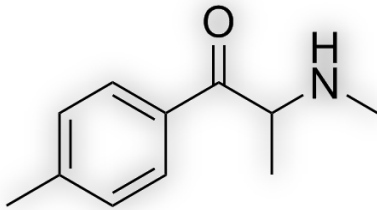
Fully validation and application of the new analytical method

(Sep 2015)

In VIVO: Analytical Results

Case 1 (Dec 2015)

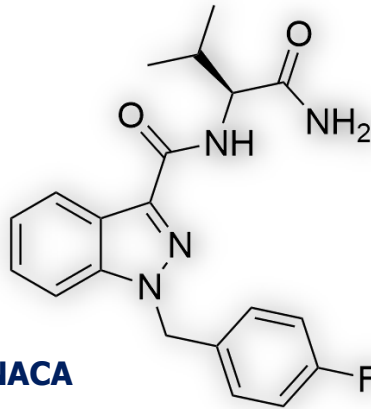
Female 23 years old



Mephedrone

Case 2 (Jan 2016)

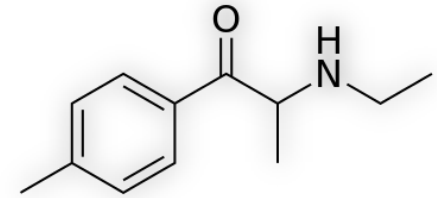
Female 16 years old



AB-FUBINACA

Case 3 (Jan 2016)

Male 43 years old

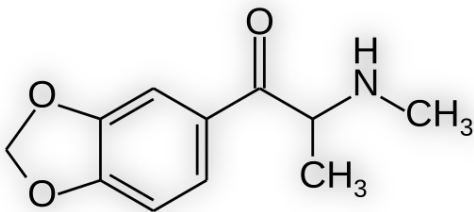


4-MEC

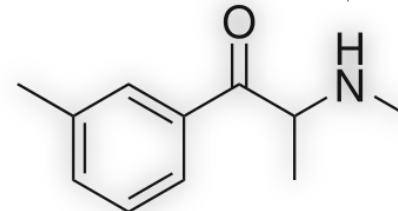
(4-methylethcathinone)

Case 4 (March 2016)

Male 32 years old



Methylone



3-MMC

(3-methylmethcathinone)

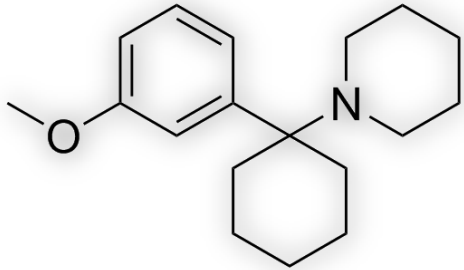


First case of *in vivo* detection in Italy

In VIVO: Analytical Results

Case 5-6(Mar 2016)

Male 19-21 years old



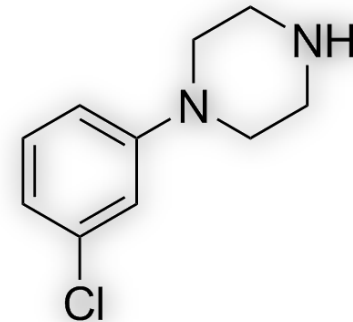
3-MeO-PCP
(3-methoxyphencyclidine)



First case of *in vivo* detection in Italy

Case 7-8(Jan 2016)

Female 19 years old, male 38 years old

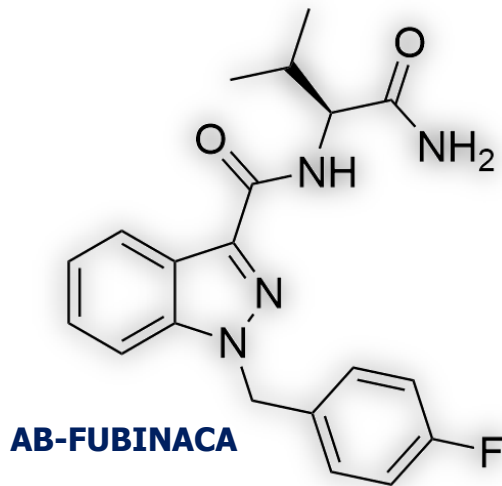
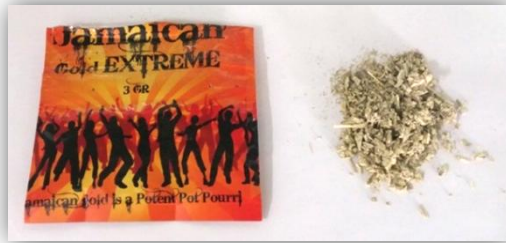


m-CPP
(meta-chlorophenylpiperazine)

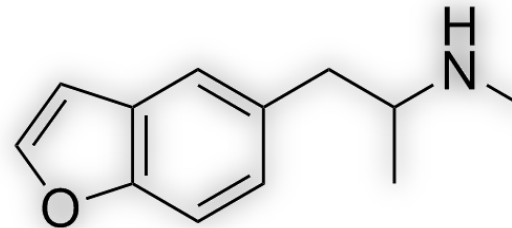
First case of *in vivo* detection in Italy 

