

# **DIGIT.D1 – Big Data**

## Community of Madrid Social Insertions

### D03.01 Requirements

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# 1 INTRODUCTION

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## 1.1 Context

According to statistic data, more than 120 million people in the EU are at risk of poverty or social exclusion. The fight against poverty and social exclusion is at the top of the Europe 2020 strategy for intelligent, sustainable and inclusive growth of the society.

A strategic objective of the European administration (national, regional and local) is to help the social insertion of these groups using several instruments and mechanisms.

During the last years the steps that have been carried out to reduce this number have been failed because the number has continued to increase and the Community of Madrid has not been an exception.

Public administrations must understand better the different groups of single units and family units with homogeneous themes that lead to exclusion and, therefore, need particular policies and follow-up of inclusion.

Measuring the results of these policies applied to each group and analysing their chronological evolution is a critical issue to understand the factors that affect the possible social insertion of an individual or his / her family unit.

## 1.2 Objective

The main purpose of the project that will be carried out in the Community of Madrid are:

- Identify the different groups of single units and family units existing in the Community of Madrid with homogeneous themes that lead to social exclusion.
- Detect chronological evolution and discover its causes.
- Establish an insertion index to measure the potential inclusion of an single unit or family unit identifying, if possible, strengths and weaknesses in applied social policies.

To meet these purposes, two lines of work will be carried out:

- On the one hand, an analytical process will be carried out, which will process and analyse the raw information received using analytical algorithms and information segmentation.
- On the other hand, a tool will be developed that visually presents the previously described information in a way that facilitates its understanding, reflecting the segmentation obtained from the different groups at risk of social exclusion in the Community of Madrid, its chronological evolution and identifying causes and factors that help make social insertion possible for each group.

The objective of this document is to focus on the formalisation of the business needs expressed by CM.

The document is based on the requested statistical analysis of raw data on files, insertion plans and social workers, the preferred data visualisation and the desired functionalities of the IT system.

In order to define the scope of the project, we have taken into account the needs of the users and we have prepared the present document, which includes the following sections:

- Data presentation and visualisation.
- Requirements summary.

## 2 DATA PRESENTATION AND VISUALISATION

The results obtained from the data analysis and processing will be published on a web tool with a standard content distribution. This chapter describes the user interface of the tool, and how the user will be able to interact with it.

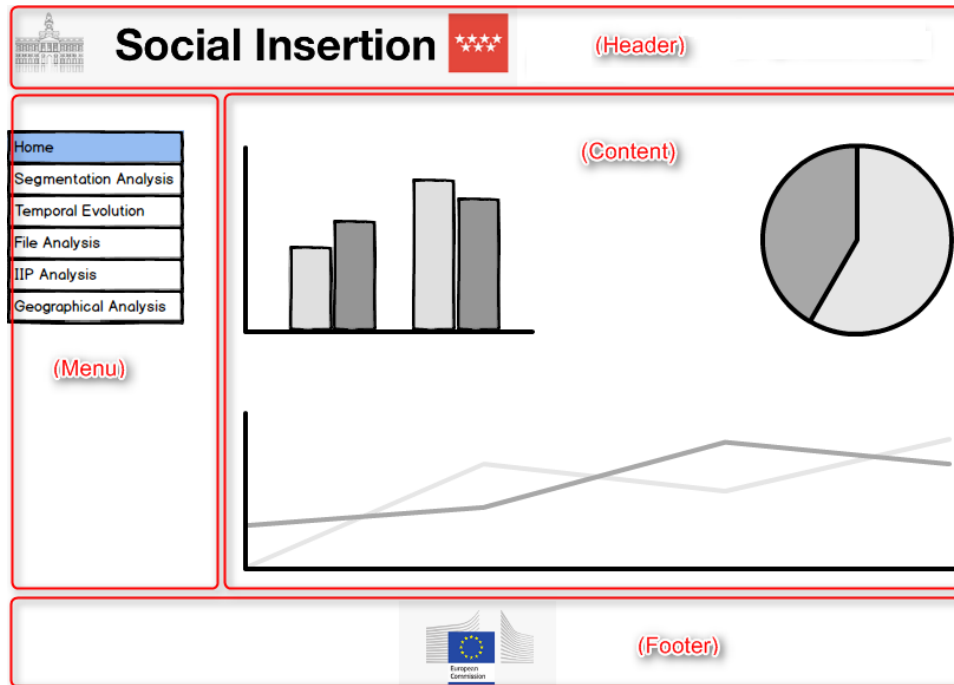


Figure 1 - Web page structure and view

### Header

The header contains a shortcut to access the home page by clicking on the Social Insertion logo.

### Main menu

The main menu contains the section with the different shortcuts of the analysis.

### Content

The content section shows the results through the different graphs that the user can visualise.

### Footer

The footer contains European Commission logo.

## 2.1 Sections

To show the information, the tool is divided into the following sections, which are composed of the information obtained from data analysis:

- Home.
- Segmentation Analysis.



- Temporal Evolution.
- File Analysis.
- IIP Analysis.
- Geographical Analysis.

All the sections share common functionalities. Moreover, some of the sections have functionalities regarding the visualisation of statistical information by means of the charts. These common functionalities are:

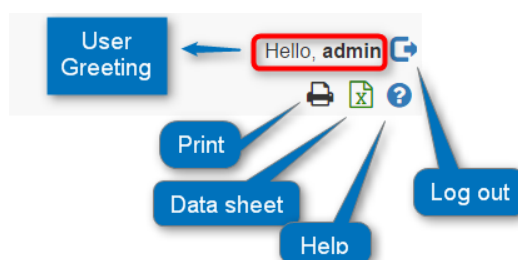
- Functional buttons;
- Carrousel of year buttons;

## 2.1.1 Common functionalities

This section explains the common functionalities that are to be found in many of the views of the application.

### 2.1.1.1 Functional buttons

The user will find in the top-right the following buttons: a print button, a data sheet button, a help button and a log-out button.



**Figure 2 - Functional buttons**

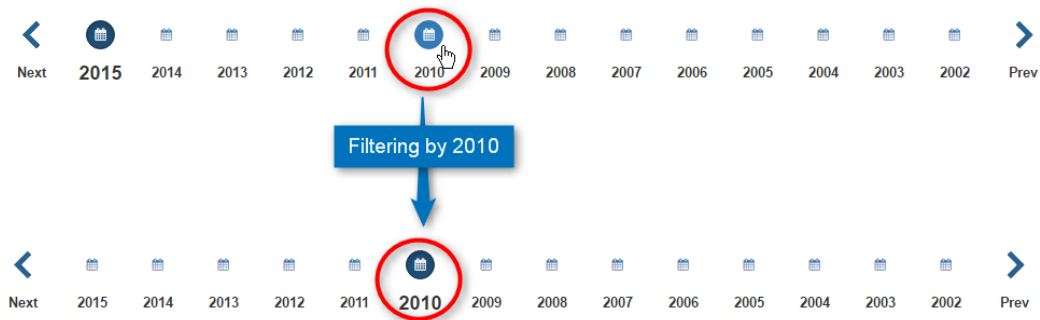
- **Print:** The user can print-out the information displayed in the screen by clicking in the print button.
- **Excel download:** To download the data from the charts in a data sheet the user can click over the data sheet button.
- **User Manual:** The user can read more information regarding the use of the application by clicking the help button
- **Logout:** Finally, the user can log out the session by clicking over the log-out button.

### 2.1.1.2 Carrousel of year buttons

The first content displayed in the segment analysis, the detail views and the geographical analysis views is a carrousel of buttons with years ranging from 2002 to 2015. Clicking over each of the year buttons filters the data by the selected year.

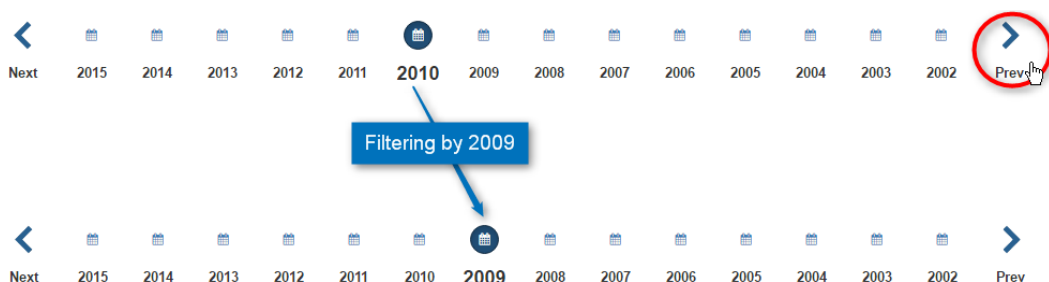


**Figure 3 - Year-button carousel. Selected year**



**Figure 4 - Year-button carousel. Filtering**

The user can click on the “Prev” button to visualize the segment information of the year that precedes the year currently displayed. If the data is filtered already by year 2002 then clicking the “Prev” button displays data filtered by 2015.



**Figure 5- Year-button carousel. Previous year**

The user can click on the “Next” button to visualize the data of the year that follows the year currently displayed. If the current year is 2015 then clicking in “Next” displays data for 2002.

### 2.1.2 Home

The home page will show the conclusions obtained after the analysis of the data showing in a quick overview information making focus in:

- Profile with greater probability of insertion.
- Profile with lower probability of insertion.
- Efficiency in management.
- Prevention.
- Possible fraud detection.

### 2.1.2.1 Profile with greater probability of insertion

This section will show the profile with greater probability of insertion base on the analysed data about number of files, beneficiaries and total amount spent and the number of resulting insertions:

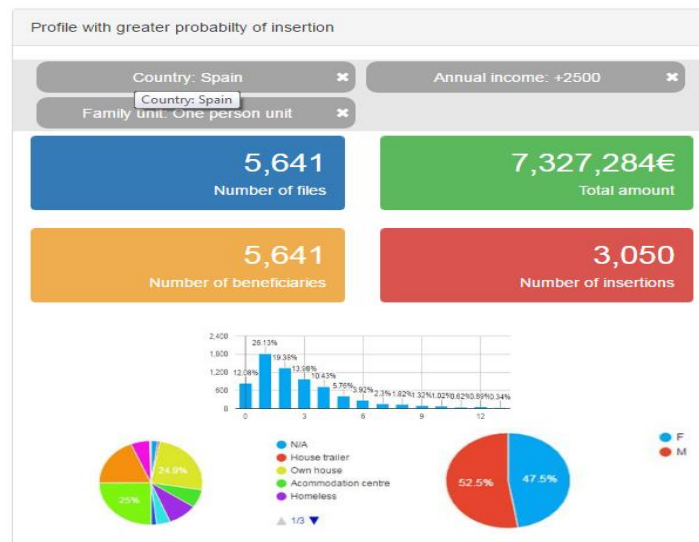


Figure 6 - Profile with greater probability of insertion

### 2.1.2.2 Profile with lower probability of insertion

This section will show the profile with lower probability of insertion base on the analysed data about number of files, beneficiaries and total amount spent and the number of resulting insertions:

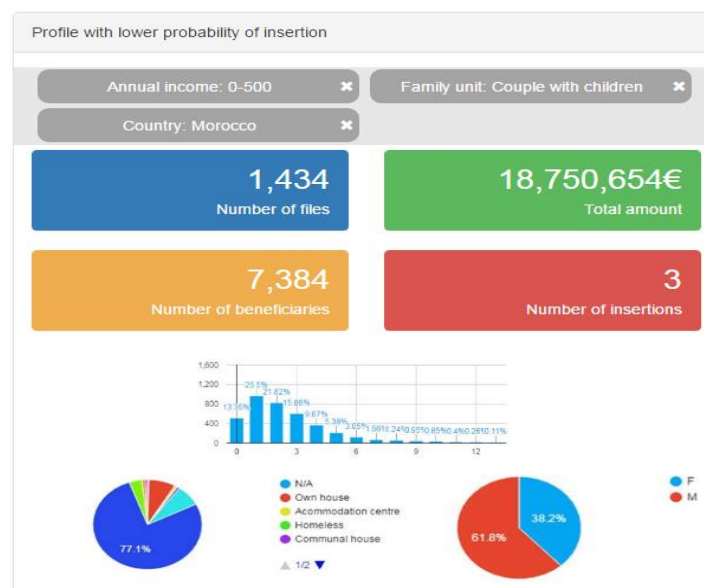


Figure 7 - Profile with lower probability of insertion

### 2.1.2.3 Efficiency in management

This section will focus in the efficiency in management from 2002 to 2015 overviewing the total number of distinct files, total amount spent, the total of the beneficiaries and the number of resulting insertions.

The conclusion will show base on: % of insertion, average amount spent by file and average insertion cost

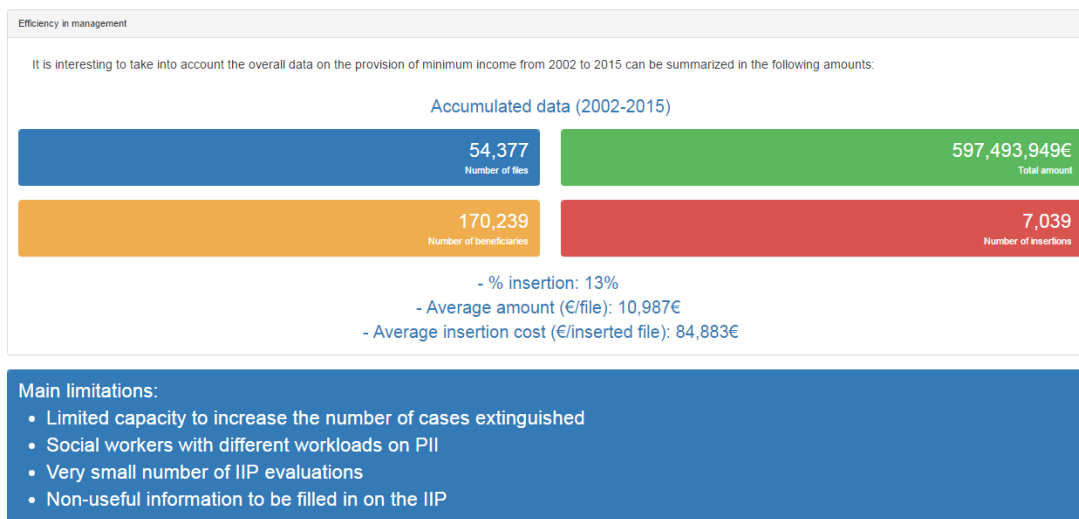


Figure 8 - Efficiency in management

### 2.1.2.4 Prevention

This section will show using heat maps a conclusion about Community of Madrid areas with the higher number of files to prevent that number to increasing.

