New Psychoactive Substances (NPS):

A questionnaire on the definition of NPS, proposals to establish a forensic centre for excellence, and improving data collection and information sharing
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1. Background

New Psychoactive Substances (NPS), also known as “legal highs”, have risen to prominence in recent years, and stakeholders across Scotland have raised concerns about the impact of these substances on individuals, services and local communities. Much is still unknown about the scale and associated harms of NPS use in Scotland, although there are indications that some NPS can cause a range of physical and psychological symptoms among users, from kidney failure to psychosis\(^1\). It has also been suggested that these may be just as serious as for other illicit drugs\(^2\), and have even resulted in death\(^3\).

Improving routine data collection and information sharing on NPS will help to address some of the existing gaps in knowledge. However, this requires a common definition of NPS, and a better understanding of the NPS being used in Scotland. These issues have been discussed by the NPS Evidence Group\(^4\), coordinated by the Scottish Government, and were also recognised in the report published by the NPS Expert Review Group in February 2015\(^5\). The Expert Review Group recommended that a definition of NPS should be developed for stakeholders in Scotland; and that a national centre for excellence in forensic analysis be created to lead in the detection and identification of NPS within the criminal justice system. This could assist in providing standards and building evidence for possible prosecution. It was also recommended that consideration be given to the possibility of a Centre for Excellence becoming a national platform for building and maintaining a knowledge base on NPS, sharing information with for example hospitals and other relevant services on emerging trends.

Subsequent to publication of the Expert Review Group report, and following on from the General Election in May 2015, the Home Office published the Psychoactive Substances Bill on 29 May 2015\(^6\). As currently drafted, the Bill will create a blanket ban on the production, distribution, sale and supply of psychoactive substances in the United Kingdom. This has implications for Scottish stakeholders, both in terms of how NPS is defined, but also in relation to the forensic capacity needed to support

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\(^4\) The NPS Evidence Group is comprised of key stakeholders from a range of sectors including health, enforcement, academia, and the third sector amongst others. This group has met twice to discuss the evidence gaps relating to NPS.
\(^6\) http://www.publications.parliament.uk/pa/bills/cbill/2015-2016/0063/cbill_2015-20160063_en_2.htm#pb2-l1g2
implementation of the Bill. This will make the ability to identify NPS, and to determine whether a substance is psychoactive, increasingly important.

The Scottish Government therefore wishes to engage with those who are likely to be impacted by the Bill, in order to explore the potential needs of stakeholders in Scotland. The questions below will cover three key areas:

1. Sharing the proposed definition of NPS as set out in the draft Psychoactive Substances Bill, and seeking views on a model for categorising NPS within this high level definition.

2. Gathering views on potential functions of a Forensic Centre for Excellence, to lead on the detection and identification of NPS, and

3. Gathering views about how to improve data collection and information sharing on NPS between stakeholders.

This information will be used to inform on-going discussions with the Home Office and to determine the extent to which these needs can be met by the UK Government in their plans to implement the Bill. It is acknowledged that in the current financial climate, any plans are likely to be limited in scope. Therefore, although a Centre for Excellence has the potential to address some of the gaps in knowledge on NPS in Scotland, the intention is not that it should address all of the existing gaps in data collection and information sharing comprehensively. The Scottish Government is seeking to identify the most pressing gaps and the key priority areas and then explore the options for how these could be addressed.

2. Instructions for completing the questionnaire

There are three sections to this questionnaire. The first relates to developing a definition of NPS, the second to potential functions of a Forensic Centre for Excellence, and the third to information sharing between stakeholders.

Each section is preceded by background information, followed by a series of statements for you to score. Please rate your level of support for each of the statements below on a scale of 1 to 7, where:

1=strongly disagree
5=neither agree nor disagree
7=strongly agree

Don’t know = you do not think you are informed enough to answer the question.

There are also some `open questions`. Please write brief responses in the space provided.