In seized material: Analytical Results

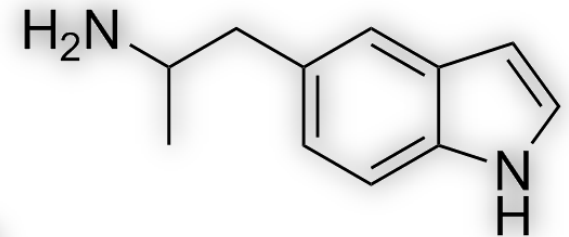
SEIZURE 1



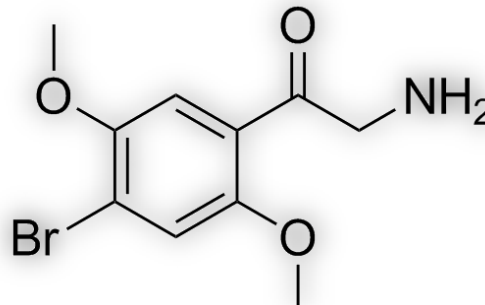
SEIZURE 2



5-MAPB
5-(2-aminopropyl)benzofuran



5-IT
5-(2-aminopropyl)indole



bk-2C-B

The detention and identification of the previously described substances , both in seized materials and in biological samples, has been possible thanks to the activities promoted by the I-SEE Project

but

the number of documented NPS cases in biological fluids is still low.
This could be **due to:**

- **lack of routine analytical protocols** to search these substances
- **difficulties encountered by laws enforcement in identifying and seizing them**

and not because their use is not common among the population

COMUNICATION AND DISSEMINATION

All the analytical results achieved have been presented and disseminated in scientific venues:

22nd ENFSI Drugs Working Group Meeting Bled, Slovenia
May 10th - 11th 2016 Organized by Ministry of Interior Police – Slovenia

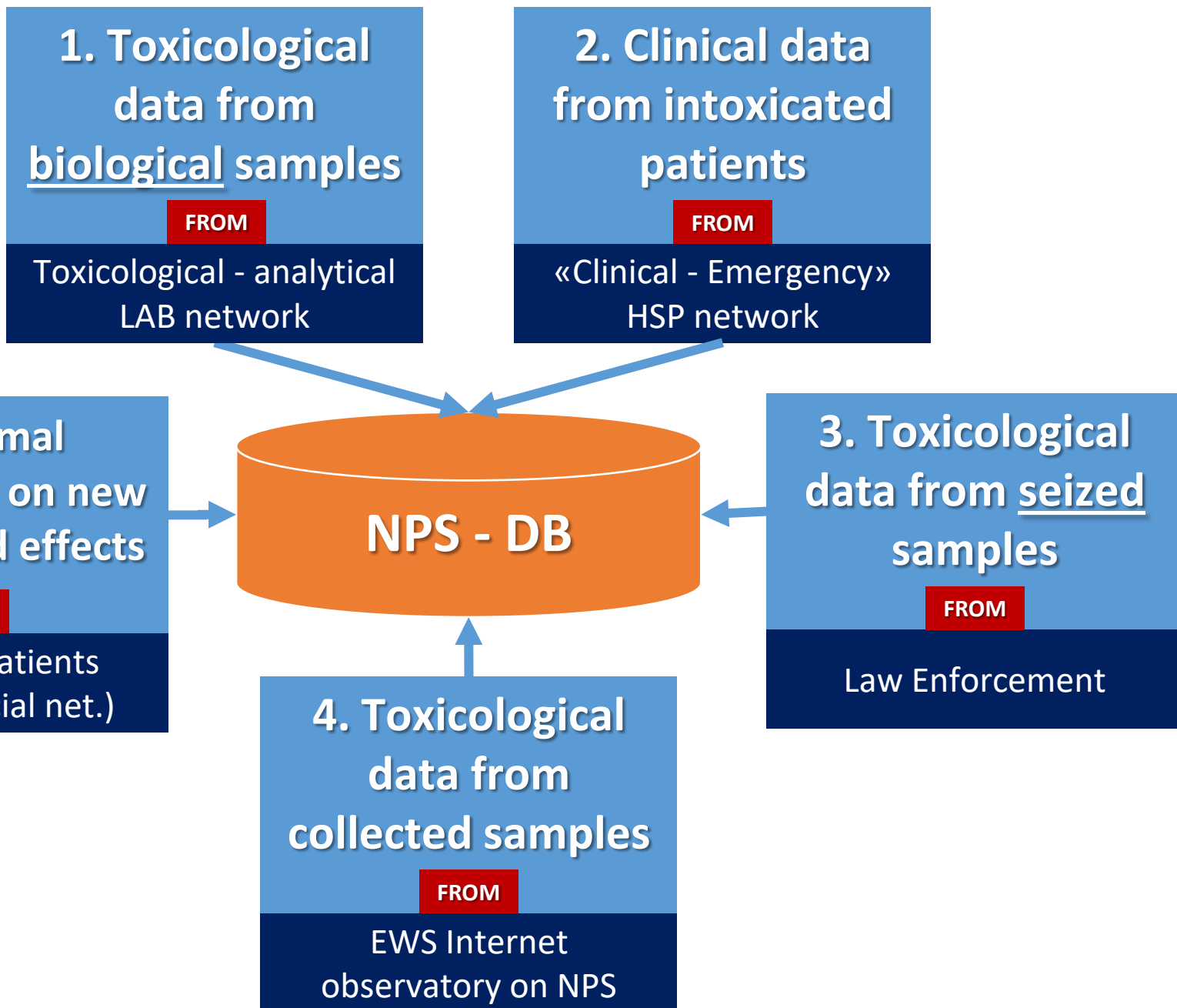
CROTOX 2016 meeting Porec, Croatia October 9th-12th
Organized by the Croatian Society of Toxicology