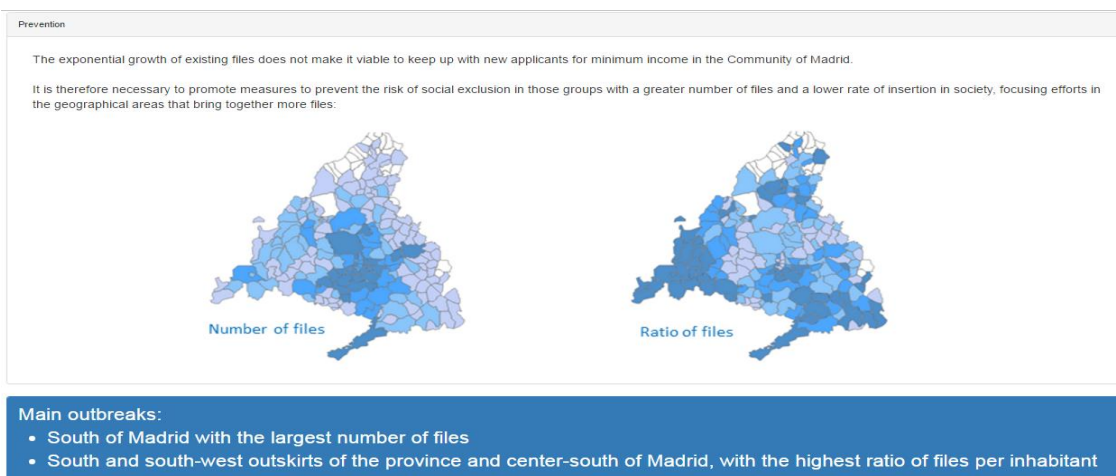


Figure 9 - Prevention

### 2.1.2.5 Possible fraud detection

This section will show a conclusion base on % of files older than 3 years old disaggregated by nationality:

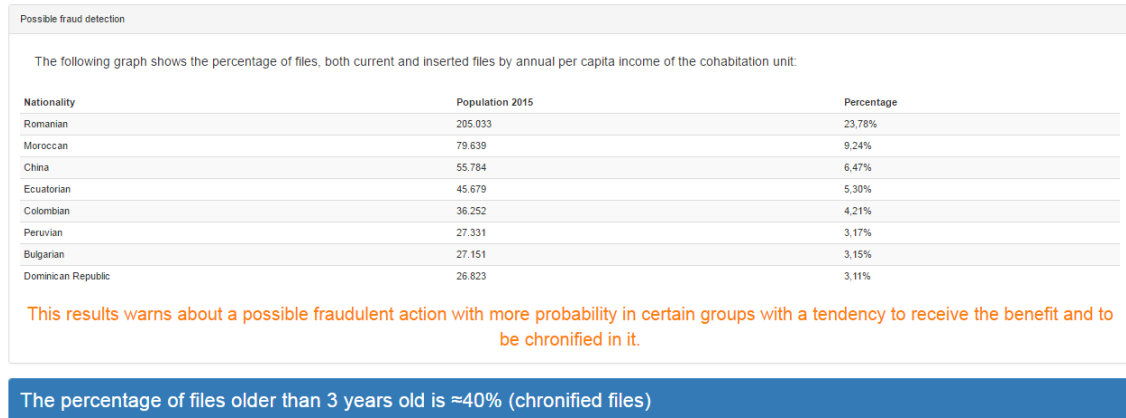


Figure 10 - Possible fraud detection

### 2.1.3 “Segmentation Analysis” section

This section will show the data of the analysed files segmenting information by family type, continent origin and rank of antiquity which will be named later like “segment” with a short descriptive text.

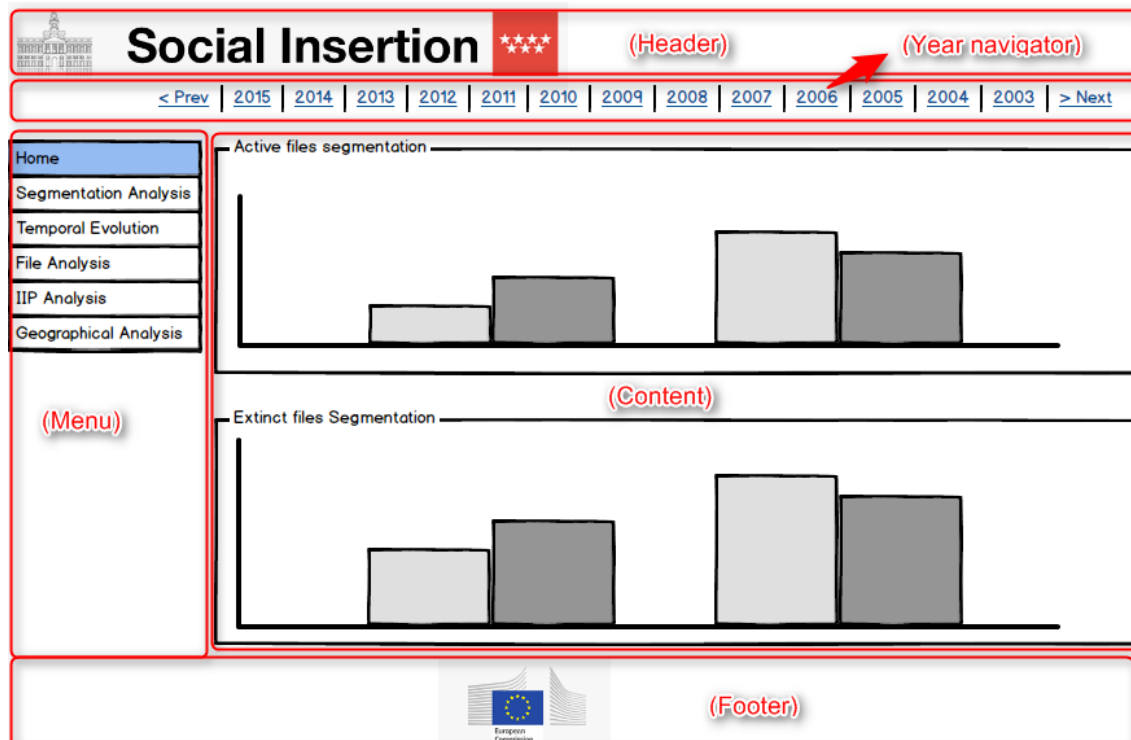


Figure 11 - Segmentation Analysis structure and view

The information will be shown in two graphs, one graph will show the data concerning to the active files and the other graph will show the data referring to the extinct files for a given year.

Understanding by active file those in which the beneficiary is obtaining a benefit. At the moment that beneficiary ceases to collect the benefit, the file will be extinct.

Once a file is extinguished, it no longer appears again in successive years.

In order to change the year for the displayed data, a selector will be included at the top of the content, which, once clicked on a year, will recalculate the information. (see section [5.1.1.2 Carrousel of year buttons](#))

Each graphs will show the information as follows:

- in the vertical axis represents the information regarding the family type.
- The horizontal axis represents the continent.
- By applying a colour system will distinguish between records with more than 3 years old (1<sup>st</sup> Colour), less than 3 years old (2<sup>nd</sup> colour) or with an undocumented age (3<sup>rd</sup> colour).

The information displayed in each bubble when hover will be as follows:

- Origin: The continent origin (vertical axis)
- Family Unit: The family unit (horizontal axis)
- Years from issue date: Displayed by colour.
- Number of files; The number of files for this year, family unit, origin and antiquity.



Figure 12 - Segmentation Analysis

By clicking on a bubble the application will access the detail page there will be two different detail pages: One for the active files and the other one for the extinct files.

### 2.1.3.1 Segmentation Analysis active files detail page

This page will show the information about the active files for the filters applied according to the clicked bubble.

The information obtained in the detail page will be obtained in the function of the chosen segment (Years from issue, type of family and origin).

The page will have the following format:

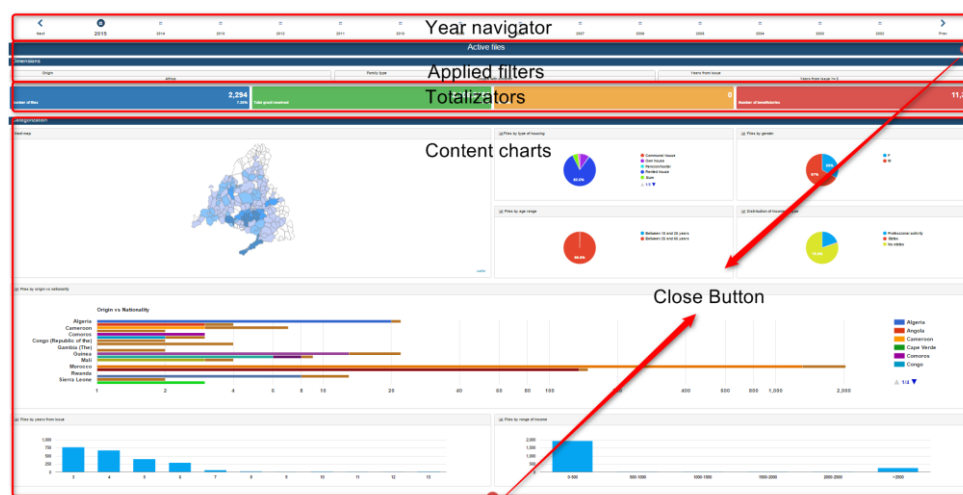


Figure 13 - Segmentation Analysis active files detail page

In the totalizers part the following information will be shown:

- Number of active files: The total of active files and percentage in the selected year and segment filters applied
- Total grant received in euro and percentage
- New files: The total of new files created and percentage in the selected year and segment filters applied
- Number of beneficiaries: Total people who obtain financial grants and percentage.

In the categorization part the following information will be shown:

- Heat Map: This map will show the number of active files by district and town
- Number of active files by type of housing.
- Number of active files by gender.
- Number of active files by age range.

- Distribution of income by type
- Number of files by years from issue date.
- Number of files by Origin vs Nationality.
- Number of files by range of income

A link will be shown at the top to be able to filter by year the detail with the same filters previously applied. (see section [5.1.12 Carousel of year buttons](#))

#### 2.1.3.1.1 Heat Map

This chart will show the information that references the active files and the ratio according to the number of people of the district / town for which the information is presented highlighting with darker colours those districts / town with the higher number of active files.

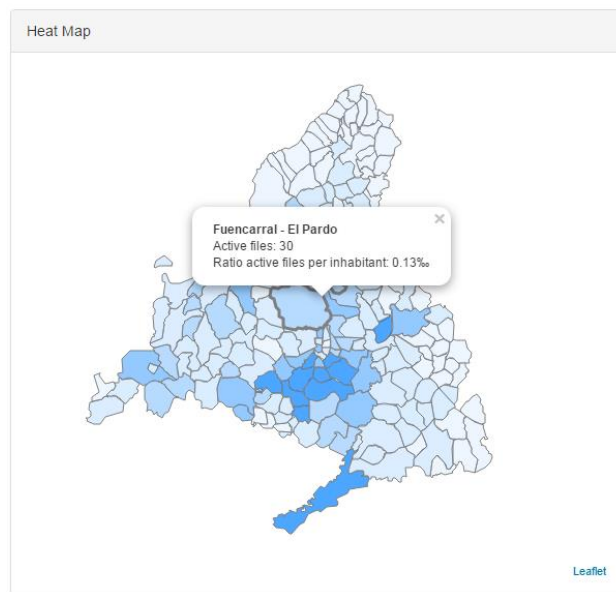


Figure 14 - Active files heat map

#### 2.1.3.1.2 Number of active files by type of housing chart

This chart will show the information of the number of active files disaggregated by type of housing

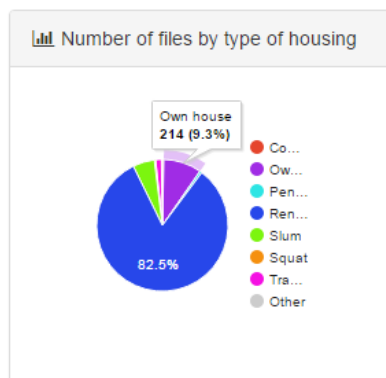


Figure 15 - Active files by type of housing



#### 2.1.3.1.3 Number of active files by gender chart

This chart will show the information of the number of active files disaggregated by type of housing

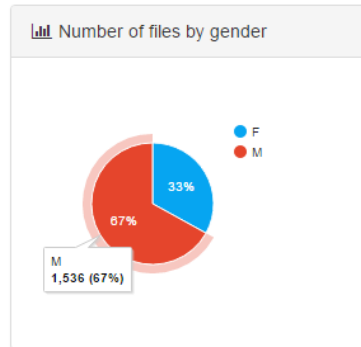


Figure 16 - Active files by gender

#### 2.1.3.1.4 Number of active files by age range chart

This chart will show the information of the number of active files disaggregated by age range

