# Workstream 1

# Monitoring user forums

## *I-TREND platform Handbook*

*Observatoire français des drogues et des toxicomanies (OFDT)*

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**Version updated:** 29/03/2017

## Table of contents

# 1. General Presentation

This platform is built to exploit data gathered on online forums dedicated to drugs. The collection took part during the I-TREND project, between October 1, 2013 and 31 October 2014. In meantime, a software has also be developed to automate the data collection. It is still in activity for some forums.

## 1.1. The software for crawling quantitative data on forums

The I-TREND software is a robot that browses selected forums. It is adapted for the layouts of each of them. Only sub-sections concerning NPS are monitored. The robot visits the summarize page of these sections. Its function is to copy the title of each online discussion, its Uniform resource locator (URL), its creation date, and its number of view (Figure 1 : Illustration of the forums I-TREND software).



Figure 1 : Illustration of the forums I-TREND software

## 1.2. The web platform for storing and exploiting collected data

All data are stored in **a first database**, which is monthly updated. A professional selects online discussions which are interesting to monitor. Selected online discussion are qualified, and are included in **a second database**. This last is dedicated to the analysis itself.

All selected online discussions are qualified by the main NPS discussed, or by the thematic debated. According to the first qualification given, the online discussion is automatically classified by chemical families, self-experimented effects and if it is appropriated, by thematic. The choice of variables and charts available online are made on this data set. Online discussions remaining in the first database can be included in it at any moment. You can consult the whole typology in the section **Thesaurus, Typology**.

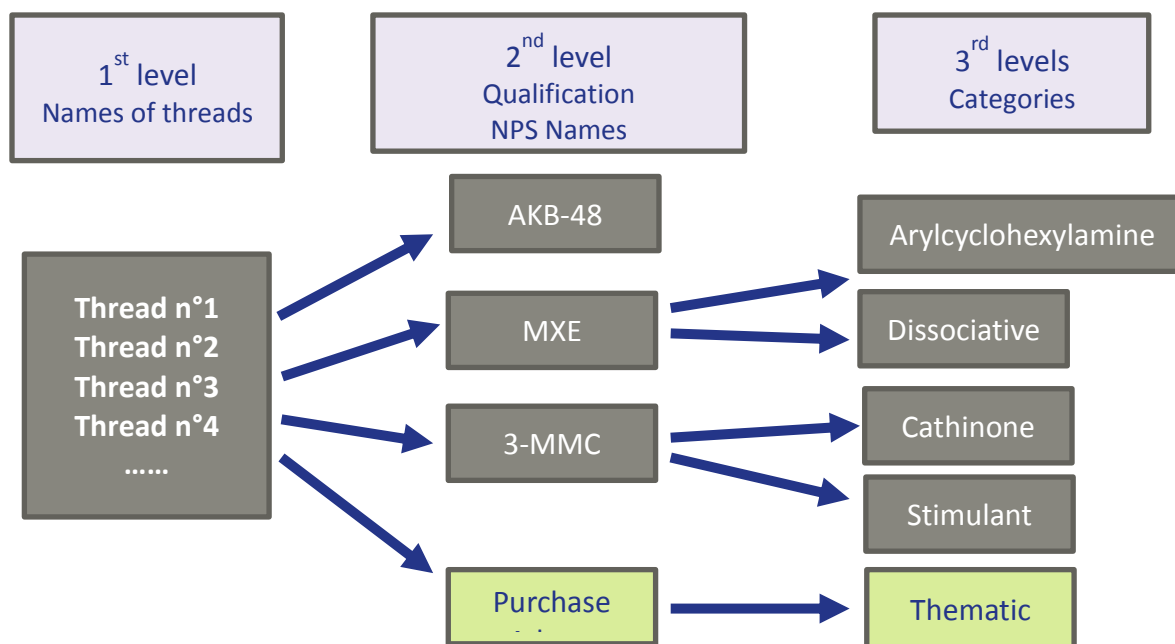| 1st level<br>Names of threads | 2nd level<br>Qualification<br>NPS Names | 3rd levels<br>Categories |
|---|---|---|

**Figure 2 : Illustration of the several level of data qualification**

Data can be analysed through different perspectives. It is possible to select all data, or only for one or several countries, among forums, and with a determining period of time. Different charts are proposed for visualising those set (cumulated values, evolution curve…). They can be downloaded with several formats (png, jpg, svp…).

## 2. The URL address of the I-TREND forums platform
**It is recommended to use Chrome as navigator.**

Institutions and professionals can visit the platform. If you wish to do so, you can send a request to ofdt#UNDERSCR#ofdt.fr.

