

VIDI USER GUIDE

1. VIDI TOOLBAR FUNCTIONALITY

As shown in Figure 1, the VIDI toolbar is used in parallel with the web forum of interest. It is composed of a *selection panel* in the upper part of the toolbar and three *action buttons* further down (as indicated by the two arrows in Figure 1). Using the selection panel, the user can select the part of the forum she might be interested in. Once the selection has been made, the action buttons provide access to the main VIDI toolbar functionalities, described in the following subsections.

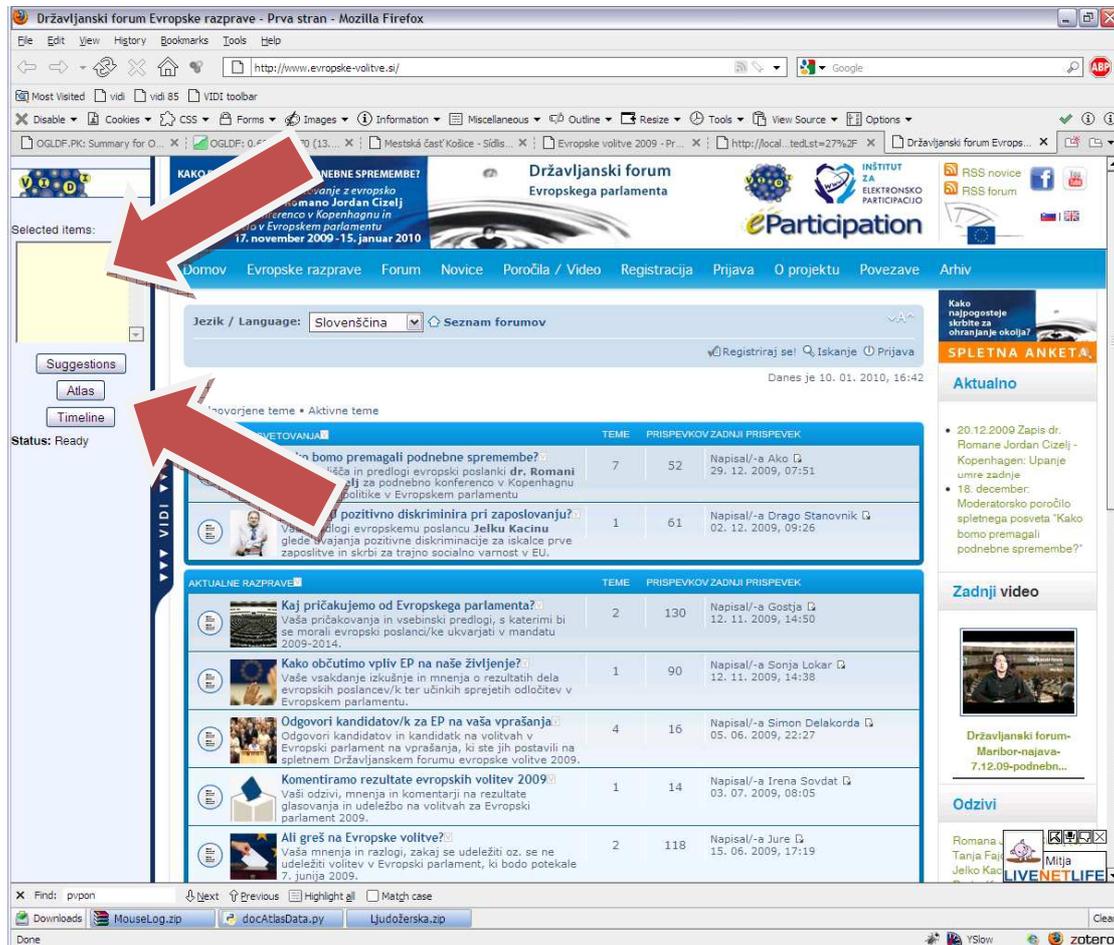


Figure 1: The toolbar deployed on INEPA's web forum. The selection panel and action buttons are marked with arrows.

1.1. Browsing Suggestions

The toolbar can, given a list of topics and threads of interest for the user, suggest further topics and threads on the current page that are similar to the selected ones and therefore potentially also interesting.