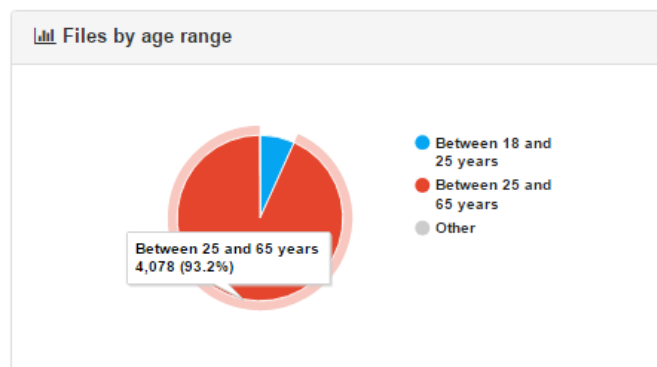


Figure 17 - Active files by age range

#### 2.1.3.1.5 Distribution of income by type chart

This chart will show the information of the distribution of income disaggregated by type

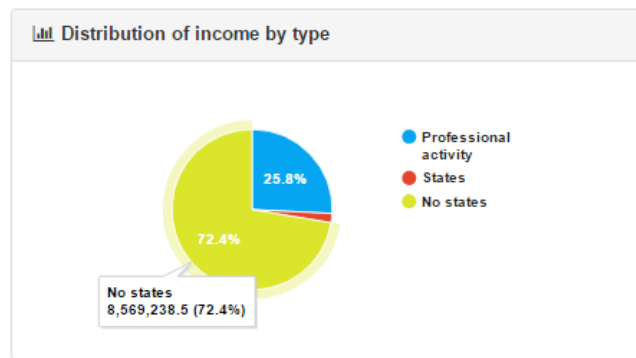


Figure 18 – Distribution of income by type in active files

#### 2.1.3.1.6 Number of files by years from issue date chart

This chart will show the information of the number of active files disaggregated by years from issue date

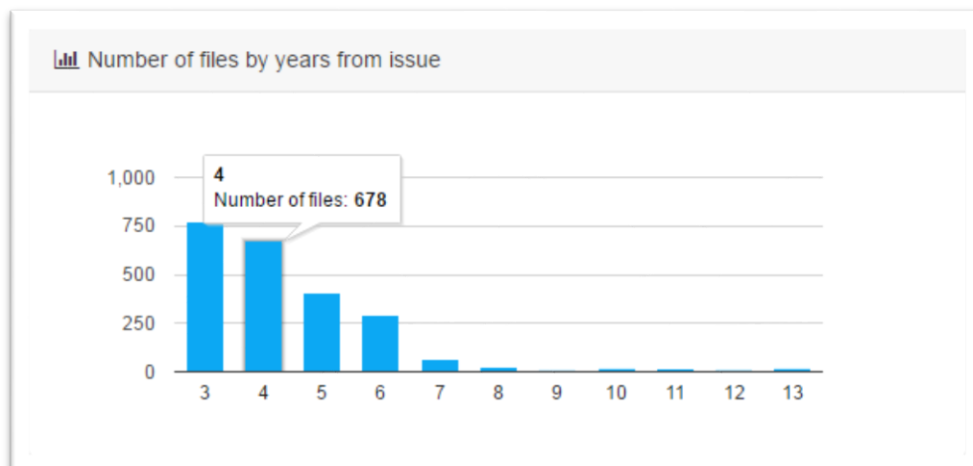


Figure 19 - Active files by years from issue date

#### 2.1.3.1.7 Number of files by Origin vs Nationality chart

This chart will show the information of the number of active files disaggregated by origin and in a second level disaggregated by nationality

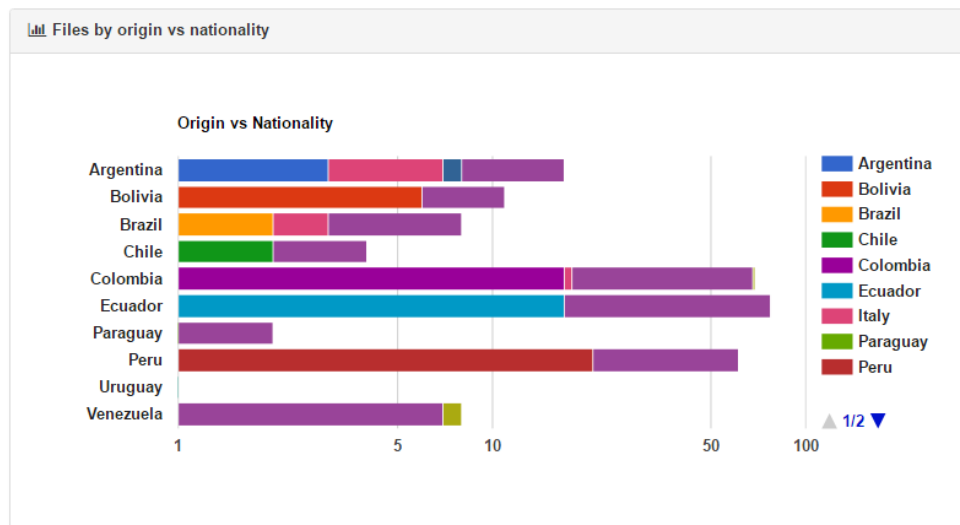


Figure 20 - Active files by origin vs nationality

#### 2.1.3.1.8 Number of files by range of income chart

This chart will show the information that references the active files disaggregated by income range.

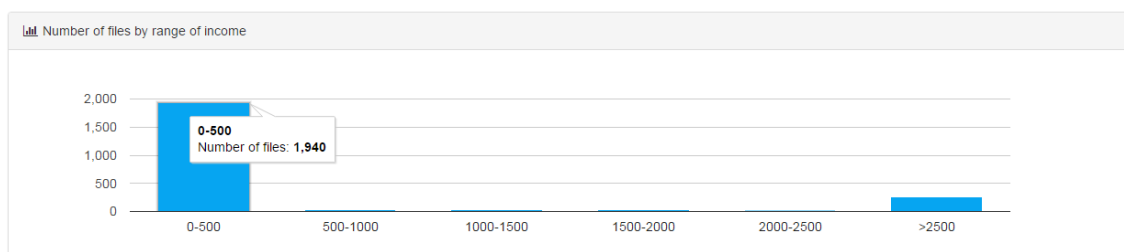
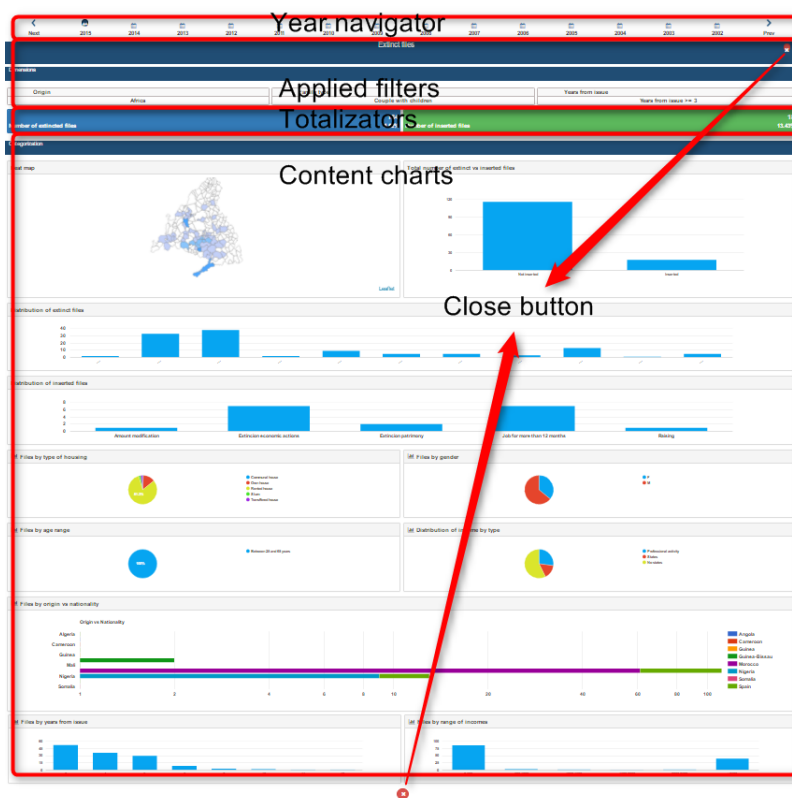


Figure 21 - Active files by range of income

#### 2.1.3.2 Segmentation Analysis extinct files detail page

This page will show the information about the extinct files for the filters applied according to the clicked bubble.

The page will have the following format:



**Figure 22 - Segmentation Analysis extinct files detail page**

In the totalization part, the following information will be shown:

- Number of extinct files. The total of extinct files and percentage in the selected year and segment filters applied
- Number of inserted files: All files that end with insertion and percentage in the selected year and segment.

In the categorization part the following information will be shown:

- Heat Map: This map will show the number of extinct files by district and town.
- Number of files by cause of Extinction
- Number of files by type of housing.
- Number of files by gender.
- Number of files by age range.
- Number of files by years from issue.
- Number of files by Origin vs Nationality.
- Distribution of income by type
- Number of files by range of Incomes.

A link will be shown at the top to be able to filter by year the detail with the same filters previously applied (see section [5.1.1.2 Carousel of year buttons](#))

### 2.1.3.2.1 Heat Map

This chart will show the information that references the extinct files and the ratio according to the number of people of the district / town for which the information is presented highlighting with darker colours those districts / towns with the higher number of extinct files.

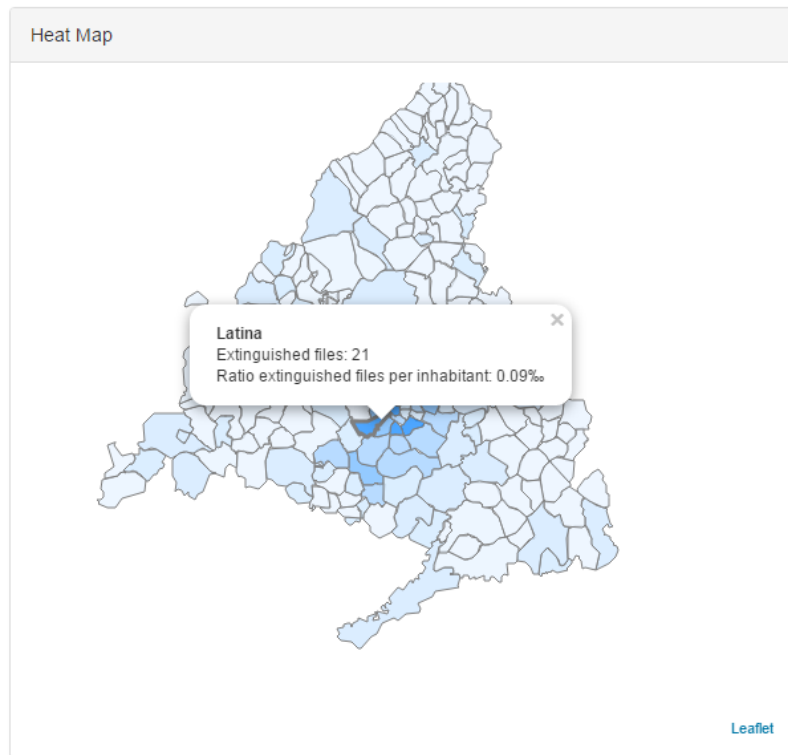


Figure 23 - Extinct files heat map

### 2.1.3.2.2 Number of files by cause of Extinction chart

This chart will show the information that references the extinct files disaggregated by cause of extinction

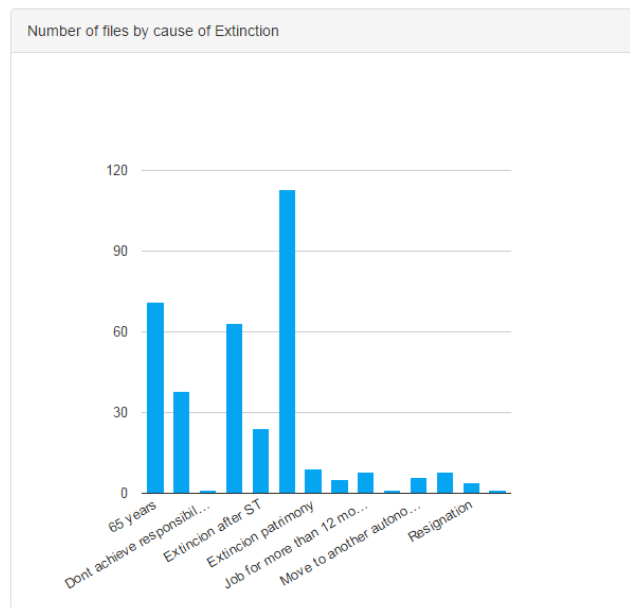


Figure 24 - Extinct files by cause of extinction

#### 2.1.3.2.3 Number of files by type of housing chart

This chart will show the information that references the extinct files disaggregated by type of housing.