54th TIAFT Meeting Brisbane, Australia
28th August – 1st September 2016



The **final results** will be disseminate to **Ministries of Interior and Ministries of Health of Member States, EMCDDA, United Nations Office on Drugs and Crime, World Health Organization**





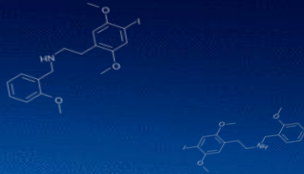
DATA ENTRY, CONSULTATION AND REPORTING

Home Page





ADVANCED Early Warning System RESEARCH



In collaborazione con



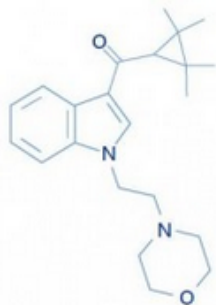
UNIVERSITÀ
DEGLI STUDI
FIRENZE

URiToN – TF – DSS

NPS DATA BASE

Gestione Molecole - Modifica

- Dati generali**
- Proprietà chimico/fisiche
- Sicurezza
- Farmacocinetica/metabolismo
- Informazioni laboratoristiche dalla letteratura
- Farmacologia
- Informazioni tossicologiche



Data inserimento *:

06 gg 02 mm 2014 aaaa

Nome comune/sigla molecola:

A-796,260/1-(2-Morfolin-4-iletil)-1H-indol-3-il]-(2,2,3,3-

Nome sistematico/IUPAC:

1-(2-morpholin-4-ylethyl)-1H-indol-3-yl]-(2,2,3,3-tetram

Stereochimica:

Sinonimi:

A-796,260

Brand:

Gergali:

CAS

Forma libera 895155 - 26 - 7

Sale

Cloridrato: - -

Solfato: - -

Altro: - -

Natura della sostanza

Sintetica Sintesi nota: Si No

Descrizione:

Functional information since 2015

N. Substances registered 168

N. Clinical cases registered 41

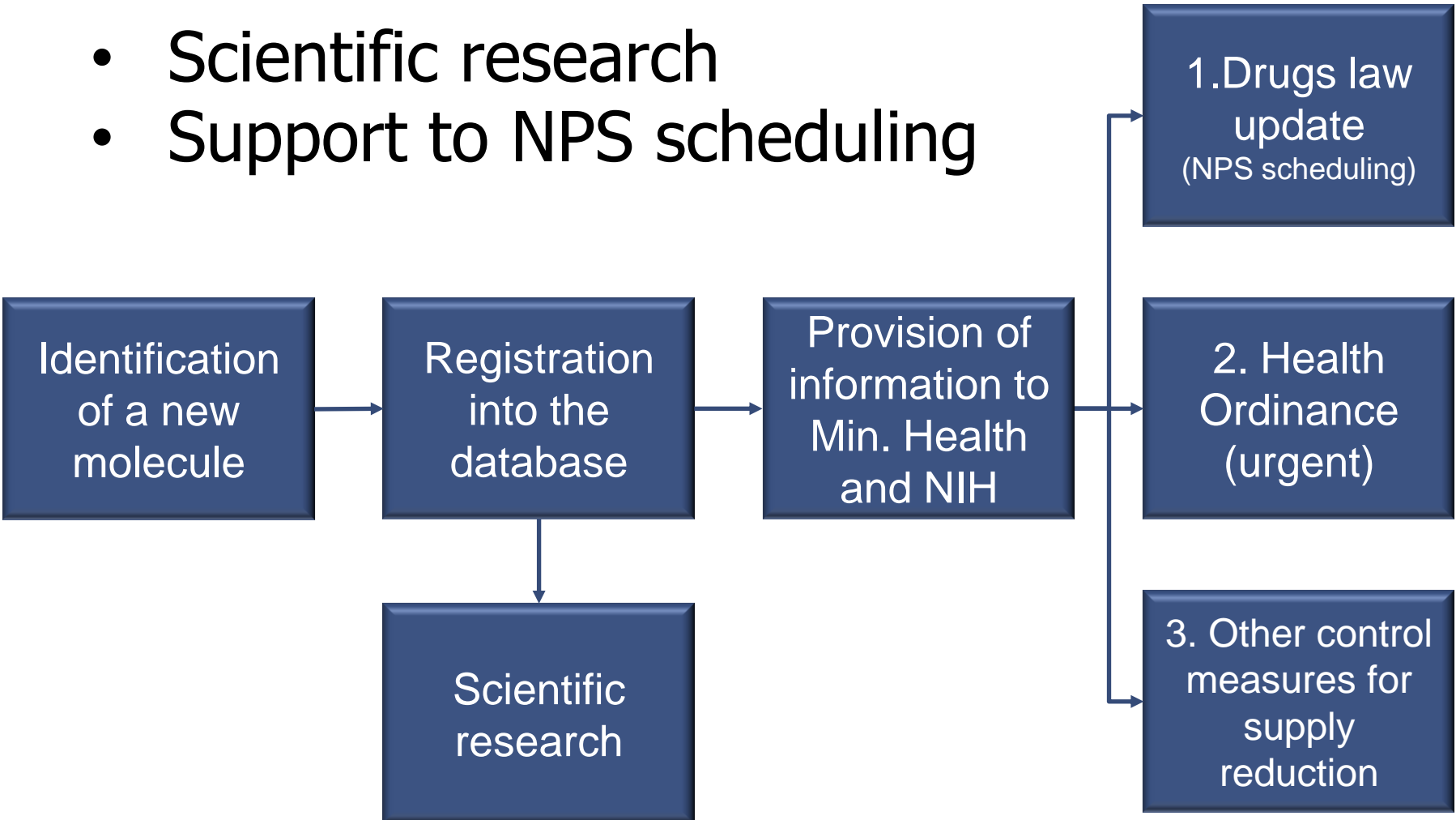
N. Seizures registered 71

N. Collected samples registered (ie. Internet) 25



FUNCTIONAL INFORMATION

- Scientific research
- Support to NPS scheduling





EWS DATA MANAGEMENT PLATFORM (DMP)



File Excel (.xls, .xlsx, .csv)



Access archive

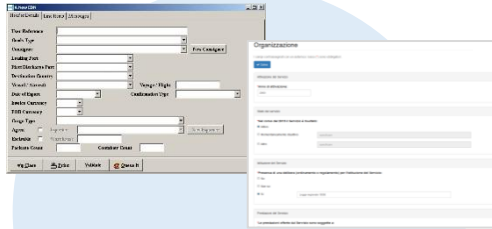
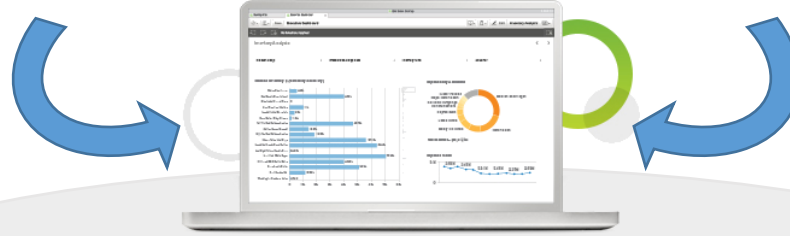


File .txt



Database Oracle

Different formats accepted for data input



Acquiring information/data through online platforms or data entry application

Data QUALITY control (coverage, completeness, consistency) and representation with indicators and graphs

Development of punctual, interval, progress and geographic indicators; graphical, table and georeferenced representations



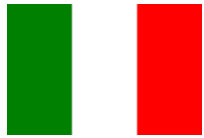
PDF reporting production, export of charts and graphs, reports and notification sent according to recipient

NPS REPORTING

Standard reporting



European Monitoring Centre
for Drugs and Drug Addiction



National report

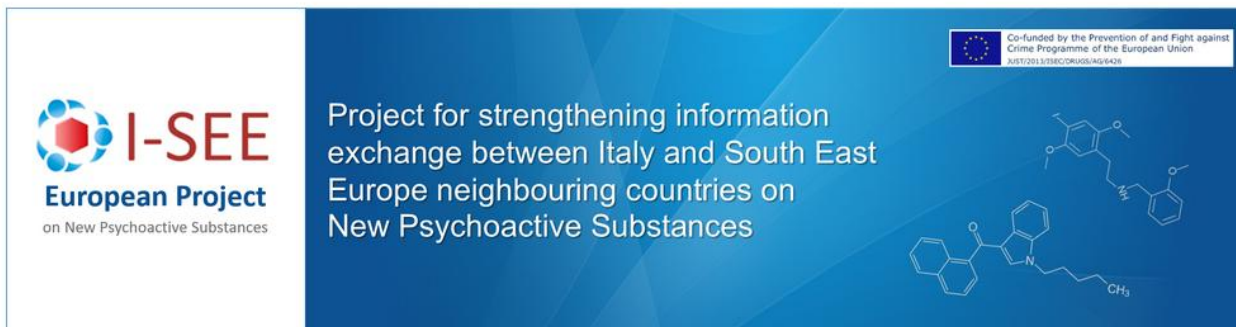
Customized reporting

- Researchers
- Lab personnel
- Health professionals
- LEA
- Regional and National institutions

WEB SITE



The I-SEE project



The banner features the I-SEE logo on the left, which consists of a stylized globe with red and blue segments. To the right of the logo, the text reads "I-SEE European Project on New Psychoactive Substances". Further right, a blue background contains the text "Project for strengthening information exchange between Italy and South East Europe neighbouring countries on New Psychoactive Substances". In the top right corner of the banner, there is a small European Union flag and the text "Co-funded by the Prevention and Fight against Crime Programme of the European Union JUST/2013/198/C/PR/05/16/4/09". On the right side of the banner, there are two chemical structures: one is a complex aromatic ring system with a nitrogen atom and a methyl group, and the other is a similar structure with a different ring system.

Presentation

The main objective of the I-SEE project, which involves the National Early Warning Systems (EWS) on drugs of Italy, Republic of Slovenia and Republic of Croatia, is to strengthen information exchange on New Psychoactive Substances (NPS) between Italy and South East Europe neighbouring countries, where drug smuggling is easy due to the right of free movement of persons and goods into EU territory. The project intends to ease Law Enforcement activities and cooperation both within countries and among participating countries by means of the valorization of national EWS experiences and good practice exchange.

Target groups of project activities are Law Enforcement, professionals working in analytical laboratories, clinical centres and NGOs involved in prevention, treatment and rehabilitation of drug addicts.