## 3. Main Frontpage and menu navigation
The simple menu navigation is easy to handle. Three main sections are available. Their subordinate branches are visible by passing the cursor over them, or by clicking on them.

- **Navigate among** data / options for displaying data

At the bottom of each table, you can find the symbol "Play" and "Skip". You can access at the next page of data by using the symbol "Play" or go directly to the end of the list by using the symbol "Skip".

Alternatively you can use the local filters (see **Local filters**) for being able to scroll down all data on the same page. This option is useful when you need to select a lot of lines at the same time (eg. All cathinones).

| 19 | | O20 | Lettre recommande ? |
|----|--|-----|---------------------|
| 20 | | O21 | RC ou drogue "vrai" ? |

20 ▾  |◀  ◀  Page 1  of 49  ▶  ▶|  ↻

## 4. General and local Filters

Whatever is the chosen section (Charts, Management or Check-up sections) and its subordinate branch, the local or general filters are always accessible.
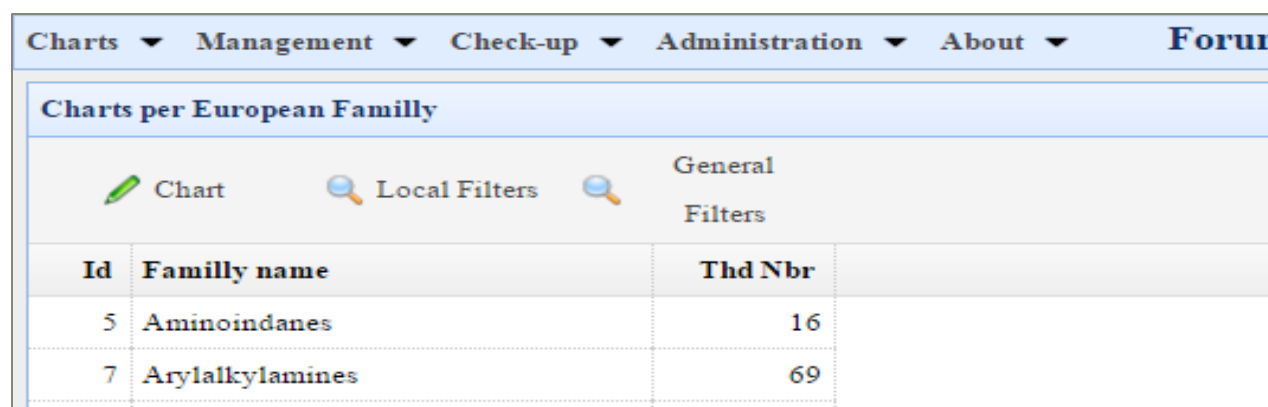


**Charts ▾  Management ▾  Check-up ▾  Administration ▾  About ▾    Forun**

**Charts per European Familly**

✎ Chart       🔍 Local Filters    🔍 General Filters

| Id | Family name | Thd Nbr |
|----|-------------|---------|
| 5 | Aminoindanes | 16 |
| 7 | Arylalkylamines | 69 |

Figure 4 Access to local and general filters

### 4.1. General filters

General filters allow users to select one or several countries and to determine the period of time. Click on the Item "General Filters", a new window opens.

#### 4.1.1. Choosing one or several countries and compare them

The name of each institution responsible of the collect stands for the country – Except for the Czech Republic.

| | |
|--|--|
| CUNI | Data collected by this institution came from one single but broad forum, frequented by Europeans and American people. |
| LJMU | Data collected came from forums identified as English forum – specifically centred on the United Kingdom, Ireland or Wales. |
| OFDT | Data collected came from 3 Francophones forums, likely to be mostly frequented by French people. |
| SWPS | Data collected came from 3 polish forums. |
| TRIMBOS | Data collected came from 4 dutch forums. |

- For analysing data gathered as a whole, in front of "organism" click on "No". Alternatively, if none country is selected, data will be also treated as a whole.

- For isolating specific data and use the breakdown function, click on "Yes" and select one or several countries.
- Then, it is obligated to confirm if the breakdown function is required, by selecting it. If this function is not selected, then the chosen countries will be treated as a whole. If **you select several partners without using the breaking down option, their data will be gathered as a whole set.**

Nota: breakdown function
Please note that you can display the breakdown per countries only for one item / substances. Example: you can display the curve of the cathinones family per countries at the same time, but you cannot display cathinones plus cannabinoids for all of them. If you do so, data will be automatically merged into two curves, for cathinones and cannabinoïds. The curves of cathinones and cannabinoids will not appear distinctively for each country at the same time.