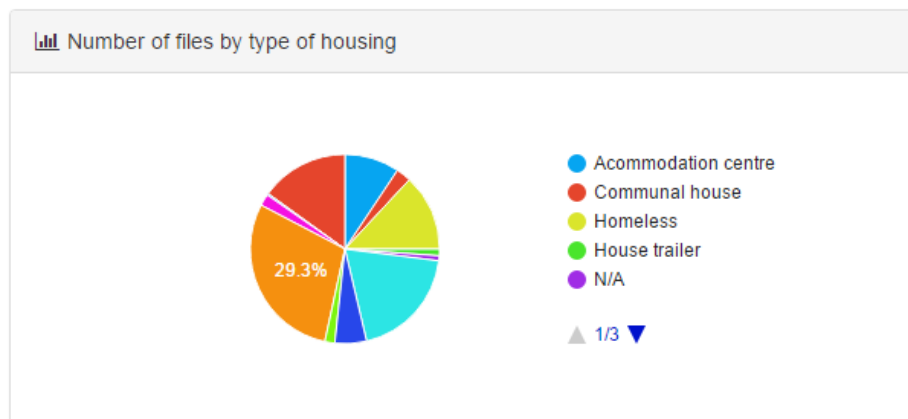


Figure 25 - Extinct files by type of housing

#### 2.1.3.2.4 Number of files by gender chart

This chart will show the information that references the extinct files disaggregated by gender.

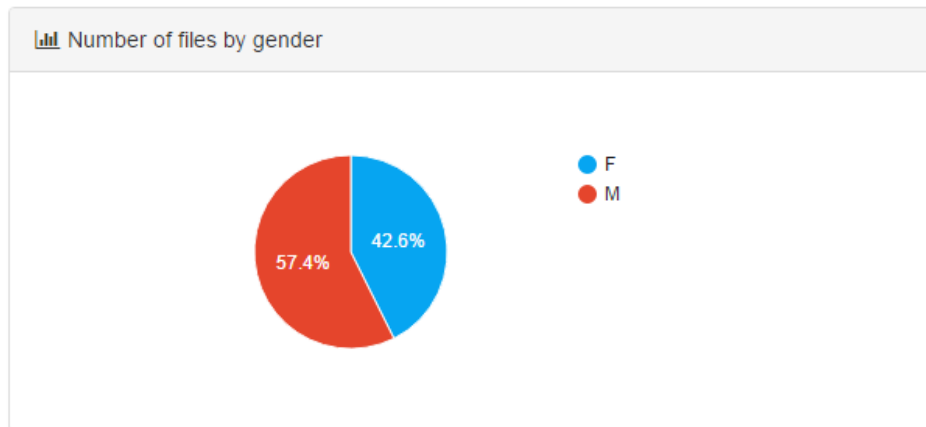


Figure 26 - Extinct files by gender

#### 2.1.3.2.5 Number of files by age range chart

This chart will show the information that references the extinct files disaggregated by age range.

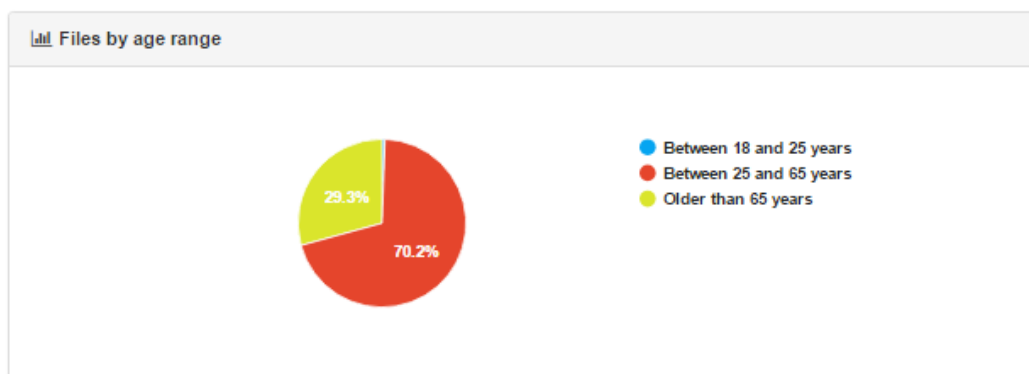


Figure 27 - Extinct files by age range

#### 2.1.3.2.6 Number of files by years from issue chart

This chart will show the information that references the extinct files disaggregated by years from issue.

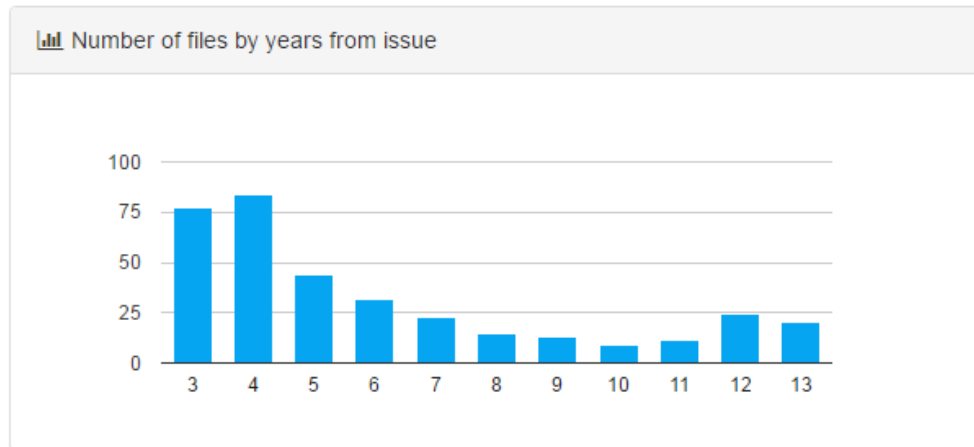


Figure 28 - Extinct files by years from issue

#### 2.1.3.2.7 Number of files by Origin vs Nationality chart

This chart will show the information of the number of extinct files disaggregated by origin and in a second level disaggregated by nationality.

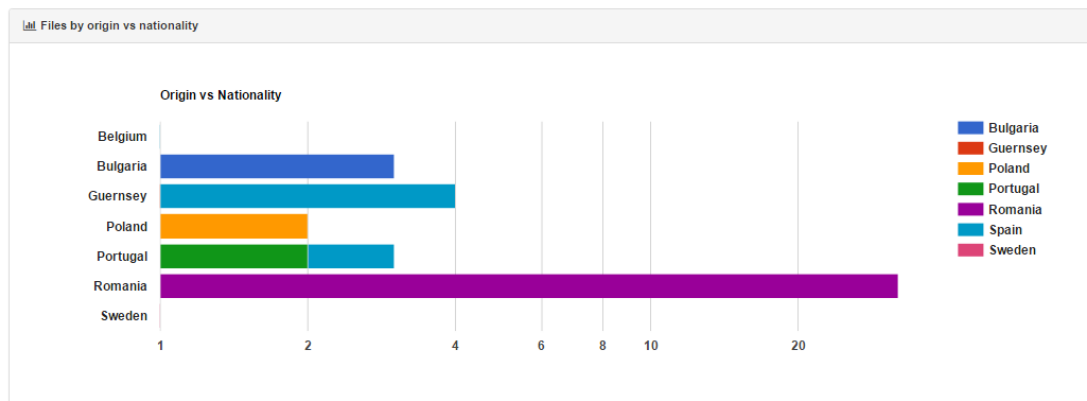


Figure 29 - Extinct files by origin vs nationality



#### 2.1.3.2.8 Number of files by income type chart

This chart will show the information that references the extinct files disaggregated by income type.

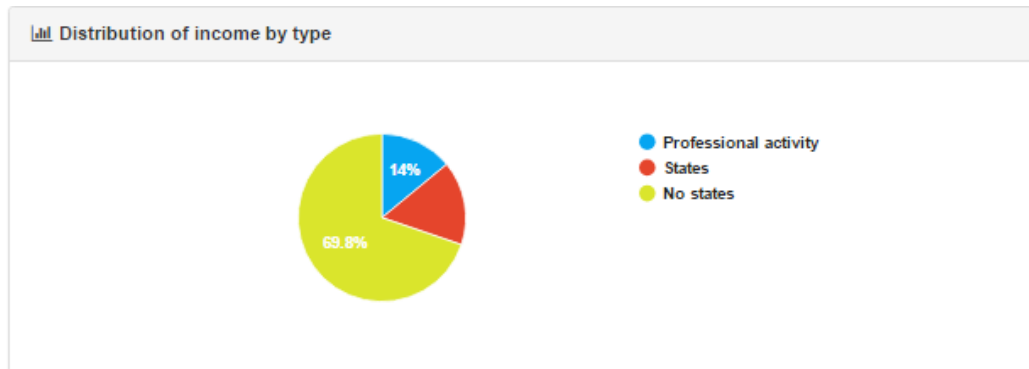


Figure 30 - Extinct files by income type

#### 2.1.3.2.9 Number of files by income range chart

This chart will show the information that references the extinct files disaggregated by income range.

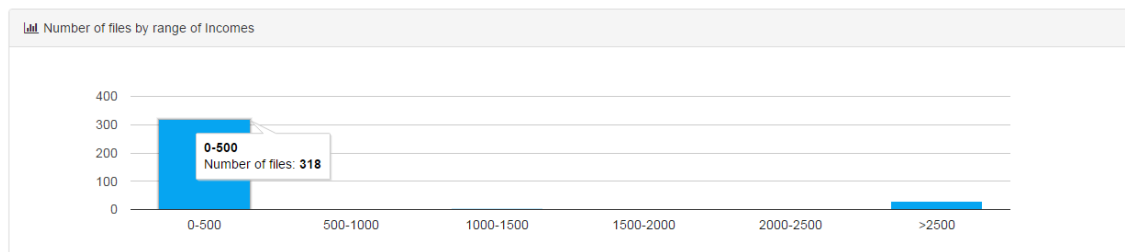
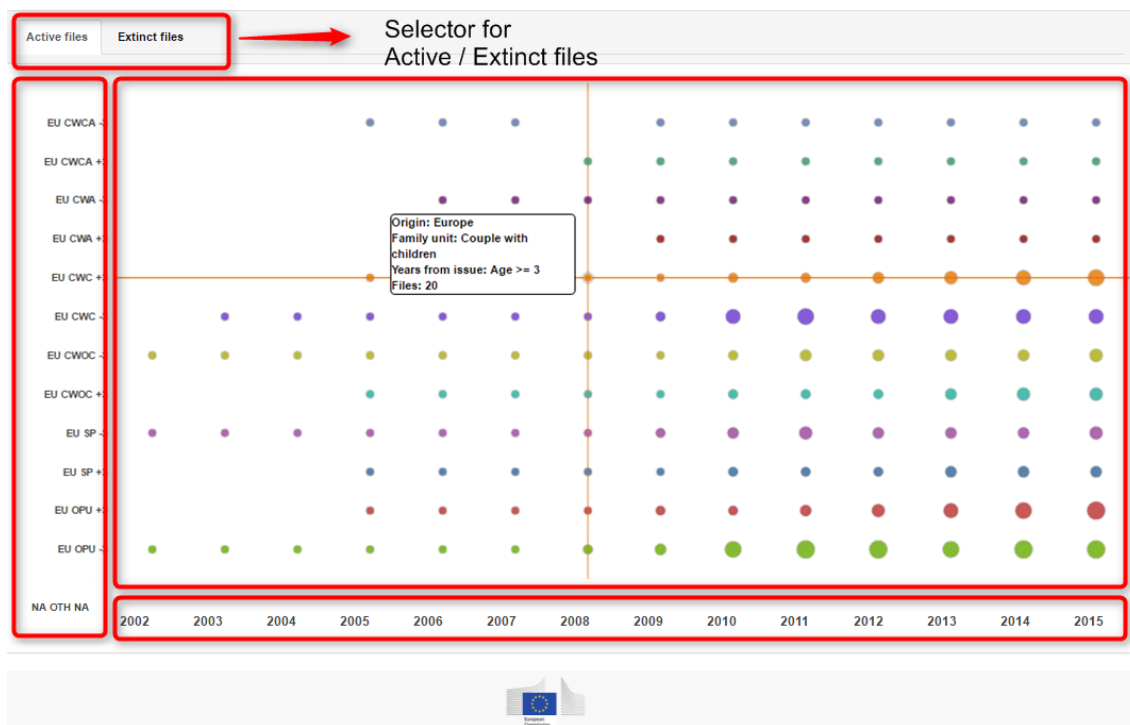


Figure 31 - Extinct files by income range

## 2.1.4 “Temporal Evolution” section

This section shows the data of the analysed files segmenting information by “segment” (Family Type, Continent origin and File antiquity) and year grouping the active files on the one hand and those extinct by another. The chart displaying the active files is displayed in the following figure:



**Figure 32 - Temporal Evolution Active files chart**

The information will be displayed using a bubble chart like follows, showing in each bubble information relative to:

- Origin: The continent origin
- Family Unit: The family unit
- File antiquity:
  - N/A when not documented
  - <3 years old
  - >=3 years old.
- Number of files: Number of files for this “segment”.

By clicking on a bubble the application will link to detail page that is the same page explained in the menus [5.1.2.1 Segmentation Analysis active files detail page](#) filtering the information with the filters that corresponds to a “segment”.

The chart displaying the extinct files is displayed in the following figure:



**Figure 33 - Temporal Evolution Extinct files chart**

The information will be displayed using a bubble chart like follows, showing in each bubble information relative to:

- Origin: The continent origin
- Family Unit: The family unit
- File antiquity:
  - N/A when not documented
  - <3 years old
  - >=3 years old.
- Number of files: Number of files for this “segment”.

By clicking on a bubble the application will link to detail page that is the same page explained in the menus [5.1.2.2 Segmentation Analysis extinct files detail page](#) filtering the information with the filters that corresponds to a “segment”.

### 2.1.5 “File Analysis” section

This section will show the data of the analysed files with the information disaggregated in different charts that makes focus in the main interests, allowing to filter the result shown of a dynamic form through the possibility of applying filters clicking on the results that are shown in the information presented in the chart characteristics.