When responding please think about what would be feasible rather than merely desirable. There are no right or wrong answers. We hope to engage with a wide range of stakeholders to capture diverse viewpoints.
3. Defining New or Novel Psychoactive Substances

At present there are different understandings and interpretations of what is meant by NPS. In February 2015, the NPS Expert Review Group recommended that a definition of NPS should be developed that can be adopted across Scotland to ensure consistency and clarity at both a local and a national level. It was acknowledged that an agreed definition would potentially be useful for stakeholders in research, academia, NHS health boards, enforcement agencies, forensics and toxicology, local and national government, education, treatment services and others.

Initial proposals for a definition of NPS that could be applied in Scotland were discussed by the NPS Evidence Group at their meeting in February 2015. There was agreement that any definition should take into account the following considerations:

- the potential of these substances for harm (although it was acknowledged that harm might not always be apparent, that some harms might be subjective, and that there would be unknown risks that may cause harm)
- the extent to which these substances were actually ‘new’, or whether they were being used in a ‘novel’ way. There was recognition that the situation was likely to change over time
- the challenges of capturing data on NPS consistently as changes in legislation bring some NPS (but not others) under the control of the Misuse of Drugs Act 1971.

However, there were different opinions about whether or not a distinction should be drawn between substances which were controlled under the Misuse of Drugs Act 1971 (e.g. mephedrone) and those that were not (e.g. salvia). Reflecting these different perspectives, it was suggested that a broad high level definition may be appropriate, but that underneath this there should be a way for stakeholders to make the definition workable in relation to their specific needs. With this in mind, it was proposed that substances should be categorised according to their effects.

3.1 Developing a legal definition of psychoactive substances

As noted in the introduction, subsequent to these discussions the Home Office published the Psychoactive Substances Bill on 29 May 2015. The Explanatory Notes issued alongside the Bill indicate that it is not a replacement for the 1971 Misuse of Drugs Act, which provides the legislative framework for the regulation of dangerous or otherwise harmful drugs in the UK. This means that substances which have already been controlled (e.g. mephedrone), will not be covered by the Psychoactive Substances Bill. Going forward psychoactive substances will continue to be classified under the 1971 Act, where there is evidence that they are harmful.

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The Bill, which is currently being considered by the House of Commons, defines a psychoactive substance as:

“any substance which is capable of producing a psychoactive effect in a person who consumes it, and is not an exempted substance [i.e. alcohol, tobacco, medicines and controlled drugs, caffeine and foodstuffs such as nutmeg and chocolate]…A substance produces a psychoactive effect in a person if, by stimulating or depressing the person’s central nervous system, it affects the person’s mental functioning or emotional state…A person consumes a substance if the person causes or allows the substance, or fumes given off by the substance, to enter the person’s body in any way.”

This legal definition has been drafted for enforcement purposes. Accordingly, and in order to avoid the need to consider each different substance on an individual basis, it does not refer to the relative harms of substances, but focuses instead on their psychoactive effects. This represents a key difference from the proposals discussed by the NPS Evidence Group. In addition, the legal definition also avoids reference to the extent to which a substance is new or novel. The Home Office consider this unworkable on the basis that it may potentially exclude psychoactive substances in existence before the enactment of the Bill. The market has been deemed to be too fluid to attach a specific date following on from which a substance should be classed as new or novel.

Discussions about the exact wording of the legal definition are still on-going between the Home Office and other stakeholders, including the Scottish Government and the Advisory Council on the Misuse of Drugs (ACMD).

The Psychoactive Substances Bill will sit within the envelope of the Misuse of Drugs Act 1971 and is therefore a reserved matter. The legal definition of a ‘psychoactive substance’, proposed in the Psychoactive Substances Bill, will therefore apply to enforcement agencies across the UK.