The work is organized in 3 steps:

1. Building up network with Law Enforcement, NGOs and health sector (Republic of Slovenia). A number of NGOs will be selected to collect NPS samples from drug users and transmit them anonymously to Law Enforcement to be analyzed. Analytical results will be provided, for control purposes, and to inform drug users about what they are consuming. In parallel, health professionals will be involved to share clinical information on NPS with Law Enforcement and NGOs.
2. Building up clinical network (Republic of Croatia), to develop an effective network in clinical settings, including clinical toxicology laboratories, emergency wards, departments of forensic medicine and other relevant subjects in the health sector, so as to increase scientific and professional capacities related to the identification of NPS in biological samples and effective treatment of intoxicated patients.
3. Developing tools for strengthening NPS information exchange and identification (Italy), by arranging a model

<https://sites.google.com/site/iseeeuproject/home>

DISSEMINATION AFTER THE FINAL CONFERENCE

Dissemination of final results to:

- EMCDDA
- United Nations Office on Drugs and Crime
- World Health Organization
- Ministries of Interior and Ministries of Health of Member States



MONITORING AND EVALUATION PROCESS: MAIN TASKS PERFORMED

- Ensuring the correspondence between internal program and actual activities
- Analysing the achievement of project objectives, deliverables and outputs with respect to what declared in the project form
- Working with partners to highlight problems to be solved
- Providing support to problem solving

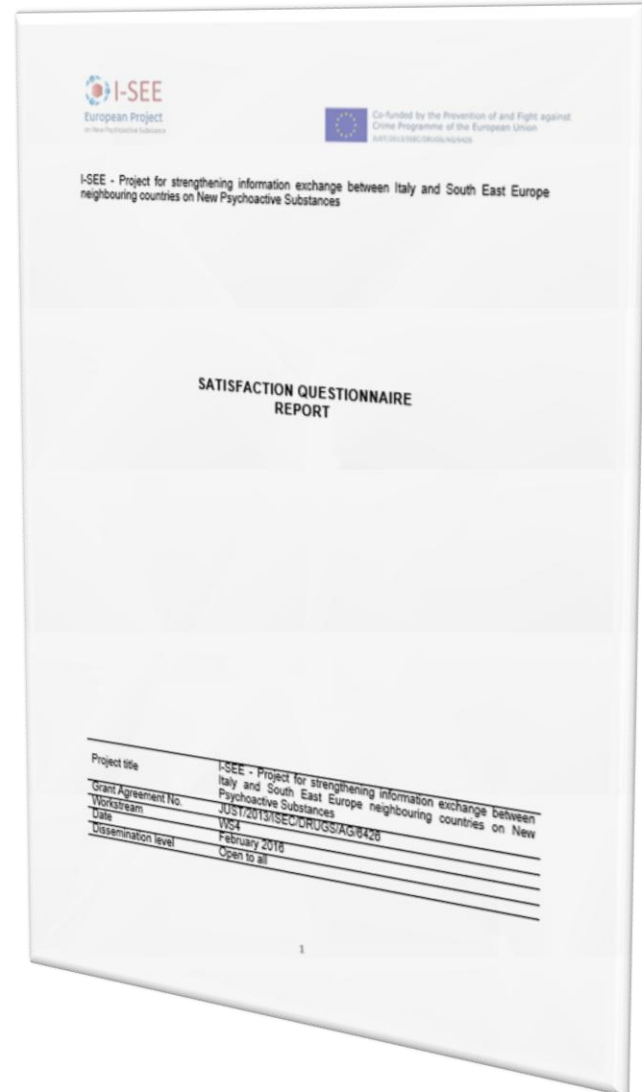
EVALUATION
QUESTIONNAIRE
Activities



SATISFACTION QUESTIONNAIRE

Method

- One questionnaire per year of activity
- 2nd SQ sent to each WP leader on 26th November 2016 and returned by 13th December 2016.
- The measurement scale adopted for answers moves from 1 (strongly disagree) to 5 (strongly agree).