The information will be displayed as follows:

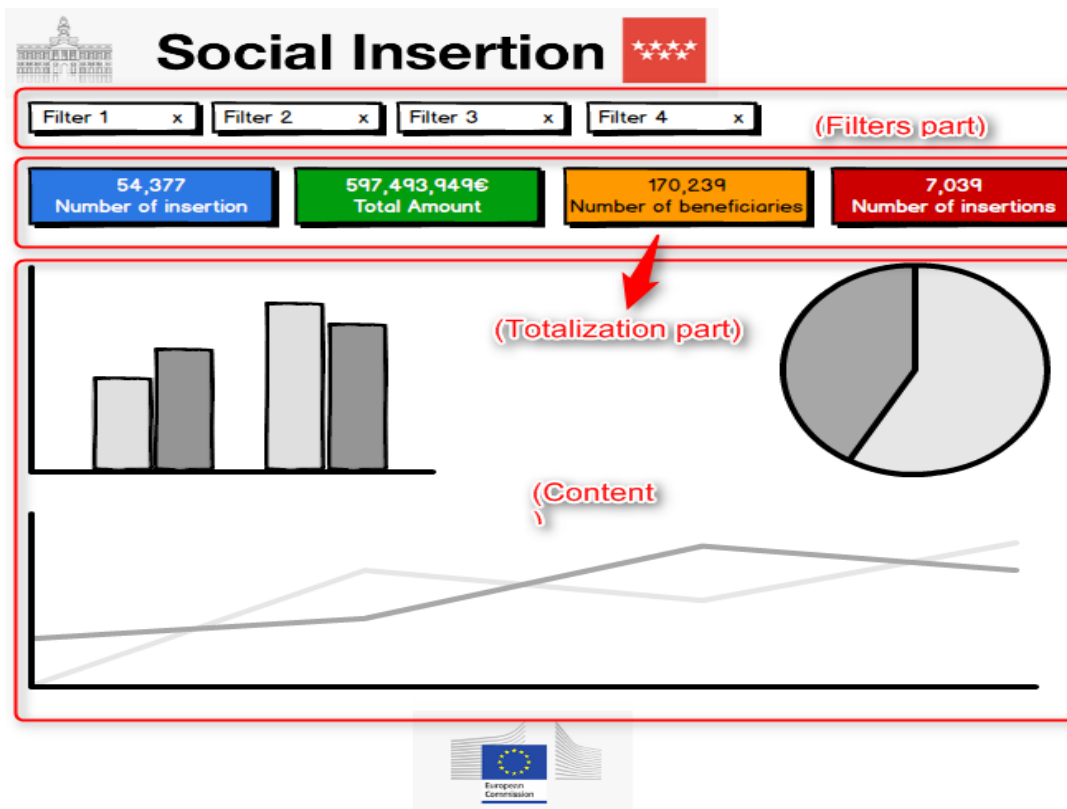


Figure 34 - File Analysis

In the filters part, a tab will be shown for each filter that has been applied on the query, being able to drop each filters by clicking on the cross image.

Whenever section of a graph is clicked, the filter will be applied to the rest of the charts and and, the rest of the sections on this chart will be marked in a grey colour to distinguish on which the filter has been applied in a visual and simple way.

In the totalization part, the following information will be shown:

- Number of files. The total of distinct files and percentage.
- Total amount: The total grants amount in euro (€) and percentage.
- Number of beneficiaries: Total people who obtain financial grants and percentage.
- Number of insertions: Number of files who ends in insertion and percentage.



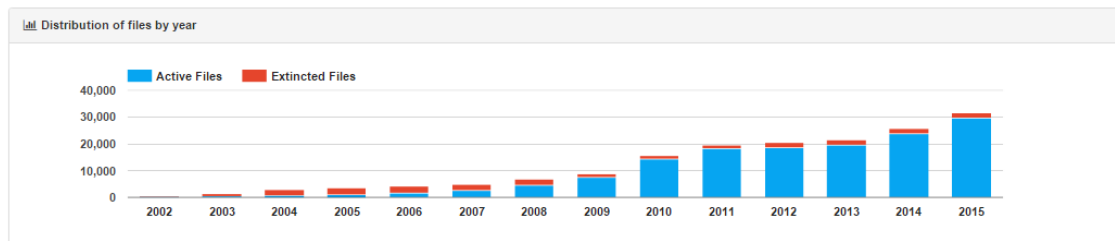
Figure 35 - File analysis totalization part

In the categorization part the following information will be shown:

- Distribution of files by year.
- Distribution of files by family units
- Distribution of files by nationality
- Distribution of files by country
- Distribution of files by education level..
- Distribution of files by antiquity.
- Distribution of files by age range.
- Distribution of files by housing types.
- Distribution of files by gender.
- Distribution of files by annual income.
- Distribution of files by occupation.
- Total number of extinct vs inserted files
- Distribution of extinct files.
- Distribution of inserted files.

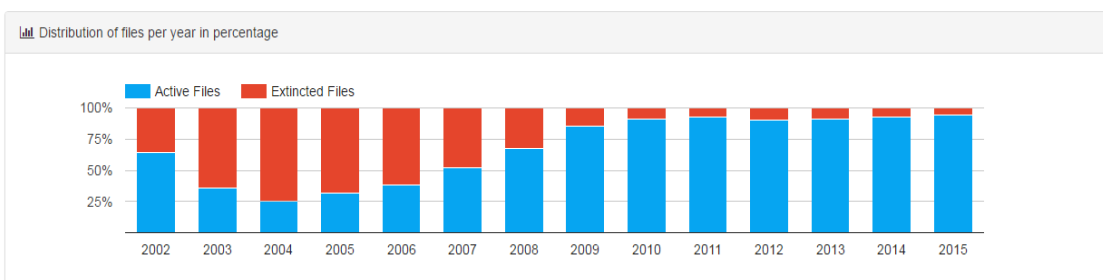
#### 2.1.5.1 Distribution of files by year chart

This chart will show the information that references all files disaggregated by year from 2002 to 2015 and active or extinct files.



**Figure 36 - Distribution of files by year**

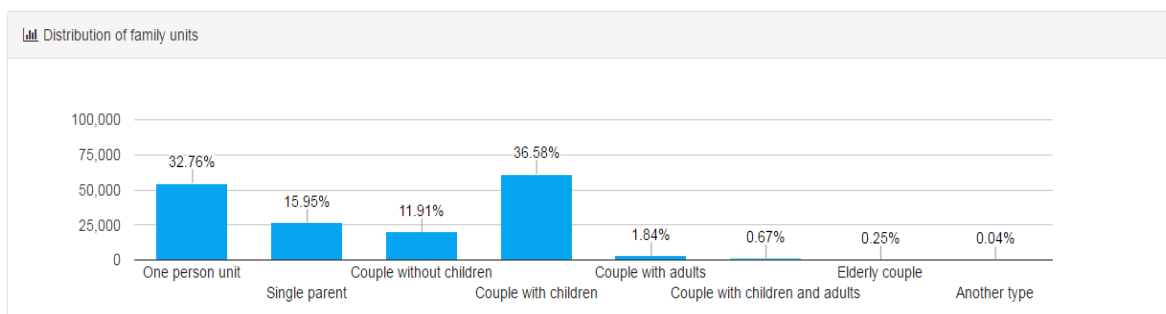
The following chart will show the percentage that references all files disaggregated by year from 2002 to 2015 and active or extinct files



**Figure 37 - Distribution of files by year (%)**

#### 2.1.5.2 Distribution of files by family units chart

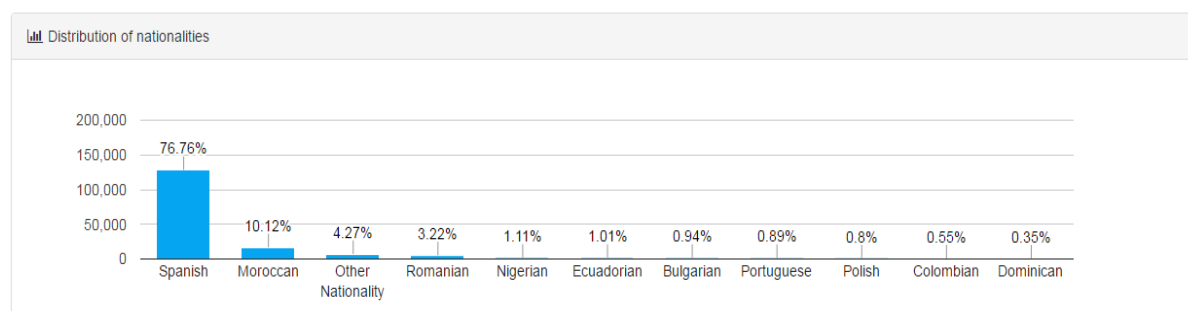
This chart will show the information that references all files disaggregated by family units showing percentage about total filtered files.



**Figure 38 - Distribution of files by family units**

### 2.1.5.3 Distribution of files by nationality chart

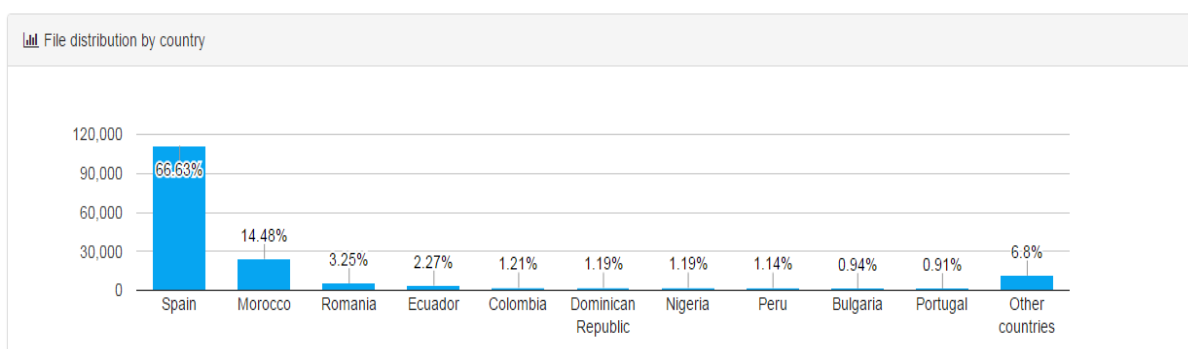
This chart will show the information that references all files disaggregated by nationality showing the detail for the next nationalities: Spanish, Moroccan, Romanian, Nigerian, Ecuadorian, Bulgarian, Portuguese, Polish, Colombian, Dominican and grouping the other nationalities in “Other nationality” showing percentage about total filtered files.



**Figure 39 - Distribution of files by nationality**

### 2.1.5.4 Distribution of files by country

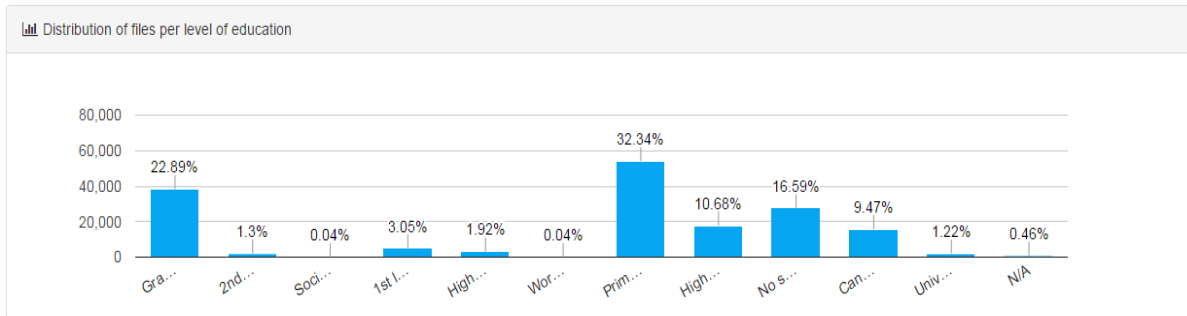
This chart will show the information that references all files disaggregated by country in a top 10 grouping the rest of results in “other countries” showing percentage about total filtered files.



**Figure 40 - Distribution of files by country**

### 2.1.5.5 Distribution of files by education level chart

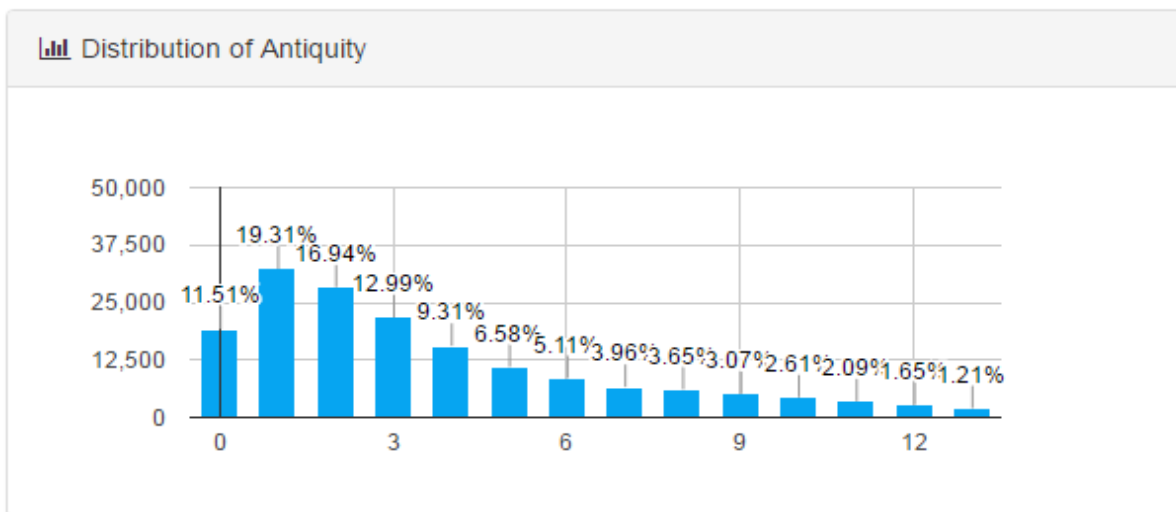
This chart will show the information that references all files disaggregated by education level showing percentage about total filtered files.