1.2. Topical Atlas

As a means of visually structuring a large subset of the forum, VIDl toolbar can plot all posts from a selection of topics and threads in a two-dimensional space. Each post is represented by a point and the points are arranged in such a way that the proximity of two points is roughly proportional to the similarity of the two corresponding posts. This way, clusters of points naturally form, representing subtopics of the part of the forum that is being analyzed. For each cluster, the user is able to determine the keywords (and with that, the topic).

1.3. Topical Timeline

To determine the popularity of topics through time, the VIDl toolbar can automatically determine the relevant topics in a given subset of the forum and plot the number of posts on each of the topics as a function of time. The number of identified topics (and consequently their specificity) can be adjusted by the user.

2. DEPLOYMENT MODES AND INSTALLATION

The client side of the toolbar is written in javascript the user can inject the relevant javascript into the page using bookmarklets¹.

2.1. Client-Side Deployment

If the user wishes to use the VIDI toolbar on a forum that does not include the above snippet of code in their pages, he should create a bookmark button pointing to the following URL:

```
javascript:(function(){var%20e=document.createElement('script');e.id='gwt_vidi';e.src='http://vidi.ijs.si/forumexplorerbar/forumexplorerbar.nocache.js?bookmarklet=1';document.body.appendChild(e);})();
```

For convenience, further instructions on how to create a bookmark button and a copy-paste-ready version of the above URL are available at <http://vidi.ijs.si/install.html>.

Once the bookmark button has been created, the user can use the VIDI toolbar by visiting a VIDI-supported forum of interest and pressing that button.

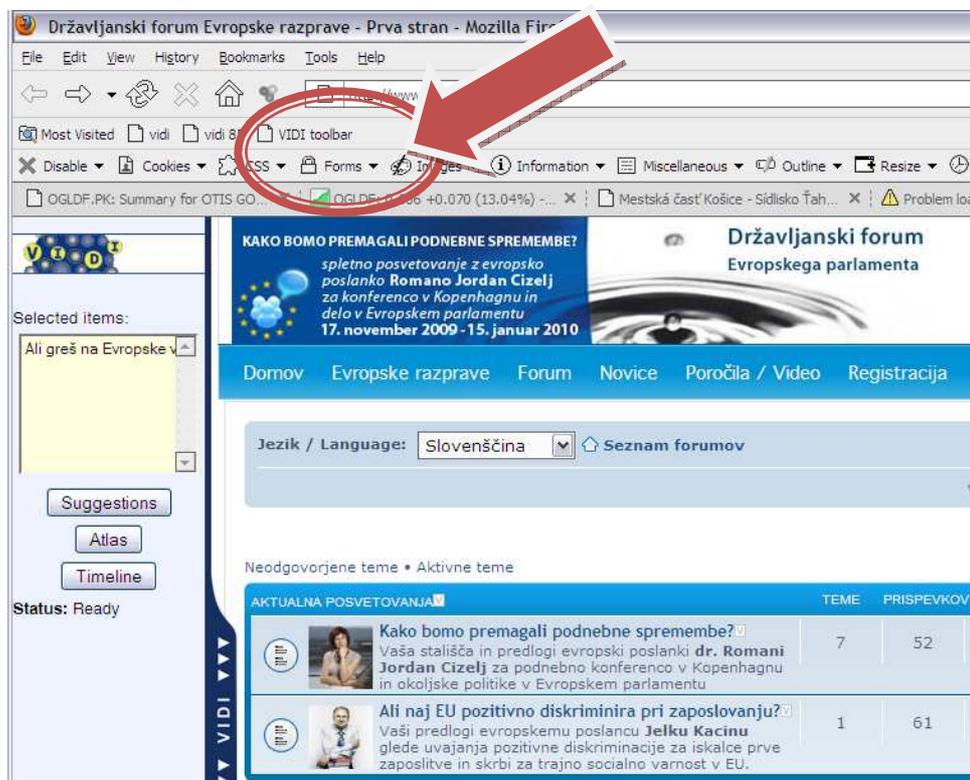


Figure 2: Client-side deployment with a bookmark button – example in Firefox.

¹ <http://en.wikipedia.org/wiki/Bookmarklet>

3. USER MANUAL

3.1. Getting Started

To use the VIDI toolbar, navigate to a VIDI-supported forum. In the scope of this testproject, the following forum has been supported:

- <http://forum.index.hu/Topic/showTopicList?t=9111313>

3.2. Expressing Areas of Interest

When VIDI is running, small icons appear next to each link that points to a discussion topic or a discussion thread, as illustrated in Figure 3. Click an icon to express interest in the corresponding forum section. The sections selected in this way are listed in the yellowish selection panel at the top of VIDI toolbar. Click an icon again to deselect the corresponding forum section.