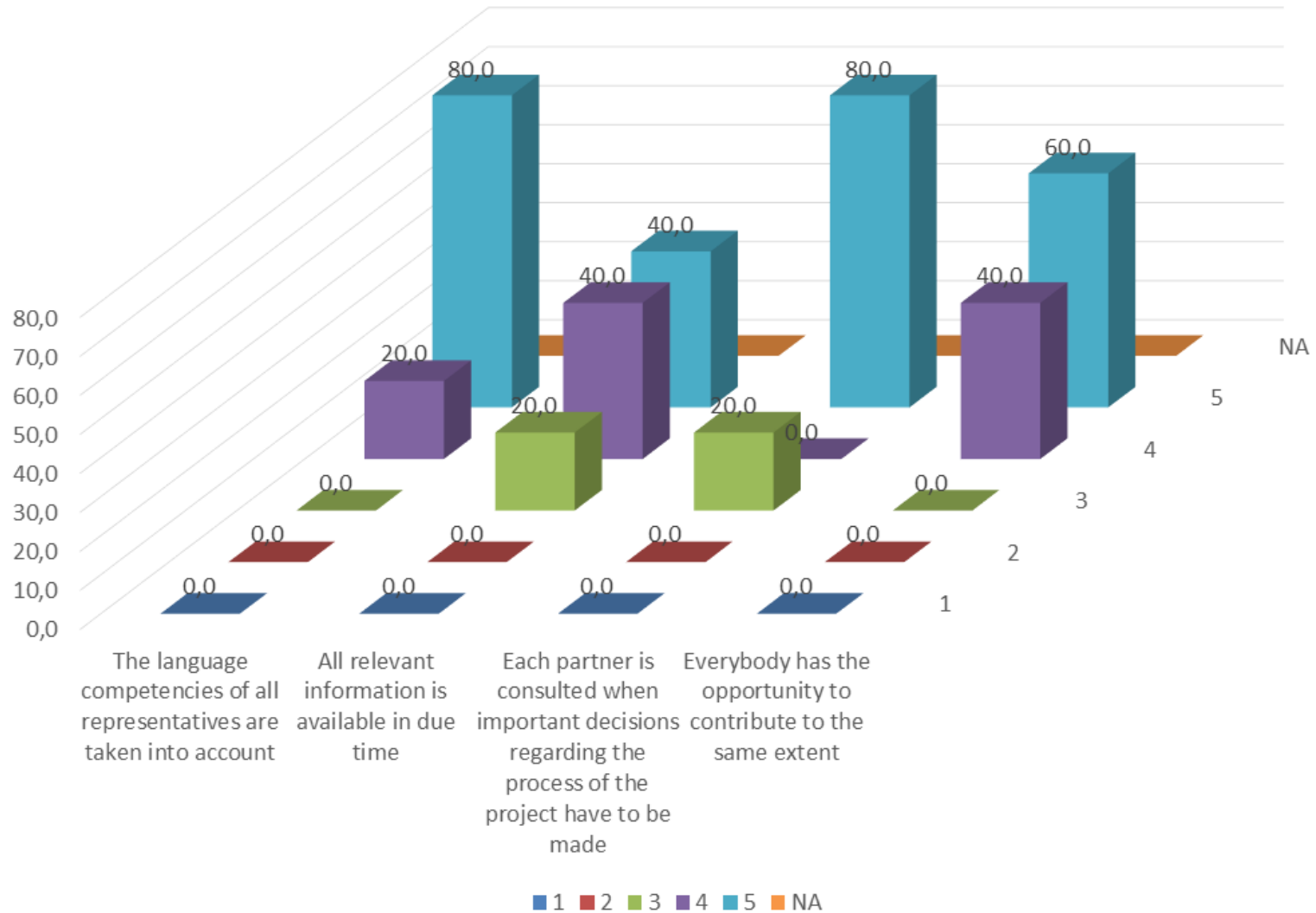


The image shows the cover of a 'Satisfaction Questionnaire Report'. At the top left is the I-SEE logo and 'European Project on New Psychoactive Substances'. At the top right is the European Union flag and the text 'Co-funded by the Prevention and Fight against Crime Programme of the European Union'. Below this is the project title: 'I-SEE - Project for strengthening information exchange between Italy and South East Europe neighbouring countries on New Psychoactive Substances'. The main title 'SATISFACTION QUESTIONNAIRE REPORT' is centered. At the bottom, there is a table with project details.

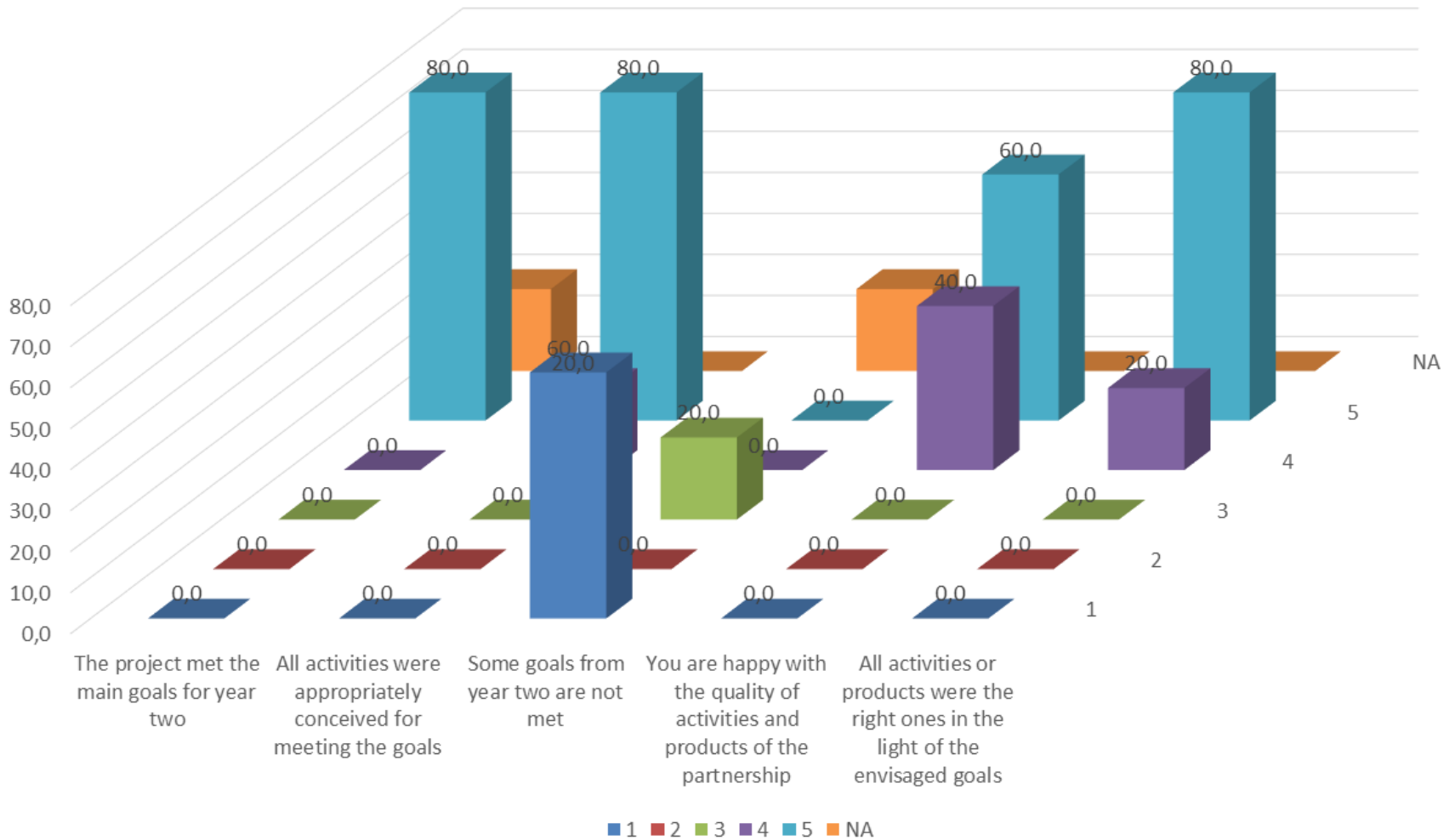
Project title	I-SEE - Project for strengthening information exchange between Italy and South East Europe neighbouring countries on New Psychoactive Substances
Grant Agreement No.	JUST/2013/SEC/DRUGS/AG/8428
Workstream	W54
Date	February 2016
Dissemination level	Open to all