**Figure 41 - Distribution on files by education level**

### 2.1.5.6 Distribution of files by antiquity

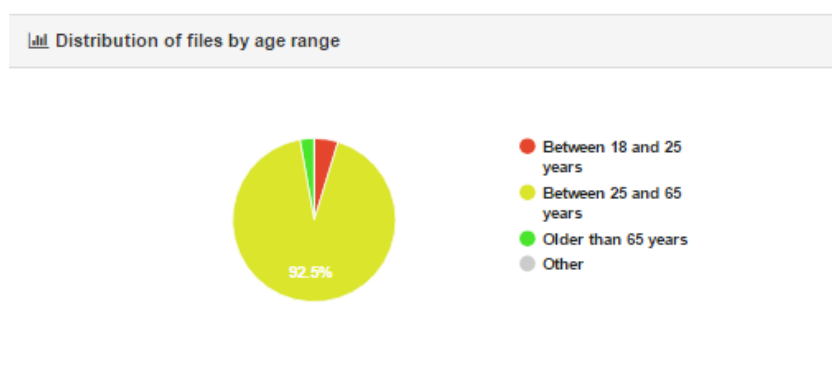
This chart will show the information that references all files disaggregated by file antiquity showing percentage about total filtered files.



**Figure 42 - Distribution of files by antiquity**

### 2.1.5.7 Distribution of files by age range

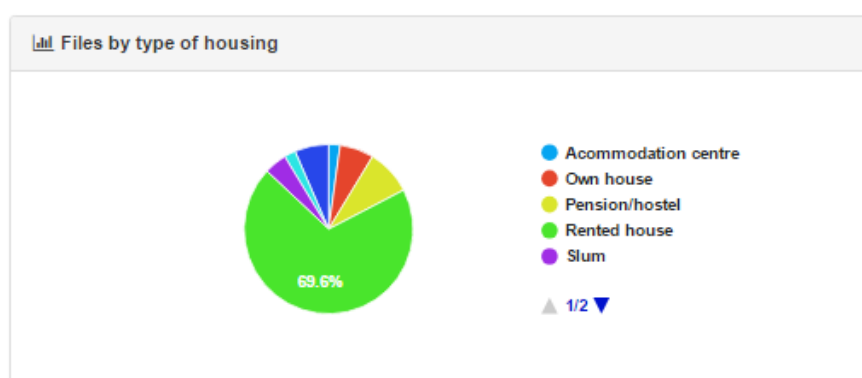
This chart will show the information that references all files disaggregated by age range showing percentage about total filtered files.



**Figure 43 - Distribution of files by age range**

#### 2.1.5.8 Distribution of files by housing type

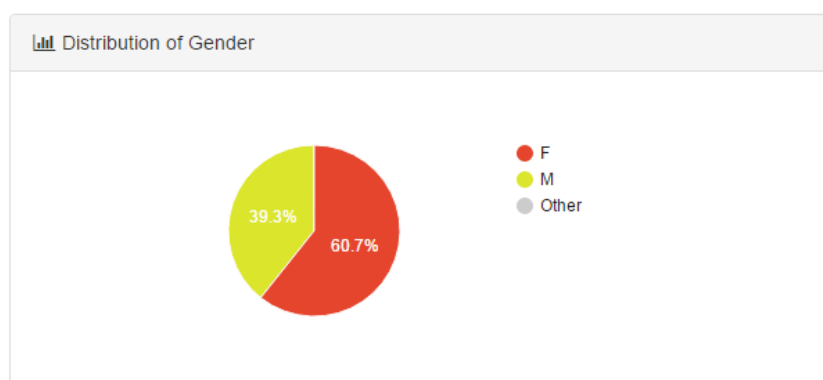
This chart will show the information that references all files disaggregated by housing type showing percentage about total filtered files.



**Figure 44 - Distribution on files by housing type**

#### 2.1.5.9 Distribution of files by gender

This chart will show the information that references all files disaggregated by gender. "F" for females and "M" for males and "Other" when sex is not documented showing percentage about total filtered files.

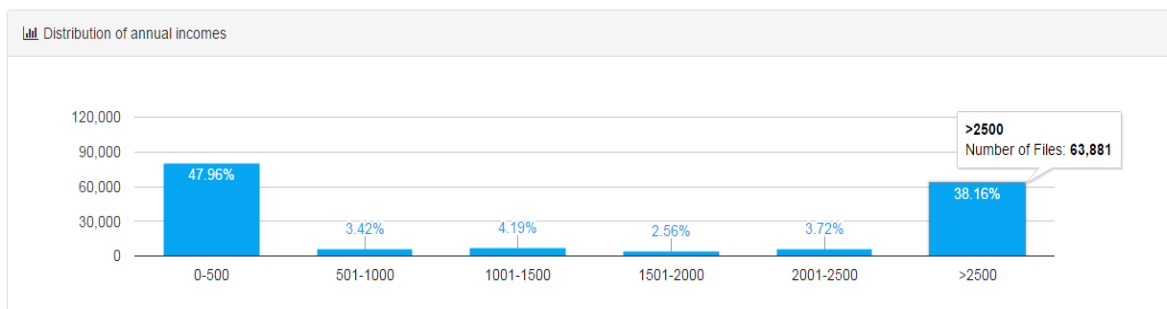


**Figure 45 - Distribution of files by gender**



### 2.1.5.10 Distribution of files by annual income

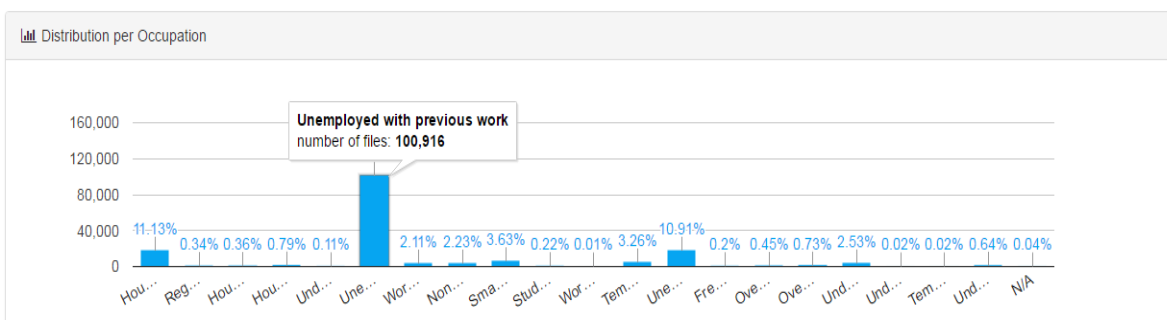
This chart will show the information that references all files disaggregated by annual income showing percentage about total filtered files.



**Figure 46 - Distribution of files by annual income**

### 2.1.5.11 Distribution of files by occupation

This chart will show the information that references all files disaggregated by occupation showing percentage about total filtered files.



**Figure 47 - Distribution of files by occupation**

### 2.1.5.12 Total number of extinct vs inserted files

This chart will show the information that references all extinct files disaggregated by inserted and not inserted. This chart will be visible as long as active files filter is not selected in the "Distribution of files by year chart".

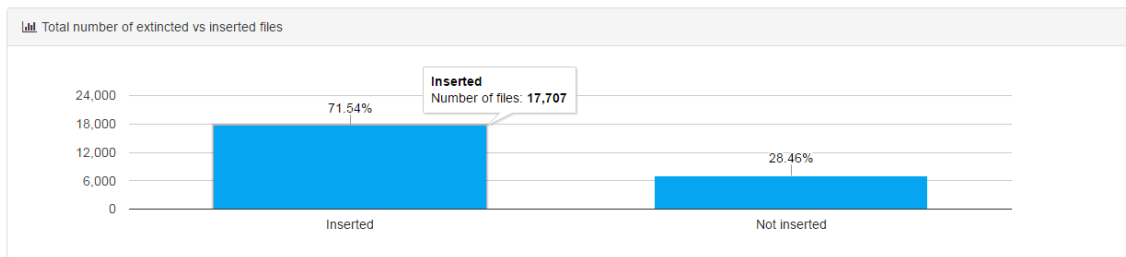


Figure 48 - Extinct files vs Inserted files

#### 2.1.5.13 Distribution of extinct files

This chart will show the information that references all “not inserted” extinct files disaggregated cause of extinction in a top 10 of information grouping the other causes in “other causes” group. As in the previous chart, this chart will be visible as long as active files filter is not selected in the “Distribution of files by year chart”.

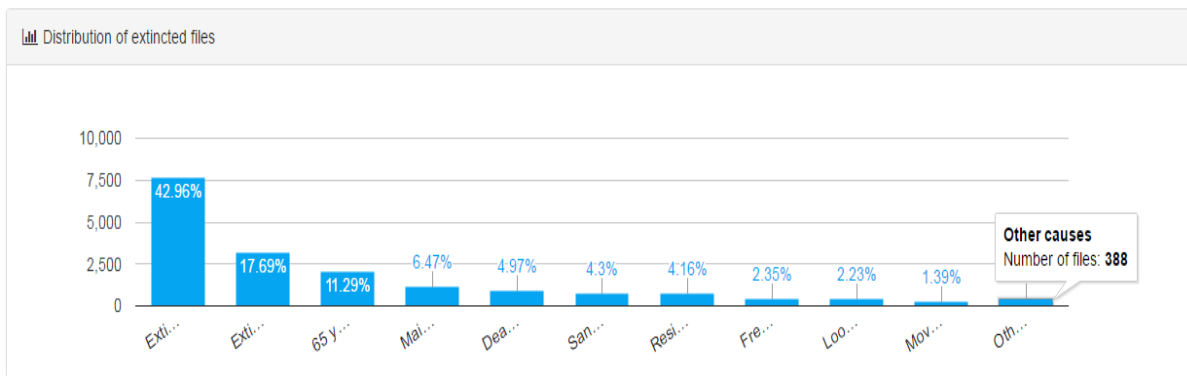


Figure 49 - Distribution of extinct files

#### 2.1.5.14 Distribution of inserted files

This chart will show the information that references all “not inserted” extinct files disaggregated cause of extinction. As in the previous chart, this chart will be visible as long as active files filter is not selected in the “Distribution of files by year chart”.

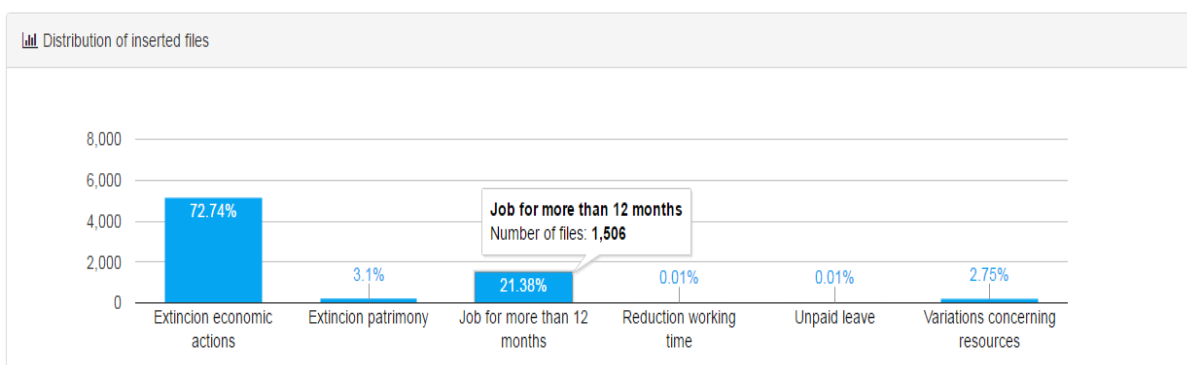
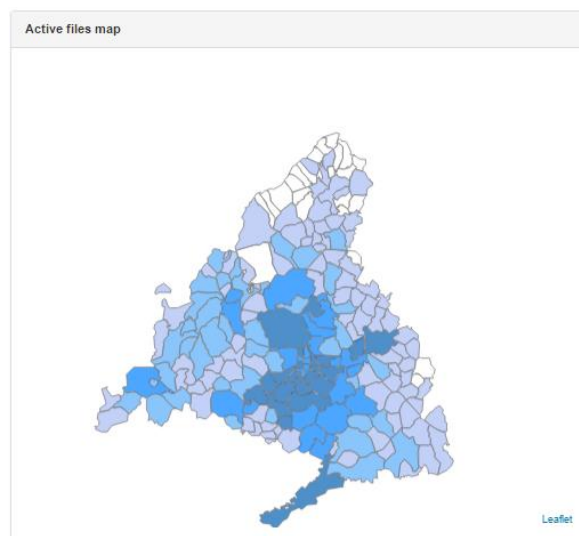


Figure 50 - Distribution of inserted files

#### 2.1.5.15 *Heat map of active files*

The chart shows a distribution of the number of active files per municipality and district. The intensity of the colour reflects the number of files



**Figure 51 - Heat map of active files**

#### 2.1.5.16 *Heat map of the ratio of active files per inhabitant*

The chart shows a distribution of the ratio between the number of active files and the number of inhabitants per municipality and district. The intensity of the colour reflects the number of files

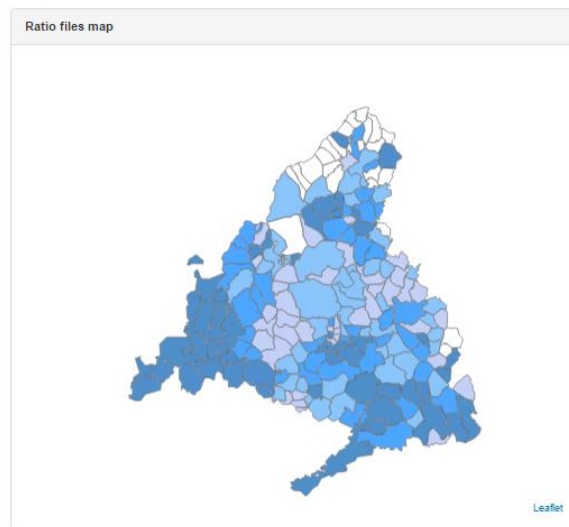


Figure 52 - Heat map of active files ratio

### 2.1.6 “IIP Analysis” section

This section will show the data of the analysed insertion plans with the information disaggregated in different charts that makes focus in the main interests, allowing to filter the result shown of a dynamic form through the possibility of applying filters clicking on the results that are shown in the information presented in the chart characteristics.