Figure 3: A close-up of the web page showing the small VIDI icons with which the user can express interest in the topic(s) of choice.

3.3. Obtaining Browsing Suggestions

To obtain suggestions on which forum threads might be of interest to you, first indicate your interest by selecting several threads as described in the previous section. Then, click the first button on the VIDI panel, "Suggestions". After a few seconds, links on the current page identified by the system as relevant to you will be marked with an orange icon; see Figure 4. The bigger the icon, the higher is the probability that the link is truly relevant.

To clear the suggestions, reload the page.

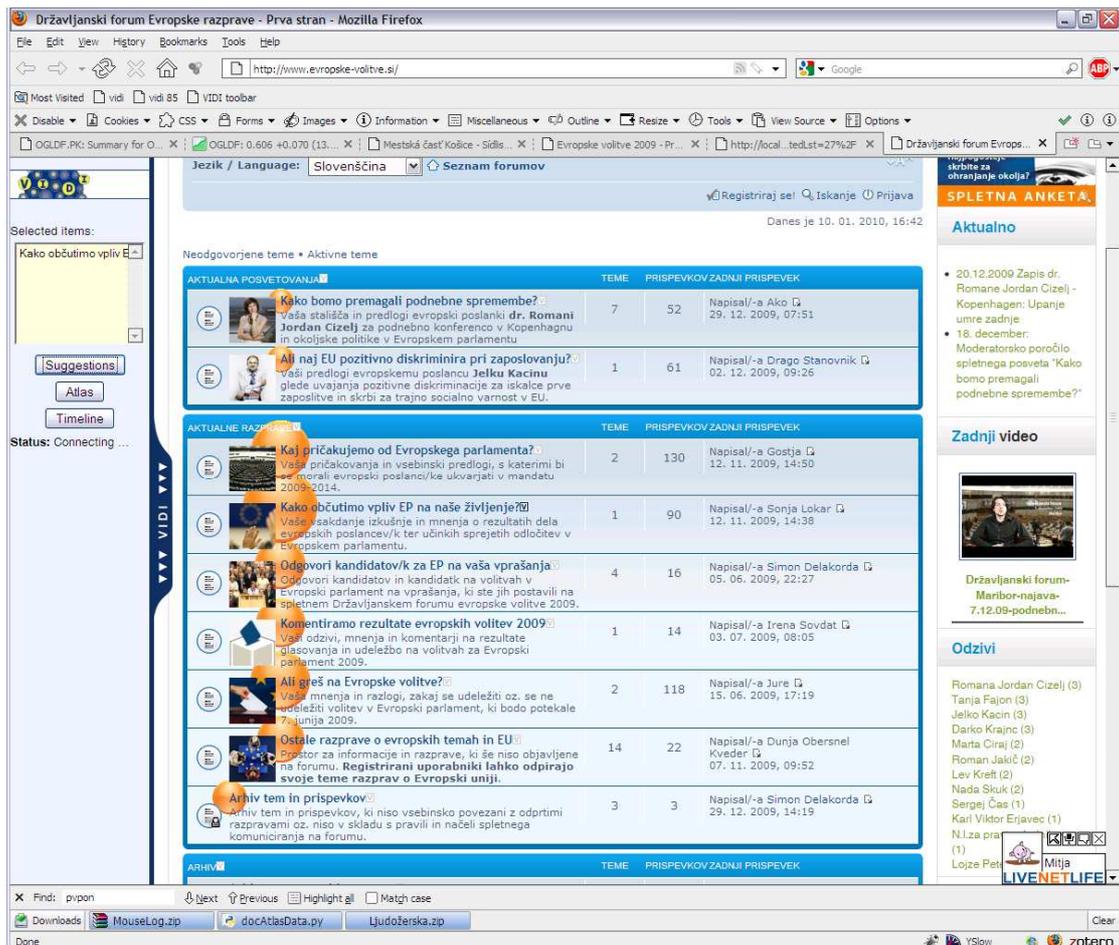


Figure 4: Browsing suggestions – the relevant links are marked by orange icons, their size proportional to link relevance.