Proposal One
There are benefits to adopting a consistent definition of NPS across a wide range of stakeholders, particularly in terms of improving the collection and sharing of data on NPS. In order to capitalise on these benefits we propose that the legal definition set out in the Psychoactive Substances Bill is adopted by a wide range of stakeholders at a national and local level (not only those involved in enforcement). This would not preclude collection of data on harms but would give a degree of consistency around what does or does not constitute a psychoactive substance. The alternative would be for different stakeholders to adopt different definitions of NPS depending on their needs.
Proposal Two
In addition to proposal one, and in order to make the legal definition workable for a wider range of stakeholders in Scotland, we propose categorising NPS beneath the broad definition set out in the Psychoactive Substances Bill according to their (intended) effect, based on the Drugs Wheel model\(^9\). Using this model, NPS would be categorised as follows:

- Opioids
- Empathogens
- Stimulants
- Dissociatives
- Psychedelics
- Depressants
- Other
- Cannabinoids
- Unknown

\(^9\) Further information about the Drugs Wheel Model is available at: [http://www.thedrugswheel.com/?page=licence](http://www.thedrugswheel.com/?page=licence)
Questions on developing a definition of NPS (refer to Section 3.1)

A wide range of stakeholders across Scotland, not only those involved in enforcement, should adopt the legal definition as set out in the Psychoactive Substances Bill (as outlined in Proposal One).

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Please provide more detail (for example, if you disagree it would be helpful if you could provide an alternative suggestion):

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In addition, stakeholders should categorise NPS based on their intended effect(s) (as outlined in Proposal Two).

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If there are changes you would like to suggest to the proposed categories of NPS (in proposal two), please describe these here:

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The categories outlined in proposal two could be applied accurately by people who are not experts in NPS.

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If you disagree, what additional information would be needed?

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Are there any other issues relating to the definition of NPS that you think need to be considered?

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4. Identifying and detecting NPS

4.1 The functions of a Forensic Centre for Excellence

One of the key barriers to capturing data on NPS relates to the myriad of new compounds that have emerged, and the lack of chemical reference standards against which they can be accurately identified. Following the recommendation of the Expert Review Group and recent developments with the Psychoactive Substances Bill, there are a number of potential functions that could be performed by a Forensic Centre for Excellence to address these challenges.

A Forensic Centre for Excellence could be embedded as part of, or distinct from, any infrastructure put in place by the UK Government. Possible functions could include:

- leading on the forensic detection and identification of NPS amongst agencies where testing relates to a criminal or potentially criminal case
- testing for psychoactivity by establishing the effects of substances on the central nervous system
- making links between identification of NPS and potential harms and treatment
- leading on developing national reference standards to become a national resource in this field
- linking in with other data sharing systems, for example the UK Forensic Early-Warning System (FEWS) and the Welsh Emerging Drugs and Identification of Novel Substances Project (WEDINOS)
- acting as a central resource for enforcement agencies, and potentially the NHS, by sharing information with relevant partners and services, for example on emerging trends.

4.2 Identifying NPS for the purposes of prosecution

A potential key function of a Forensic Centre for Excellence could be testing and identifying samples of NPS from an agreed list of enforcement agencies in Scotland. It is likely that the initial focus would be on testing samples relating to a criminal or potentially criminal case. The capacity of a Centre for Excellence to process samples from a wide range of stakeholders is likely to be extremely limited. As a result it has been suggested that the organisations listed in Box 1 could potentially be able to submit samples of NPS for testing.
Box 1

- Police Scotland
- Crown Office and Procurator Fiscal Service (including live and post-mortem toxicology)
- Scottish Prison Service
- Local Authority Trading Standards Services
- Border Force

4.3 Collecting data on harms associated with NPS

Another potential benefit of a Forensic Centre for Excellence could be the ability to link data on harms to specific NPS, for example linking the symptoms of patients who present to an NHS Emergency Department with the substance(s) that have been taken. Projects linking harms with specific substances are already being piloted in some parts of the UK, including Scotland. We are interested in the views of stakeholders to determine whether a national Centre for Excellence could play a useful role in capturing and sharing data in this area.