The information will be displayed as follows:

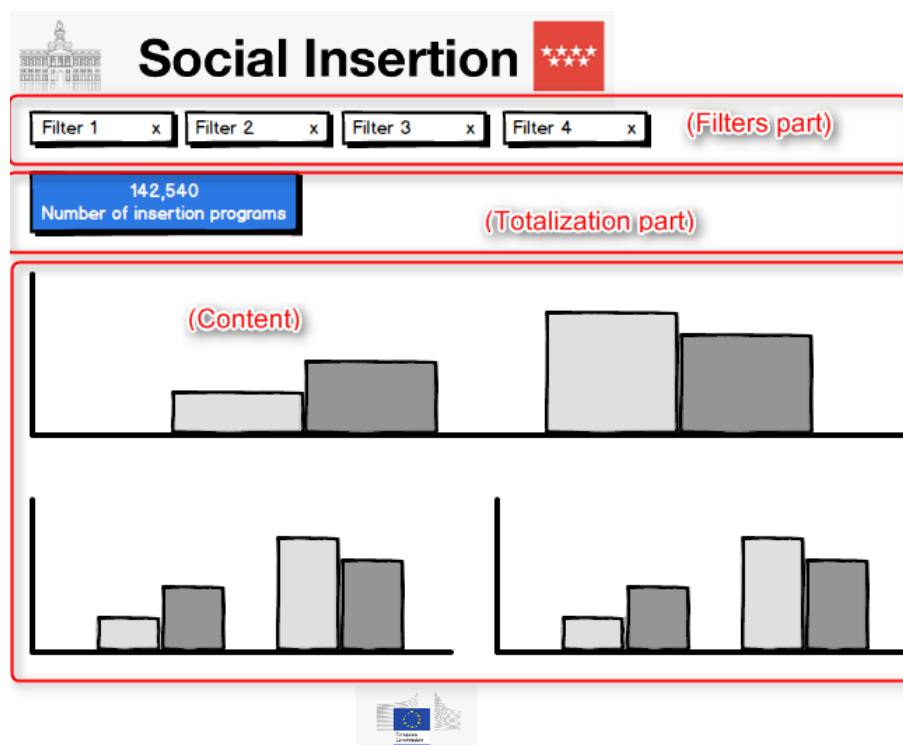


Figure 53 - IIP Analysis

Like File Analysis section in the filters part, a tab will be shown for each filter that has been applied on the query, being able to drop each filters by clicking on the cross image.

Whenever section of a graph is clicked, the filter will be applied to the rest of the charts and, the rest of the sections on this chart will be marked in a grey colour to distinguish on which the filter has been applied in a visual and simple way.

In the totalization part, the number of insertion plans will be shown.

In the categorization part the following information will be shown:

- Distribution of insertion plans by year
- Distribution of insertion plans by family unit
- Distribution of insertion plans by intervention causes.
- Distribution of insertion plans by potential opportunities.

### 2.1.6.1 Distribution of insertion plans by year

This chart will show the information that references the insertion plans disaggregated year by year showing percentage about total insertion plans.

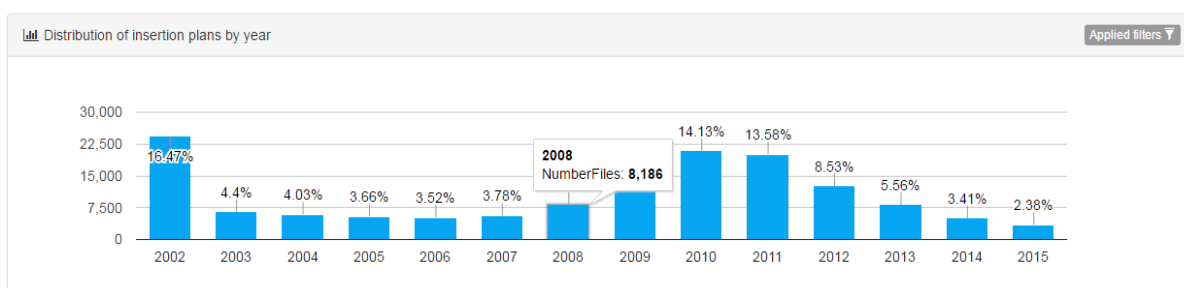


Figure 54 - Insertion plans by year

### 2.1.6.2 Distribution of insertion plans by family unit

This chart will show the information that references the insertion plans disaggregated year by family unit showing percentage about total insertion plans.

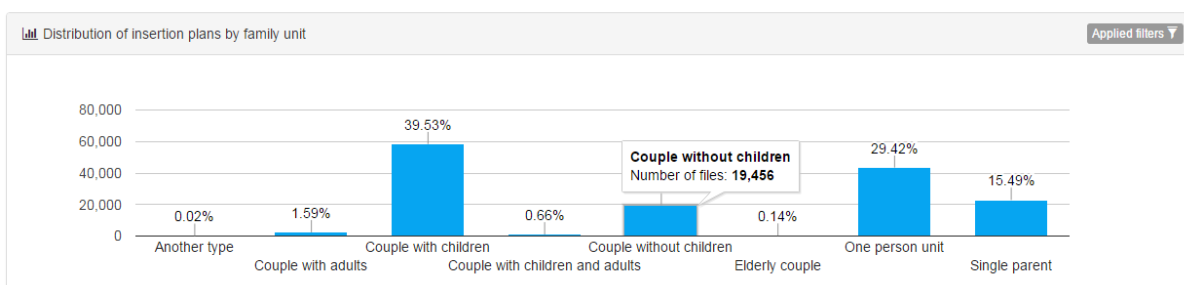


Figure 55 - Insertion plans by family unit

### 2.1.6.3 Distribution of insertion plans by intervention causes

This chart will show the information that references the insertion plans disaggregated year by intervention causes showing percentage about total insertion plans.

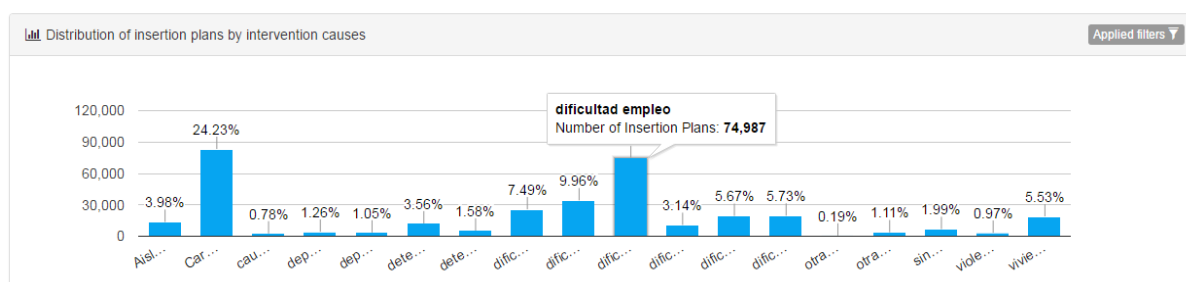


Figure 56 - Insertion plans by intervention causes

#### 2.1.6.4 Distribution of insertion plans by potential opportunities

This chart will show the information that references the insertion plans disaggregated year by potential opportunities showing percentage about total insertion plans.

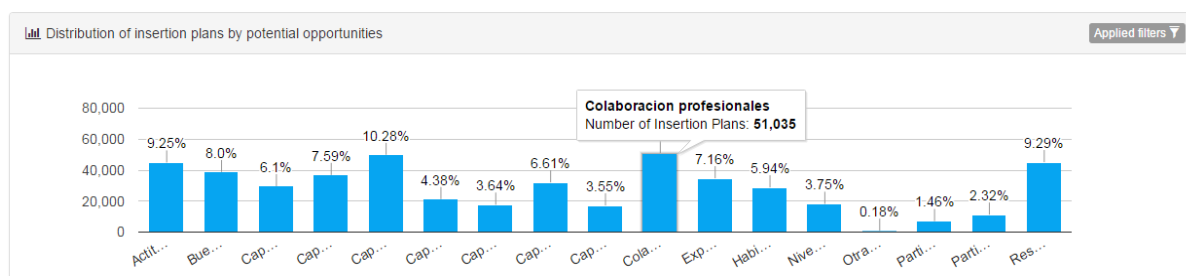


Figure 57 - Insertion plans by potential opportunities

#### 2.1.7 “Geographical Analysis” section

This section shows the data of the analysed files, insertion plans and social workers based on the population data obtained from the National Statistical Institute.

The information will be shown by using heat maps with information disaggregated by municipality and district:

The maps shown will be as follows, which will be detailed later:

- File ratio map.
- Insertion plans map.
- Social Workers map.

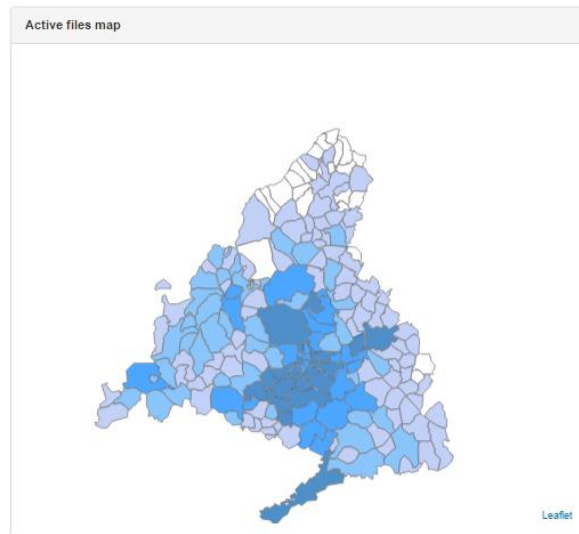
In order to change the year for the displayed data, a selector will be included at the top of the content, which, once clicked on a year, will recalculate the information (see section [5.1.12 Carousel of year buttons](#)).



Figure 58 - Year selector

#### 2.1.7.1 Heat map of active files

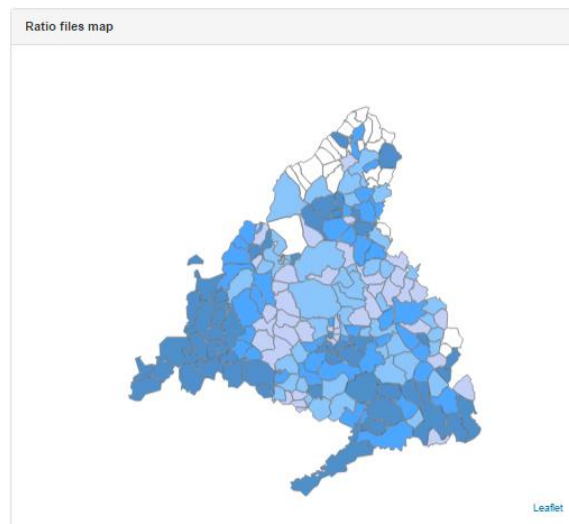
The chart shows a distribution of the number of active files per municipality and district. The intensity of the colour reflects the number of files



**Figure 59 - Heat map of active files**

#### 2.1.7.2 Heat map of the ratio of active files per inhabitant

The chart shows a distribution of the ratio between the number of active files and the number of inhabitants per municipality and district. The intensity of the colour reflects the number of files

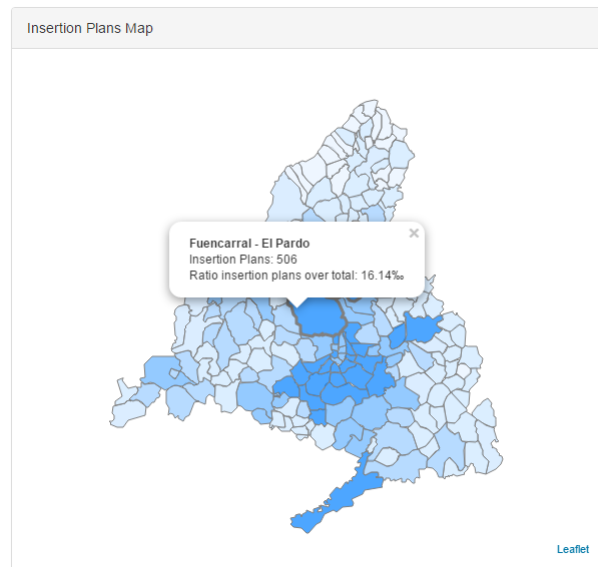


**Figure 60 - Heat map of active files ratio**

#### 2.1.7.3 Insertion plans map

This map will show the information regarding the insertion plans that affect a town or district for the selected year and the ratio of the total insertion plans of the year.