3.4. Using the Topical Atlas

To see an "atlas" of all posts in a chosen subpart of the forum as illustrated in Figure 5, first indicate your interest by selecting several threads as described in section 3.2. Then, press the "Atlas" button on the VIDI toolbar.

The atlas appears in the middle of the window. Calculating all the data needed to display the atlas can take several minutes, so please be patient. To discard the atlas, click anywhere outside the popup area.

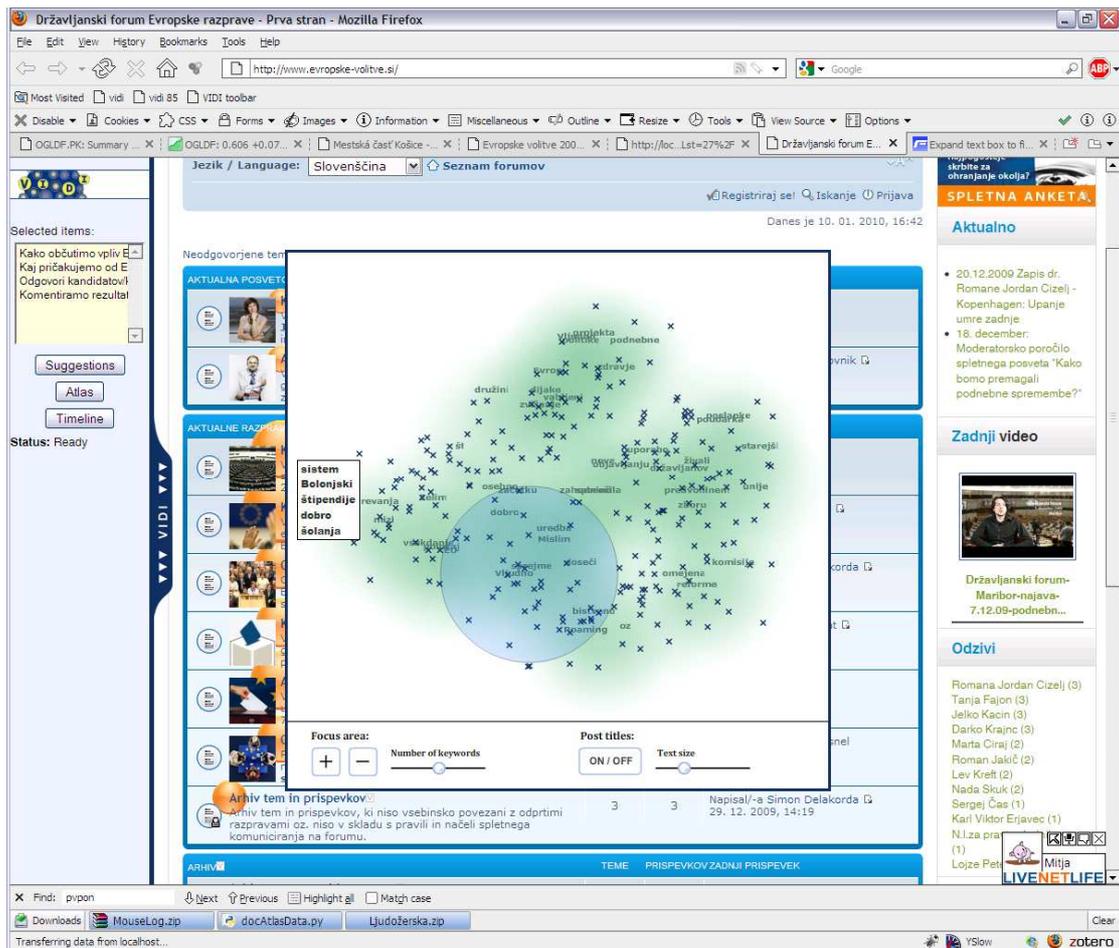


Figure 5: The "topical atlas" of a part of the forum. Similar posts are displayed close together, forming topical clusters.

The atlas chart comprises points (each representing a forum post) and keywords (each roughly describing the topic of its immediate neighborhood). To get further information about parts of the chart, move your mouse over it. The lightly blue shaded area under the mouse cursor is the *focus area* – posts within the focus area are summarized by a list of keywords that appears next to your mouse cursor.