It has been suggested that it would be beneficial if Emergency Departments at NHS Scotland Health Boards could submit samples to a Centre for Excellence. For example, data on symptoms or harms could be collected by Health Boards alongside biological samples from individuals presenting to Emergency Departments where it is suspected that NPS has been taken. These data could be pseudonymised (a procedure where identifying fields within a data record are replaced by one or more artificial identifiers). This would enable harms associated with a specific substance to be recorded, without enabling enforcement agencies to identify the individual from whom the sample had been taken.

In a very small number of cases this could support the management of an individual, for example if they are subsequently admitted to hospital for treatment. However, given the time required to process and test samples (approximately 72 hours), benefits are more likely to relate to improved information over time. Capturing this information has potential benefits for future patients displaying similar symptoms and for developing a knowledge base. There could be scope to share this information more widely with other stakeholders for example sharing data with the TOXBASE database (the online database hosted by the National Poisons Information Service).

Please note: these proposals would not change the fact that the National Poisons Information Service would remain the first point of contact for advice on how best to treat or manage patients presenting with acute and chronic poisoning.
5. **Improving information sharing on NPS**

The Scottish Government has carried out a mapping exercise of the existing sources of data available on NPS in Scotland.\(^{10}\) This work has been supported by discussions with the NPS Evidence Group. These discussions have highlighted that information on NPS is already being collected and shared by a number of agencies [see Annex A], and that there is generally increased awareness of the issue amongst stakeholders. However, significant gaps in formal data capture and information sharing on NPS in Scotland remain.

The Scottish Government would therefore also like to consider how a Forensic Centre for Excellence could improve information sharing on NPS. One option is the dissemination of a monthly report, for example containing a summary of the substances identified over the period, and broken down by local authority and health board area (where this could be done without compromising anonymity). Consideration could also be given to producing an annual report containing trends. This could be disseminated widely, for example to all stakeholders identified in Annex A.

5.1 **Alerts and warnings**

Finally, it has also been suggested that another possible function of the Forensic Centre for Excellence could be to issue alerts, for example if a particularly volatile or harmful substance is identified. These alerts could be issued to local organisations in Scotland, as well as feeding in to the UK and EU Early Warning Systems.

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Questions on the functions of a Forensic Centre for Excellence (refer to Section 4.1)

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<th>If a Forensic Centre for Excellence carried out the functions suggested in Section 4.1, it would address the most pressing gaps in knowledge about NPS.</th>
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Please provide more detail:

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Does a Forensic Centre for Excellence provide other opportunities that could be capitalised on that are not covered by the suggestions above?

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Would your organisation be capable of delivering any of the potential functions suggested above?

Yes ☐ No ☐ Don’t know ☐

Please provide further details:

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Questions on identifying NPS for the purposes of prosecution (refer to Section 4.2)

The organisations listed in Box 1 (Section 4.2) should be key priority areas for submitting NPS samples to a Forensic Centre of Excellence.

Strongly disagree…………………………………agree

1  2  3  4  5  6  7  Don’t know

Please provide details of any other organisations that you think would represent priority areas for submitting NPS samples for identification:

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Questions on collecting data on harms associated with NPS (refer to Section 4.3)

In addition to the organisations listed in Box 1, NHS Emergency Departments should also be able to submit biological samples for testing.

Strongly disagree…………………………………agree

1  2  3  4  5  6  7  Don’t know

Where possible, it would be useful if NHS Emergency Departments captured and held data on harms associated with specific NPS samples.

Strongly disagree…………………………………agree

1  2  3  4  5  6  7  Don’t know

If you agree, please provide more detail about how this could work:

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Once anonymised, these data on harms relating to specific NPS should be shared with other stakeholders.

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If you agree, please provide more detail about the specific stakeholders that would benefit from this information:

Questions on improving information sharing on NPS (refer to Section 5)

If you are aware of data or information being collected or shared on NPS that are not represented in the diagram in Annex A please provide further details here:

If a Centre for Excellence was to share information on NPS, what information would you find most useful?

How frequently would you want to receive/access this information?