The information will be displayed as follows highlighting the areas with the highest number of insertion plans:

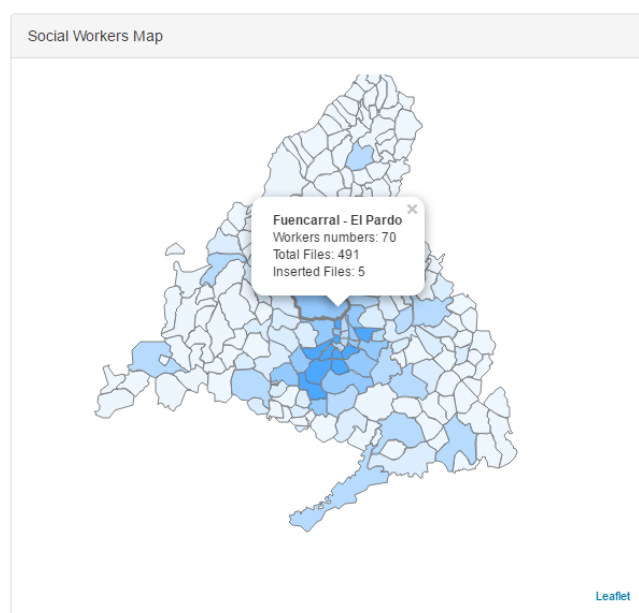


**Figure 61 - Insertion plans map**

#### 2.1.7.4 Social workers map

This map will show the information regarding the number of social workers who are working on a town or district as well as the total number of files and the number of files that have been finished with the insertion in the town/district.

The information will be displayed as follows highlighting the areas with the highest number of files:



**Figure 62 - Social workers map**



### 3 REQUIREMENTS SUMMARY

The table below contains all the project requirements.

ID	Functionalities	Description
RE-01	Show the home page when application starts	Show the home page as first page of the application.
RE-02	Show the conclusions about profiles with greater probably of insertion in the home page	Show the profiles with greater probably of insertion showing information about country, annual income, family unit and charts that represents this conclusion
RE-03	Show the conclusions about profiles with lower probably of insertion in the home page	Show the profiles with lower probably of insertion showing information about country, annual income, family unit and charts that represents this conclusion
RE-04	Show the efficiency in management in the home page	Show the conclusion about efficiency in management showing the next data: <ul style="list-style-type: none"> <li>• % of insertion</li> <li>• Average amount (€/file).</li> <li>• Average insertion cost (€/inserted file)</li> </ul>
RE-05	Show the prevention in the home page	Show a conclusion to prevent social exclusion in Community of Madrid.
RE-06	Show the possible fraud detection in the home page	Show a chart with information about population by nationality and doing a comparative about active files over inserted files by nationality.
RE-07	Show lateral navigation menu	Show lateral navigation menu that allow to access to the different parts of the application by clicking on the following links:
RE-08	Home link into lateral menu	Show Home link into lateral menu to access Home page by clicking it.
RE-09	Segmentation Analysis link into lateral menu	Show Temporal Evolution link into lateral menu to access files segmentation analysis page by clicking it.
RE-10	Temporal Evolution link into lateral menu	Show Temporal Evolution link into lateral menu to access files temporal evolution page by clicking it.
RE-11	File Analysis link into lateral menu	Show Temporal Evolution link into lateral menu to access Temporal Evolution page by clicking it.
RE-12	IIP Analysis link into lateral menu	Show IIP Analysis link into lateral menu to access Insertion plans analysis page by clicking it.
RE-13	Geographical Analysis link into lateral menu	Show Geographical Analysis link into lateral menu to access files, social workers and insertion plans geographical analysis page by clicking it.
RE-14	Show header	Show a header into the application with the title “Social Insertion” and Community of Madrid flag icon, that allows by clicking it to go to the home page
RE-15	Show footer	Show a footer into the application with the European commission logo.

<b>RE-16</b>	Active files chart into Segmentation Analysis	Show a chart with the information about active files by country, family unit, and years from issue showing the number of files in each bubble.
<b>RE-17</b>	Extinct files chart into Segmentation Analysis	Show a chart with the information about extinct files by country, family unit, and years from issue showing the number of files in each bubble.
<b>RE-18</b>	Year filter into Segmentation Analysis	Allow to filter by year Active files and Extinct files into Segmentation Analysis page
<b>RE-19</b>	Active files detail page link	Link to Active Segmentation detail page when clicking on Active files segmentation bubble to show the detailed info.
<b>RE-20</b>	Extinct files detail page link	Link to Extinct Segmentation detail page when clicking on Active files segmentation bubble to show the detailed info.
<b>RE-21</b>	Dimensions section part into active files detail page	Show a section with name dimensions into active files detail page with information about: <ul style="list-style-type: none"> <li>• Applied filters: Origin, Family Type, Years from issue.</li> <li>• Number and % of files.</li> <li>• Total grant received: Quantity and %.</li> <li>• New files: Number of new files.</li> <li>• Number of beneficiaries.</li> </ul>
<b>RE-22</b>	Heat map into active files detail page	Show a heat map with information about number of active files by town and districts and % of active files over the population ratio of the town/district.
<b>RE-23</b>	Number of files by type of housing chart into active files detail page	Show a chart with the number of active files disaggregated by type of housing
<b>RE-24</b>	Number of files by gender chart into active files detail page	Show a chart with the number of active files disaggregated by gender
<b>RE-25</b>	Number of files by age range chart into active files detail page	Show a chart with the number of active files disaggregated by age range
<b>RE-26</b>	Distribution of income by type chart into active files detail page	Show a chart with the distribution of income disaggregated by type
<b>RE-27</b>	Number of files by years from issue chart into active files detail page	Show a chart with the number of active files disaggregated by years from issue
<b>RE-28</b>	Number of files by type origin vs nationality chart into active files detail page	Show a chart with the number of active files disaggregated by origin of the person and his nationality.
<b>RE-29</b>	Number of files by range of income chart into active files detail page	Show a chart with the number of active files disaggregated by range of income
<b>RE-30</b>	Year navbar into active files detail page	Show a navigation bar into active files detail page that allows to calculate information for another year.
<b>RE-31</b>	Heat map into extinct files detail page	Show a heat map with information about number of extinct files by town and districts and % of extinct files over the population ratio of the town/district.

<b>RE-32</b>	Total number of extinct files vs inserted files chart into extinct files detail page	Show a chart with the number of extinct non-inserted files in one bar and the number of inserted files in another bar.
<b>RE-33</b>	Distribution of extinct files chart into extinct files detail page	Show a chart with the number of extinct non-inserted files disaggregated by extinction type.
<b>RE-34</b>	Distribution of inserted files chart into extinct files detail page	Show a chart with the number of extinct inserted files disaggregated by extinction type.
<b>RE-35</b>	Number of files by type of housing chart into extinct files detail page	Show a chart with the number of extinct files disaggregated by type of housing
<b>RE-36</b>	Number of files by gender chart into extinct files detail page	Show a chart with the number of extinct files disaggregated by gender
<b>RE-37</b>	Number of files by age range chart into extinct files detail page	Show a chart with the number of extinct files disaggregated by age range
<b>RE-38</b>	Number of files by years from issue chart into extinct files detail page	Show a chart with the number of extinct files disaggregated by years from issue
<b>RE-39</b>	Number of files by type origin vs nationality chart into active files detail page	Show a chart with the number of extinct files disaggregated by origin of the person and his nationality.
<b>RE-40</b>	Distribution of income by type chart into active files detail page	Show a chart with the distribution of income disaggregated by type
<b>RE-41</b>	Number of files by range of income chart into active files detail page	Show a chart with the number of extinct files disaggregated by range of income
<b>RE-42</b>	Year navbar into extinct files detail page	Show a navigation bar into extinct files detail page that allows to calculate information for the selected year.
<b>RE-43</b>	Active files chart into Temporal Evolution page	<p>Show a chart into temporal evolution page with information about active files disaggregated by segment (Origin, Family unit and Years from issue &gt; 3, &lt;= 3 or N/A) and year.</p> <p>In each bubble show information about:</p> <ul style="list-style-type: none"> <li>• Origin</li> <li>• Family unit</li> <li>• Years from issue.</li> <li>• Number of active files.</li> </ul>
<b>RE-44</b>	Extinct files chart into Temporal Evolution page	<p>Show a chart into temporal evolution page with information about extinct files disaggregated by segment (Origin, Family unit and Years from issue &gt; 3, &lt;= 3 or N/A) and year.</p> <p>In each bubble show information about:</p> <ul style="list-style-type: none"> <li>• Origin</li> <li>• Family unit</li> <li>• Years from issue.</li> <li>• Number of extinct files</li> </ul>
<b>RE-45</b>	Active files detail page link	Link to Active Segmentation detail page by clicking on a bubble in Temporal evolution active files to show the detailed info.

<b>RE-46</b>	Active files detail page link	Link to extinct Segmentation detail page by clicking on a bubble in Temporal evolution active files to show the detailed info.
<b>RE-47</b>	Number of files into File Analysis page	Show the number of files. This number will be calculated based on the applied filters
<b>RE-48</b>	Total amount into File Analysis page	Show the total amount. This number will be calculated based on the applied filters
<b>RE-49</b>	Number of beneficiaries into File Analysis page	Show the number of beneficiaries. This number will be calculated based on the applied filters
<b>RE-50</b>	Number of insertions into File Analysis page	Show the number of insertions. This number will be calculated based on the applied filters and will only be visible when active files filter is not selected
<b>RE-51</b>	Distribution of files by year in percentage chart into File Analysis page	Show a chart with information about files disaggregated by percentage of active and extinct in the same bar and year.
<b>RE-52</b>	Distribution of files by family units chart into File Analysis page	Show a chart with the number of files disaggregated by family units
<b>RE-53</b>	Distribution of files by nationalities chart into File Analysis page	Show a chart with the number of files disaggregated by nationality.
<b>RE-54</b>	Distribution of files by country chart into File Analysis page	Show a chart with the number of files disaggregated by country.
<b>RE-55</b>	Distribution of files by education level chart into File Analysis page	Show a chart with the number of files disaggregated by education level.
<b>RE-56</b>	Distribution of files by years from issue chart into File Analysis page	Show a chart with the number of files disaggregated by years from issue.
<b>RE-57</b>	Distribution of files by age range chart into File Analysis page	Show a chart with the number of files disaggregated by age range.
<b>RE-58</b>	Distribution of files by housing types chart into File Analysis page	Show a chart with the number of files disaggregated by housing types.
<b>RE-59</b>	Distribution of files by Gender chart into File Analysis page	Show a chart with the number of files disaggregated by gender.
<b>RE-60</b>	Distribution of files by annual incomes chart into File Analysis page	Show a chart with the number of files disaggregated by annual incomes.
<b>RE-61</b>	Distribution of files by occupation chart	Show a chart with the number of files disaggregated by occupation.
<b>RE-62</b>	Total number of extinct vs inserted files chart into File Analysis page	Show a chart with the number of non-inserted extinct files in one bar and inserted files in another bar.  This chart will only be visible when active files filter is not selected
<b>RE-63</b>	Distribution of extinct files chart into File Analysis page	Show a chart with the number of non-inserted extinct files disaggregated by type of extinction.  Show the information in a top 10 grouping the rest of the causes in "Other causes" bar.  This chart will only be visible when active files filter is not selected

<b>RE-64</b>	Distribution of inserted files chart into File Analysis page	Show a chart with the number of inserted extinct files disaggregated by type of extinction.  This chart will only be visible when active files filter is not selected
<b>RE-65</b>	Filter results of File Analysis charts into File Analysis page	Possibility to apply filters to the chart by clicking on any of the segments of the different ones. When a filter is applied the rest of the segment of the chart will show in grey colour.
<b>RE-66</b>	Show applied filters of File Analysis charts into File Analysis page	Show at the top of the page the filters applied being able to remove each one separately or altogether.  In the title of all charts show the active filters.
<b>RE-67</b>	Number of insertion programs into IIP Analysis page	Show the number of insertion programs.  This number will be calculated based on the applied filters
<b>RE-68</b>	Distribution of insertion plans by year chart into IIP Analysis page	Show a chart with the number of insertion plans disaggregated by year showing percentage.
<b>RE-69</b>	Distribution of IIP by family unit chart into IIP Analysis page	Show a chart with the number of insertion plans disaggregated by family unit showing percentage.
<b>RE-70</b>	Distribution of IIP by intervention causes into IIP Analysis page	Show a chart with the number of insertion plans disaggregated by intervention causes showing percentage.
<b>RE-71</b>	Distribution of IIP by potential opportunities into IIP Analysis page	Show a chart with the number of insertion plans disaggregated by potential opportunities showing percentage.
<b>RE-72</b>	Filter results of IIP Analysis charts into IIP Analysis page	Possibility to apply filters to the charts by clicking on any of the segments of the different ones. When a filter is applied the rest of the segment of the chart will show in grey colour.
<b>RE-73</b>	Show applied filters of IIP Analysis charts into IIP Analysis page	Show at the top of the page the filters applied being able to remove each one separately or altogether.  In the title of all charts show the active filters.
<b>RE-74</b>	Active files heat map into Geographical Analysis page	Show a heat map with information about number of active files by town and districts showing in darker colours in those with the largest number of files  .
<b>RE-75</b>	Active File ratio heat map into Geographical Analysis page	Show a heat map with information about of the ratio of active files per inhabitant by town and districts showing in darker colours in those with the biggest ratio.
<b>RE-76</b>	Insertion plans heat mal into Geographical Analysis page	Show a heat map with information about number of insertion plans by town and districts and % of insertion plans over the population ratio of the town/district.
<b>RE-77</b>	Social Workers heat map into Geographical Analysis page	Show a heat map with information about: <ul style="list-style-type: none"> <li>• Works number.</li> <li>• Total Files.</li> <li>• Inserted files</li> </ul> by town and districts showing in darker colours in those with the biggest number of inserted files