To reduce the need to scan the whole chart with the focus area, some keywords are given in advance. Those appear in green in the background. The area of the chart of which they are representative is marked with a light shade of green.

Hovering the cursor over a forum post shows its subject as it appears on the forum (e.g. "Re: new anti-smoking law"). Clicking on a post navigates the browser to the corresponding thread.

Settings: Just under the atlas chart, there are several settings you can adjust. The "+" and "-" buttons increase and decrease the size of the focus area, respectively. Depending on the browser you use, you may also be able to adjust the focus area size by scrolling the mouse wheel. Using the "Number of keywords" slider, you can adjust the number of keywords with which the documents within the focus area are described.

Clicking the "ON/OFF" button switches the display of forum posts' titles on and off. By default, titles are hidden and only appear when you move the

mouse over a post in order to reduce visual clutter. If you choose to display the titles permanently, their size can be adjusted with the "Font size" slider just next to the "Subjects" button.

3.5. Using the Topical Timeline

To see a timeline of topical evolution of a chosen subpart of the forum as illustrated in Figure 5, first indicate your interest by selecting several threads as described in section 3.2. Then, press the "Timeline" button on the VIDI toolbar.

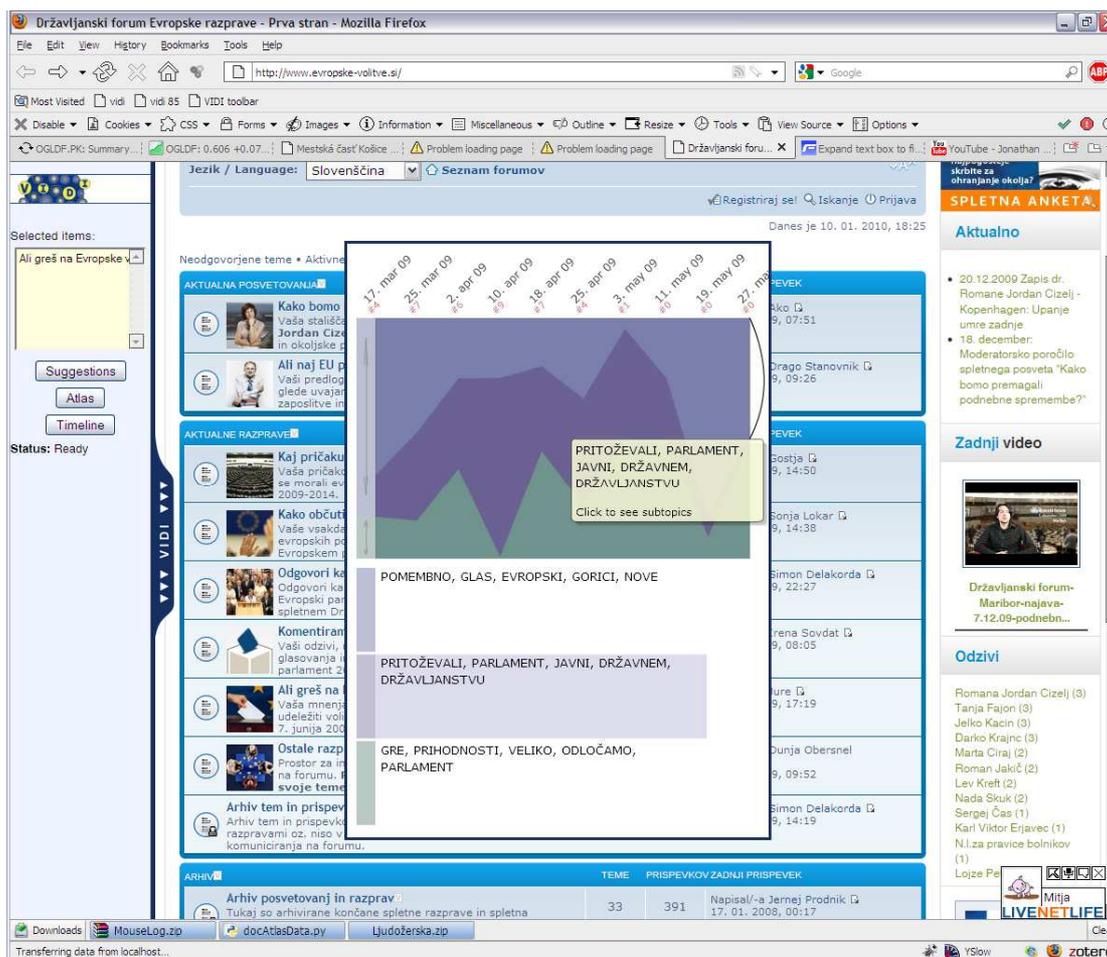


Figure 6: Topical timeline. Each colored stripe represents a topic; its description (in the form of keywords) is given below the graph. The thickness of each stripe corresponds to how much a topic was talked about at a given moment.