Figure 5 : Insights from the window of the general filters

### 4.1.2. Choosing one period of time

It is possible to select a specific period, by selecting "Yes" and then by specifying the beginning and the end of the period. Select "No", involves that all data will be available, until the last collection. However, not all countries are currently concerned by the monitoring.



After setting up the required options, click on "Save" on the bottom right of the window.

## 4.2. Local filters

Local filters allow to narrow data by selecting those having the term or part of the sought term. When you click on local filters, new tabs appear below the first main line of the table (N°, Title, Family, Sub-family, European family, V, and Treads Number). With the local filters, you are also able to scroll down and up all data whereas normally they are available page per page (see 5 Navigate among data / options for displaying data).

Log on your mouse in it and type either the sought substances name, or family or sub-family or European family. Data are narrowed according letters typed in the tab.



Figure 6 : Position of the local filters and example of selection with the cathinones family.

- Charts section, so-called for this purpose. From this section you can get quantitative information about several sub-sections which are: NPS considered one by one, by chemical families or self-experimented effects families (See **Charts section**).
- **Management section**, enables users to change the data categorization (substance names, family names etc....). You can download the full 2<sup>nd</sup> database from this section. It contains the collected and exploited threads (See **Management section**).
- **Check-up section**, gives the possibility to overview data, and the value of each thread for the current month, included either in the 1<sup>st</sup> database (all collected thread are stored here) or in the 2<sup>nd</sup> database (see **Check-up section**).
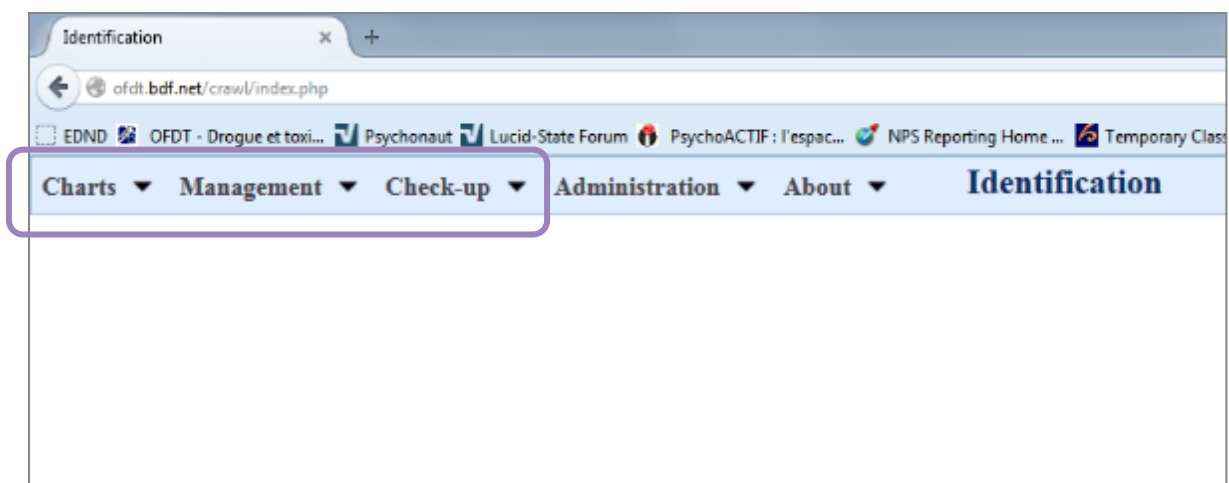
Figure 3 : The 3 main sections: charts, management and check-up.

## 5. Navigate among data / options for displaying data

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**Figure 5 : Insights from the window of the general filters**
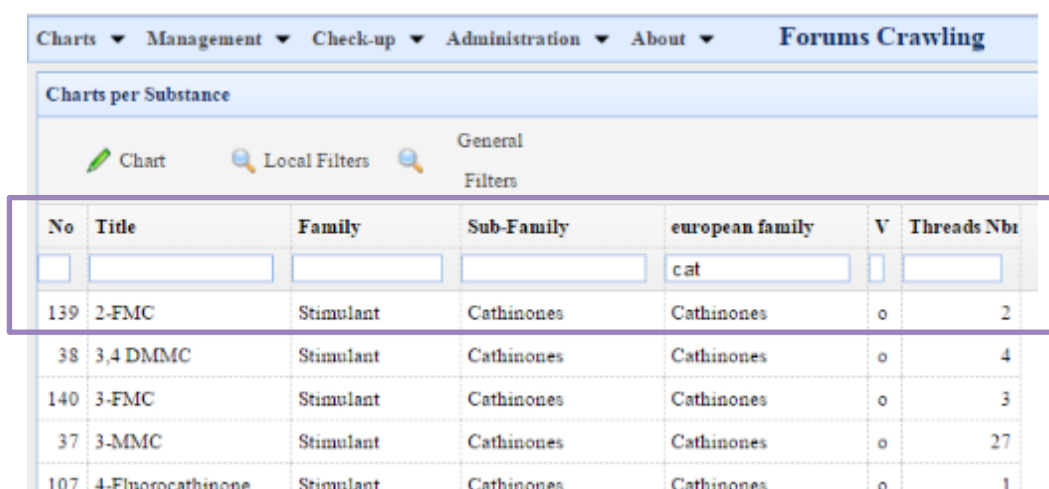
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After setting up the required options, click on "Save" on the bottom right of the window.