If you have any suggestions on the scope, content or method of dissemination of information from a Centre for Excellence, please note these here:

Do you have any other suggestions about how a Centre for Excellence could or should share information more widely?
Questions on alerts and warnings (refer to Section 5.1)

It should be the role of a Forensic Centre for Excellence to manage and disseminate alerts on new and potentially harmful NPS.

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Do you have any alternative suggestions for the management and dissemination of alerts on potentially harmful NPS?

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6. Additional questions for:

- Police Scotland
- Crown Office and Procurator Fiscal Service (including live and post-mortem toxicology)
- Scottish Prison Service
- Local Authority Trading Standards Services
- NHS Emergency Department staff
- Border Force

6.1 Additional questions on identifying NPS for the purposes of prosecution

Would you anticipate submitting samples to a Centre for Excellence?

Yes ☐ No ☐ Don’t know ☐

What types of sample would you anticipate submitting (e.g. bulk drug/biological sample)?

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In what quantities?

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How often would you anticipate submitting samples?

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13
Would you benefit from accessing reference standards held by a Centre for Excellence?

Yes ☐    No ☐    Don’t know ☐

Please provide further details:

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Thank you for taking part.

A summary of the results will be published by 18th February 2016. These results will be used as part of the evidence base to inform on-going discussions with the UK Government, and to further develop our policy programme on new psychoactive substances.
Annex A: Stakeholder map and key sources of data on NPS

ENFORCEMENT

The Crown and Procurator Fiscal
- Data on causes of deaths (testing done by Glasgow University Toxicology Services)

Police Scotland
- Information on drugs seized (Drug Trend Bulletins)
- NPS Samples seized

Scottish Police Authority (Forensic Services)
- Custody Nurses – ADASTRA system (currently trying to add facility to capture data on NPS)
- SPS biennial survey (NPS prevalence)
- Urine screening to establish substance being used (Glasgow Uni)

Scottish Prison Service

NPS Evidence Group
- NPS Research on prevalence, motivations and harms

Drug Trend Monitoring Groups
- Informal data sharing - NPS data collection forms (returned to DTMG)

ADPs
- ADP Drug Alerts
- ADP 'apps' for NPS
- Data for NDRDO
- Local surveys and research

NDRDD Local Data Coordinators
- NPS Drug Related Deaths
- Prevalence of NPS use in SCJS and SALSSS surveys

ISO
- National Records of Scotland
- NHS Health Scotland

THIRD SECTOR STAKEHOLDERS

Crew 2000
- Reports on price of NPS
- Drugs Database and chat room
- Street collections and NPS questionnaire

Scottish Drugs Forum
- Service surveys

Scottish Families Affected by Drugs
- Collect data on NPS to share with ADPs and Police Scotland

Know the Score and Franks
- Monthly summary of requests for information on NPS

Centre for Drug Misuse Research
- My Legal High Survey

UK AND INTERNATIONAL STAKEHOLDERS

Home Office
- Public Health England
- Department of Health UK FEWS

EMCDDA

UK Focal Point on Drugs

OTHER STAKEHOLDERS

Trading Standards

Border Force

HARM REDUCTION SERVICES

- NED data
- Community Improvement Partnership (Edinburgh) → NK, cans unit and needle discard
- Aberdeen NK survey
- NESI study (2015 sweep including NPS)

PATHOLOGY SERVICES

Mental Health Services
- NHS Health Boards
- Scottish Ambulance Service

Primary Care
- A&E
- Scottish Drugs Misuse Database (to be replaced by DASy in 2016)

National Records Information Service

TOXBASE: - Records of enquiries - Feeds into EMCDDA EWS

GPG A&E Pilot Project to screen for NPS

IONA study to identify NPS (NIBRF funded UK study)

NHS Health Promotion

Mental Health Inpatient Bed Census

Public Health

Patient health records
- Out of Hospital deaths
- Acute Psychiatric admissions
- Self-harm and suicide data
- Qualitative info gathered in clinical notes but no diagnostic coding in reporting systems