The timeline appears in the middle of the window. To discard the timeline, click anywhere outside the popup area.

The main part of the visualization is the graph in its upper half. Each of the colored areas of the graph represents a topic on the forum. The thickness of the colored stripe shows how active this topic was through time. The actual dates are given just above the graph, at the very top of the visualization.

Hovering over a topic shows a tooltip with keywords describing the topic. At the same time, keywords for all the topics are displayed below the graph in a color-coded legend. Additionally, when hovering over a topic, small red

numbers are displayed at the top of the graph for each time slot. These are an absolute indicator of the topic's popularity: they represent the actual number of posts from the given time period talking about the given topic.

The topics are automatically determined by semantically clustering the selected posts in a hierarchical fashion. To avoid over-segmentation, all the posts are initially split into just two topics.

If you wish to delve deeper into a topic, click its stripe in the graph. If subtopics are available, the topic will split into two. Click on the black arc on the right to merge the subtopics once again. Click on the vertical arrows in the left margin to temporarily hide all other topics and expand the selected topic (along with its subtopics) over the whole graph. Click on the light grey arrow in the upper left corner to show the remaining topics again.

3.6. Defining Notification Patterns

VIDI-System supports an email based user notification about user-relevant situation within a discussion forum. In order to notify the user he/she must model the situation of interest and register in the VIDI-System. For this reason VIDI notification pattern user interface (UI) provides discussion forum specific categories such that the user can select the relevant categories, configure and connect them to each other using the provided operator nodes. In order to define a notification pattern the user can use the drag and drop functionality provided by the UI.

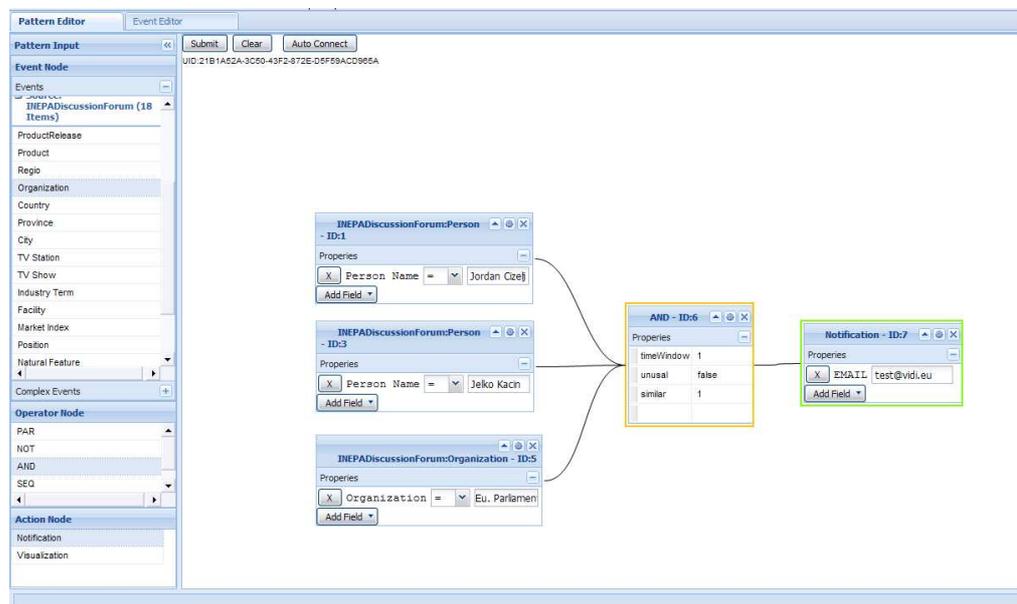


Figure 8: Example of a notification pattern for the INEPA discussion forum

The example in figure 8 shows a pattern that describes a notification pattern within the INEPA discussion forum where two members of European Parliament from Slovenia are mentioned in the European Parliament context.