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Log on your mouse in it and type either the sought substances name, or family or sub-family or European family. Data are narrowed according letters typed in the tab.

**Figure 6 : Position of the local filters and example of selection with the cathinones family.**

# 7. Charts section

Click on "Charts". Select one sub-section for displaying data. Data will be aggregated according your choices of countries, breakdown options and time period.

Each sub-section represents a level of analysis.

## 7.1. Proposed variables

By clicking on "Charts", you can have a look on the subordinate branch of its section. The section Management gives you information about how those sub-sections follow a logical sequence (see **Management section**).

The right column always indicates the number of monitored threads.

The number of views is available either when a chart is displayed (see **Performing charts**) or in the section Management subsection "Threads" (see **Download data**), or in the section Check-up, subsection collected threads (see **Check-up section**).
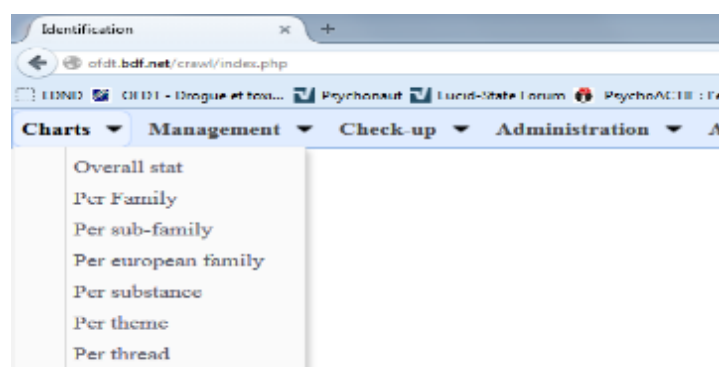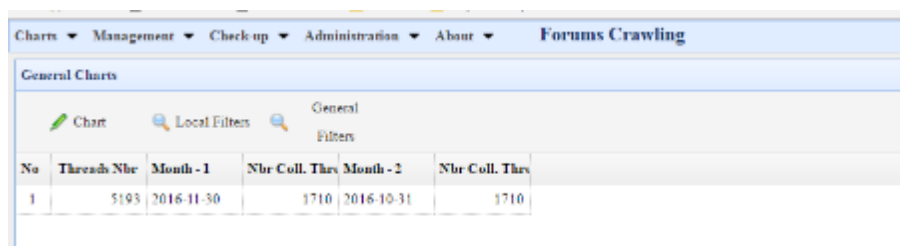


**Figure 7 : Sub-sections available through the charts section.**
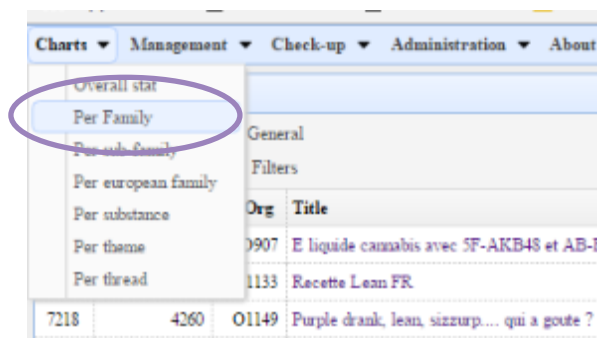
### 7.1.1. Overall data

The overall subsection gives you information about the total number of collected threads responding to your options and the number of collected threads for each of the last two months.

**Figure 8 : Overall view on data.**

### 7.1.2. Data per families of effects
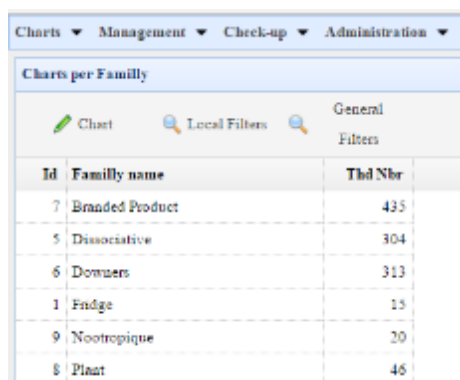


In this section you can find data aggregated by main self-experimented effects, described by consumers. The most often, this typology sticks with the ones used by online forums for gathering per groups online discussions.