1

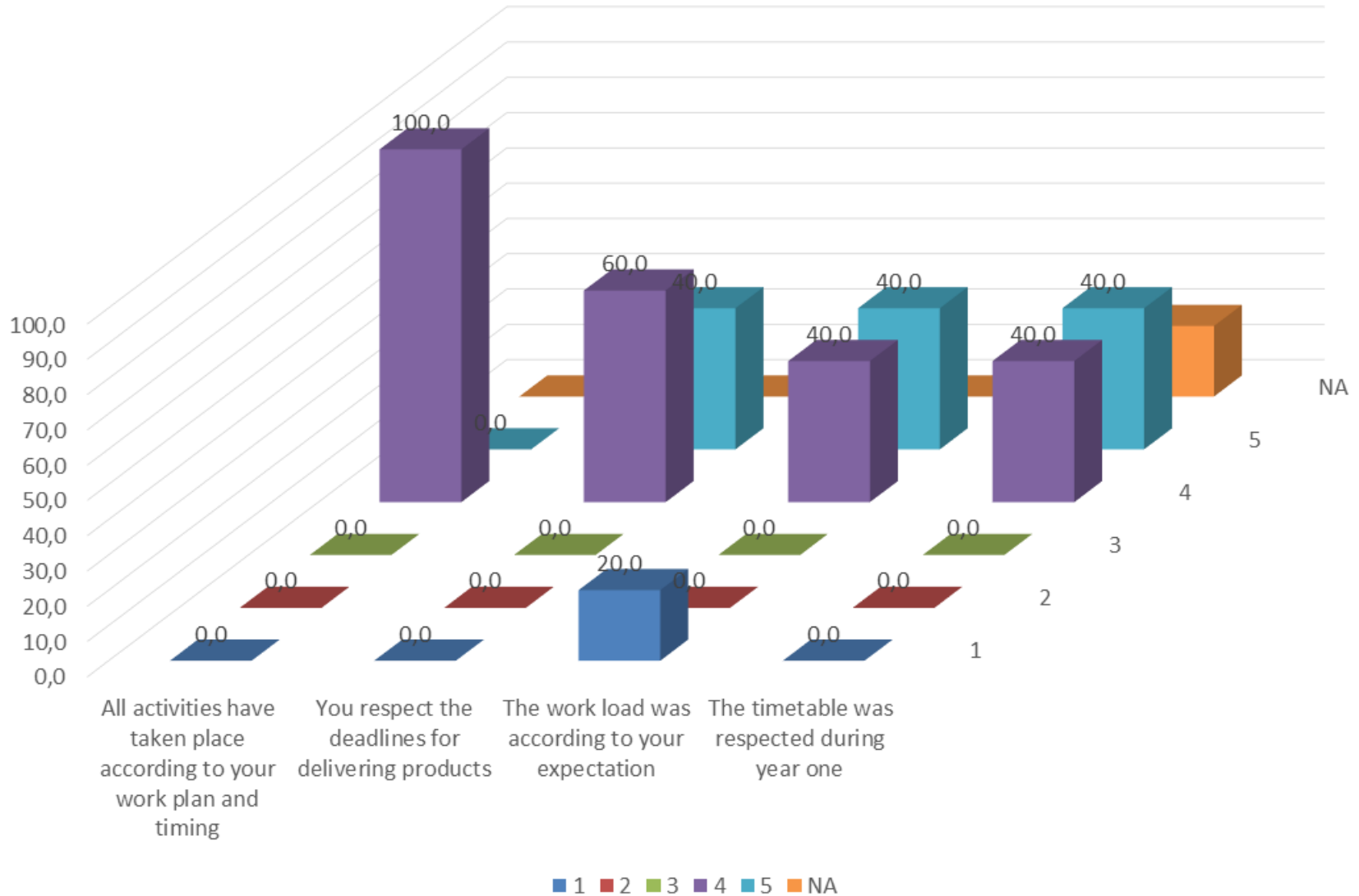
DECISION MAKING PROCEDURE



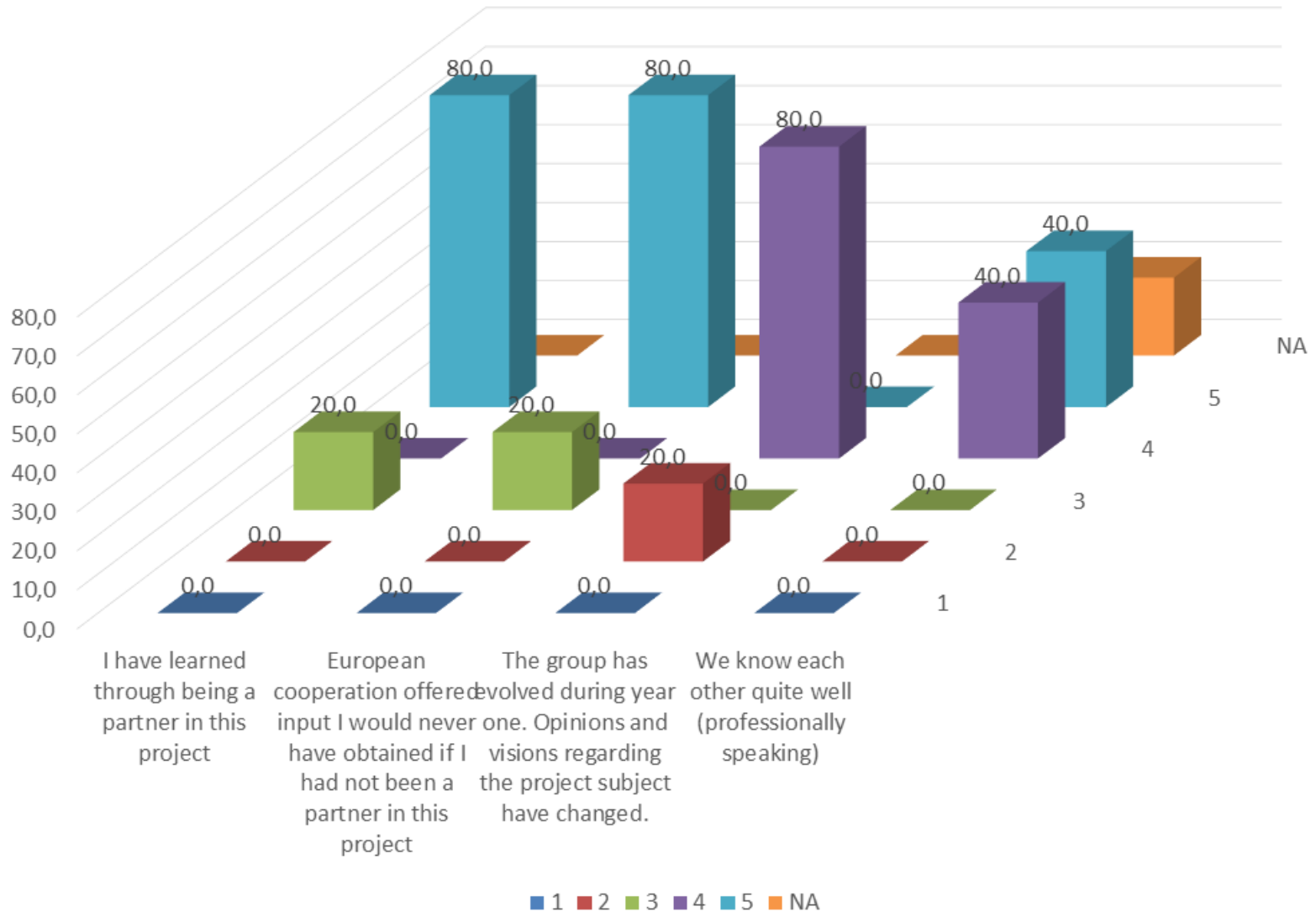
GOALS



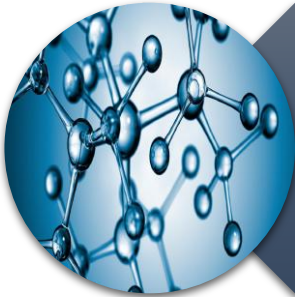
TIMETABLE



LEARNING



LESSON LEARNED FROM WS3 AND WS4



Importance of information sharing on NPS in Italy and with project partners (cases, database, knowledge, experience, tools, etc.)



Importance of looking at the NPS phenomenon from several points of view (clinical, analytical, LEA, users, etc.)



Importance of involving several stakeholders to tackle the NPS issue (health professionals, researchers, LEA, public officials, journalists, etc.)

LESSON LEARNED FROM WS3 AND WS4



Strengthened experience in EU project management
(activity and administration)



Strengthened collaboration between
Italy, Slovenia and Croatia



Gratitude for partners so committed,
collaborative, creative, generous and
ready to live mutually enriching
experiences