> Nota on the "fridge" family
> This family is an interim storage, where online discussions with unclear main subject are stored until explanations.



**Figure 9: Vernacular categories used by online forums – here gathered in the "Family section".**

### 7.1.3. Data per sub-families

Please note that "sub-families" are an attempt to clarify and sub-divided family which can be very broad.

Sub-families are sub-categories derived from the main effects. They are not chemically sorted, and do not represent consistent groups. Their typology is based on simple and basic merging, sometimes only

on the basis of similarities in the labelling of chemical names (eg. The UR-*xxx* sub-group among the synthetic cannabinoids family). Some of those sub-categories may disappear over time.

Each NPS is qualified according one chemical family and one "effect" family. When it is possible, it is more precisely defined by a "sub-family", still based on how users talk about NPS. If there is no possibility to use one sub-family, by default the main effect family is reported once again as "sub-family".

Example of subfamilies : The synthetic psychedelic family is divided among the 2c-x series, 4 and 5 substituted tryptamines, ergolines, NBOMe series, other psychedelics, others tryptamines, psychedelic amphetamines.

| Family | Sub-families |
|---|---|
| psychedelic | 2c-x series |
| psychedelic | 4 substituted tryptamines |
| psychedelic | 5 substituted tryptamines |
| psychedelic | ergolines |
| psychedelic | NBOMe series |
| psychedelic | other psychedelics |
| psychedelic | others tryptamines |
| psychedelic | psychedelic amphetamines |

### 7.1.4. Data per chemical or European families

This typology is based on the EDND (European database on new drugs). The EDND is managed by the Early warning system Unit (EWS) of the European monitoring centre for drugs and drug addiction (EMCDDA).
There is 13 chemical and official families. Nonetheless, three extra families have been created:
- The **"branded products" category** is aimed to store all threads related to commercial names, without chemical background discussion.
- The category **"Irrelevant"** aims to store all online discussion about one substance which is not considered as a New psychoactive substance (NPS) by the European Union, or which does not have real chemical existence.
- The category **"Thematics"** gathers all discussions related to topics not focus on one or several substances (see **Data per theme**).

### 7.1.5. Data per substances

With this subordinate branch of the Charts section, you can see all substances which are monitored. The corresponding number of threads / online discussion by substances is indicated on the right and last column.

Figure 10: List of substances.

### 7.1.6. Data per theme

Themes are intended to attribute a qualification at online discussions, aside their chemical subject. Those online discussions could be either already qualified with a main NPS – and consequently with a family, sub-family and European or chemical family or could be not qualified. In this case the thread does not have a NPS or a group of substance at object. By default its main qualification is the labelling "thematic".

There is 9 themes. They cover different aspect such as links between users and retailers (delivery, after-sales services…), discussion specifically about how to consume, or branded products…



Figure 11 : List of themes.

### 7.1.7. Data per threads

It is the last level of analysis. All collected online discussions are listed.

It is possible to get the number of view per threads, either by selecting the thread for a (see **Performing charts**) or in the section Management, subsection "Threads" (see **Download data**), or in the section Check-up, subsection collected threads (see **Check-up section**).

| No | RfOrg | Title | Substance 1 | Substance 2 | Family | Sub-Family | Theme | Creat. |
|----|-------|-------|-------------|-------------|--------|------------|-------|--------|
| 4804 | L1 | Tried AMT.. | AMT | | Psychedelic | Others tryptamines | | 07/01/2012 |
| 4805 | L2 | My Benzo Fury report - Mkat replacement is here! | Benzo Fury | Mixed APB | Branded Product | Branded Product | | 08/08/2010 |
| 4806 | L3 | Mephedrone: Short or Long term effects. | Mephedrone | | Stimulant | Cathinones | | 24/07/2010 |

**Figure 12: List of threads / online discussion.**

## 7.2. Performing charts

At first, choose one sub-section inside the "Charts" section (families, sub-families, European families, substances, themes or threads).

- Set up your general filters (See **6.1 General filters**).
- Select one or several lines. If you select only one line, you can use the breakdown option for comparing several countries, or forums.
  - For selecting one line, click on it. It is now highlighted in yellow. Double click on it for displaying the chart, or alternatively click on the icon pencil in the top of the left corner (see **Figure 13**).
  - For selecting several lines, click on the first line and the last line of your selection and at the same time use the combination "Maj"+ click left. Or if you want to select several lines, click on the first, and for the next, select them by using the combination "Ctrl"+ click left.
  - Remember also that for easing your navigation and selection of lines, you can scroll down and up if you click on – at first – on "local filters" (see **6.2 Local filters**)

- Then Double click on the line(s) selected for displaying charts, or alternatively click on the chart icon, the pencil in the top of the left corner (see **Figure 13**).



**Figure 13: For performing a chart, in the chart section, select one or several lines then click on Chart.**

### 7.3. The Charts window

Several tabs allow you to see data by different ways. Here an example based on data for cathinones. You have several options for visualising your data.

- Fly over the curves will display the value of each nodes.
- In the key/legend box, if you click on the name of one institution (substance, or family, or country depending on which kind of items you have chosen), its line disappears.
- You can choose to download the chart or print it with different format by cliking on the button in the top corner on the right.
- Scrolling down the window, you will find the table data used for the chart. You can copy it and paste in on excel.
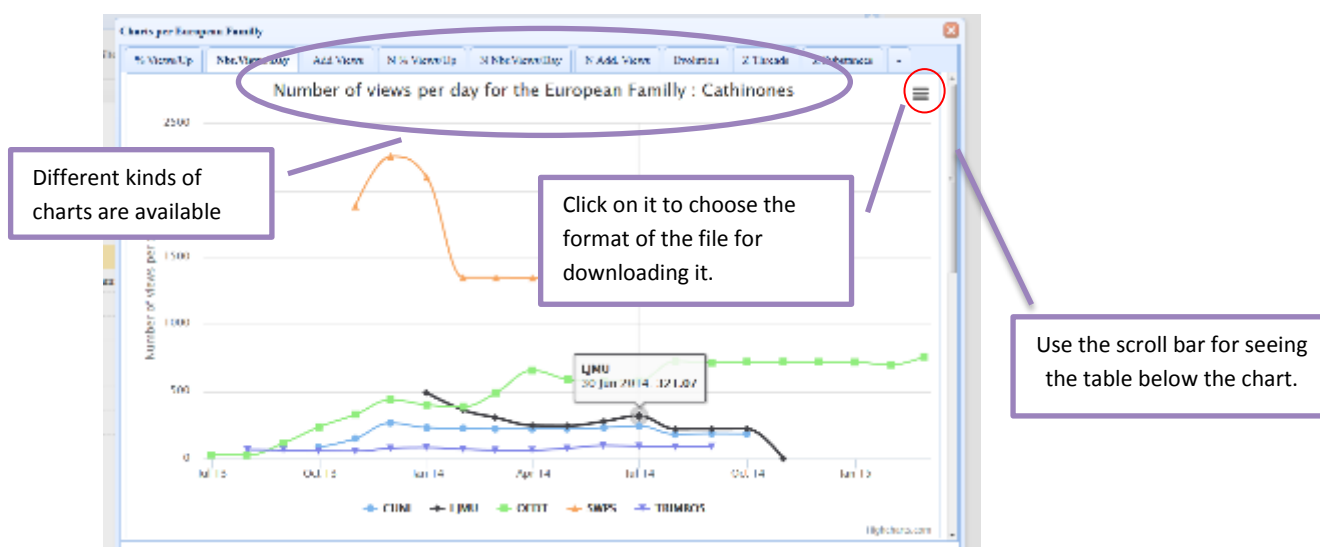


**Figure 14: Chart window.**

### 7.4. Types of charts available

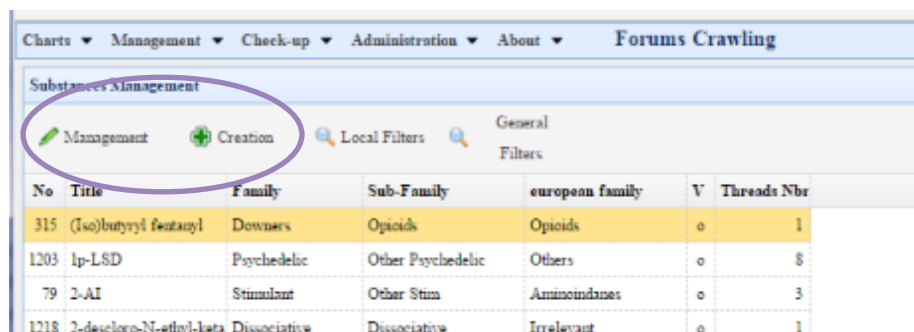| Short Name | Full Name | Explanations |
|---|---|---|
| **% Views/Up** | Acceleration or deceleration of the increase of views by percentage per month for the Family X | It is the "rate of growth" per month. One problem is that threads with a small number of view at the beginning appear to quickly grow up, whereas, threads with a regular and important number of view have a small percentage.<br>Eg. There is 30 new views the 1st month. There is 60 new views the 2nd month.<br>Consequently, the "rate of growth" for this month is 200%. |
| **Nbr. Views/Day** | Number of views per day for the Family X | It is the mean of the number of new views per day between each monthly collect. |
| **Add. Views** | Cumulated number of views per month. | |
| **N % Views/Up** | Normalized "rate of growth" of views by percentage for the family : X | Will be drawn with histogram format.<br>Feedback on all values for all families. Do not compare each value with the previous one, but rather observe the increase of views, considering the overall growth of all categories.<br>Denominator is not the total number family views but the total number views for all families.<br>This chart functions with more than one family. |
| **N nbr. Views/Day** | Normalized number of views per day for the family : X | Will be drawn with histogram format.<br>Feedback on all values for all families. Do not compare each value with the previous one, but rather observe the growth/increase of views..., taking the overall growth (increase) of all categories into account.<br>Denominator is not the total number family views but the total number views for all families.<br>This chart functions only if you select more than one family. |
| **N add. Views** | Normalized cumulated views | Will be drawn with histogram format.<br>Ibid, Feedback on all values not on the family itself but toward the general accumulation. |
| **Evolution** | None available | |
| **Z thread** | None available | |
| **Z substances** | None available | |

# 8. Management section

This section is intended to manage the typology used to qualify data (see **Table 1**), data values and their downloading.

| Effect families | Sub-families | European Families EDND classification | Themes |
|---|---|---|---|
| Branded Product | Dissociative | Aminoindanes | E-Cigarette / E-Liquid / Vaporiz |
| Dissociative | Medical drug | Arylalkylamines | E-Shops |
| Downer | Benzodiazepine | Arylcyclohexylamines | Harm Reduction |
| Nootropique | Downer / Other sedative | Benzodiazepines | Legality / Justice |
| Plant | Medical drug | Branded Product | Media |
| Psychedelic | Opioids | Cannabinoids | Q Identity Molecule |
| Stimulant | Medical drug | Cathinones | Q on Consumption |
| Synthetic Cannabinoid | Nootropique | Indolalkylamines (fe tryptamines) | |
| Thematics | Plant | Irrelevant | |
| | 2C-x serie | Opioids | |
| | 4-substituted tryptamine | Others | |
| | 5-substituted tryptamines | Phenethylamines | |
| | Ergolines | Piperazine derivates | |
| | NBOMe series | Piperidines & pyrrolidines | |
| | Other Psychedelic | Plants & extracts | |
| | Others tryptamines | Thematics | |
| | Psychedelic amphetamines | | |
| | APB series | | |

Table 1 Typology used to qualify online discussions.

## 8.1. Thesaurus, Typology, data qualification and specific cases

Items used for Families, Sub-families, Substances, Themes and European Families can be managed only by the administrator. Icons called "Management" (pencil) and Creation (green cross) can be used only by him.
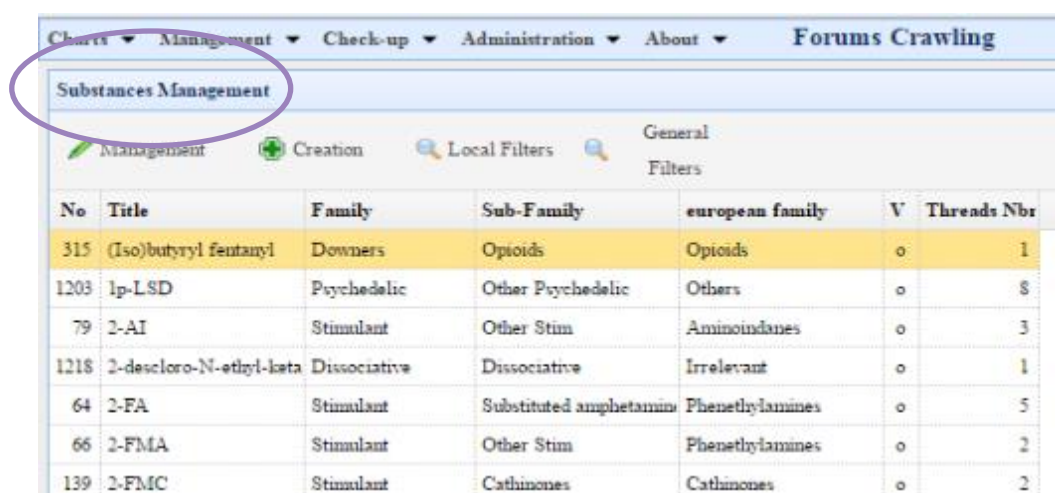
**Figure 15 Icons reserved to the administrator**

Those items are automatically attributed on the base of the substance name choosen by the user. He has the possibility to choose the name of the substance among proposals (see **Change or attribute values)**. User can also choose which thematic characterises the discussion. Alternatively he can report problems, such as missing names, and to propose improvement (see **Report a problem**).

Substances names are the ones used by the EDND. The automatic attribution of their families for each can be consulted in the section "Management", sub-section "Substances". The number of threads per substances are available on the right column. Remember that you can always used general filters to select data set and local filters for easier their visibility.



**Figure 16 Example of the logical attribution of effect family, subfamily and European family inside the substances management section.**

Some specific cases may exist, meaning that it is not always possible to qualify one online discussion with one or two chemical names.

- Discussions linked with a group of substances are qualified with specific items such as : mix synthetic cannabinoids, mix cathinones, mix phenetelamines, mix stimulants etc…
- Discussions linked with branded names are categorised by "Branded Product".
- Discussions focused on classical drugs are qualified according the main substance discussed, but are qualified as irreleveant in the column european family
  Eg. Codeine is categorised as a downer (family), medical drug (sub-family) and irreleveant (european family).
  Discussion not caracterised by specific drugs, but by theme, is categorised by default as "Thematics" for effect family, sub-family, european family level. At the end, user selects the suitable thematic .

### 8.2. Manage data

In the section "Management" it is possible to change values at the level of threads / online discussion. Other levels (effects families, sub-families, EDND families or thematic) can be changed only by administrator. The management section concerns only online discussions which have been selected by the users for being exploited. The threads which are monitored but not selected are accessible by the **Check-up section**.

It is possible by this section to download all or a set of data as well as to report problems of substance names or concordance between levels of qualification.



**Figure 17: Window dedicated to change values characterising one online discussion.**

### 8.2.1. Change or attribute values

For changing values of an online discussion (eg. Substance names, date, URL…), double click on it, or select it and then click on "Manage" (pencil icon). A new window opens.

It is possible to choose a substance name inside the proposal list in front of "Substance 1", or alternatively to type the beginning of the name. The software will propose names having the same first letters (see **Figure 18**).

The name of the 2ⁿᵈ substance, the title of the thread, the creation date, the thematic or the URL and the name forum can also be changed. Before to leave, save changes by clicking on "save" (green arrow), on the bottom of the right corner.

**Figure 18 The master list of substance names can be chosen by scrolling it down or by typing the first letters.**

Subfamilies and families will be automatically given to the thread. Click on "save" before to leave!

If user does not change any values, he has to click on "Cancel" (red cross), also on the bottom of the right corner.

### 8.2.2. Report a problem

If you meet a problem, for instance if you cannot find the correct name or if you see that something is wrong with the categorization, in the window for managing data, click on SOS.



**Figure 19: The SOS button allows to signal at the administrator a problem with the list of substances names.**

A new window will open. You can write the name of the requested substance and explain to the administrator your needs / observations.

**Figure 20: Window dedicated to signal and explain the problem to the administrator.**

If under "Management" section, you see that substances do not have a qualification (effect families, sub-families, etc…), or if the substance name is in red; it means that the substance name is not already on the database. The software cannot recognize it and cannot attribute families. It can be a new substance, a branded product or a well-known NPS but misspelling. Each time that a thread is not correctly classified, it is not taken in consideration for performing charts.

### 8.3. Download data

You can download data by clicking on :

- **Export monthly:** concerns all new views and cumulated number of views per month.
- **Export Manual census:** concerns previous data which have been manually collected during the I-TREND project.

By using **General filters** or **Local filters** you can select which type of data you want to download.

When a chart is performing, you also have the possibility to copy/paste data used for doing it. They are located below the chart (see



**Figure 21: Download options inside the management section.**

## 9. Check-up section

This section gives you an overview on collected data:

- **Monthly census**: You can see the number of threads collected manually per month. If some values were missing, we have calculated them by taking the previous and next values.
- **Collected threads:** Only French and Dutch forums are concerned for the moment. Threads collected during the last collection, and already stored in the front database, are displayed. They are ranked by decreasing importance.
- **External threads:** Only French and Dutch forums are concerned for the moment. All threads collected but not already selected for the front database are displayed.

## 9. Check-up section

This section gives you an overview on collected data: