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**HEALTH INDICATORS IN THE
REPUBLIC OF SERBIA**

USER GUIDE

Belgrade, 2011

HOW TO INSTALL

For launching the application it is necessary to save „healthindicators.zip“ file to a specific part of your hard disk. Then you have to extract the content of the zipped file to „healthindicators“ folder and to enter the folder DPS-2.

HOW TO LAUNCH THE APPLICATION



A single click on the following application's icon launches the application

Launching an application opens a welcome window (Figure 1).

Serbian Health Indicators Database



Figure 1: Opening window

Immediately after closing this window, the main screen appears (Figure 2).

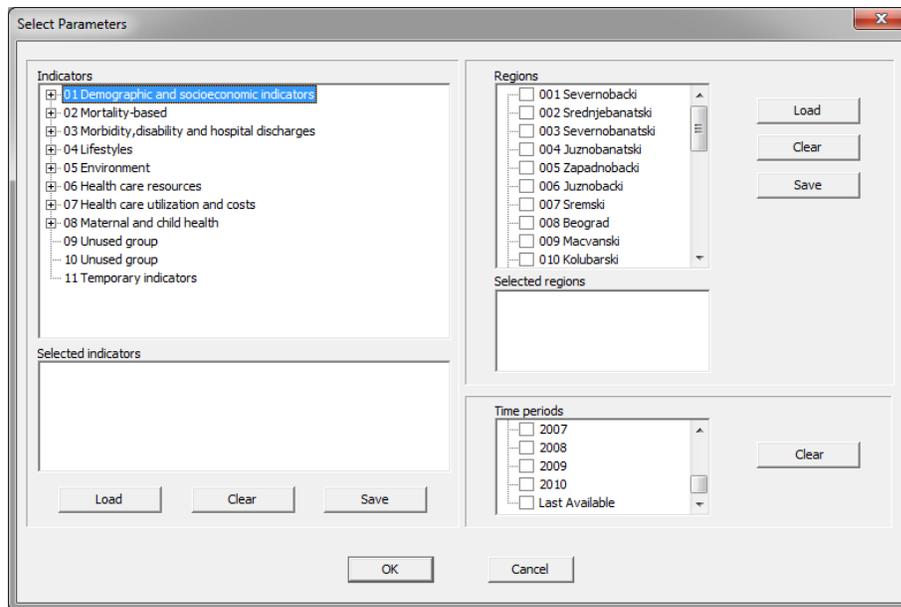


Figure 2: Display of the main window

Opening of the main window is also accessible on the main menu by selecting option *Parameters* → *Select parameters* (Figure 3).

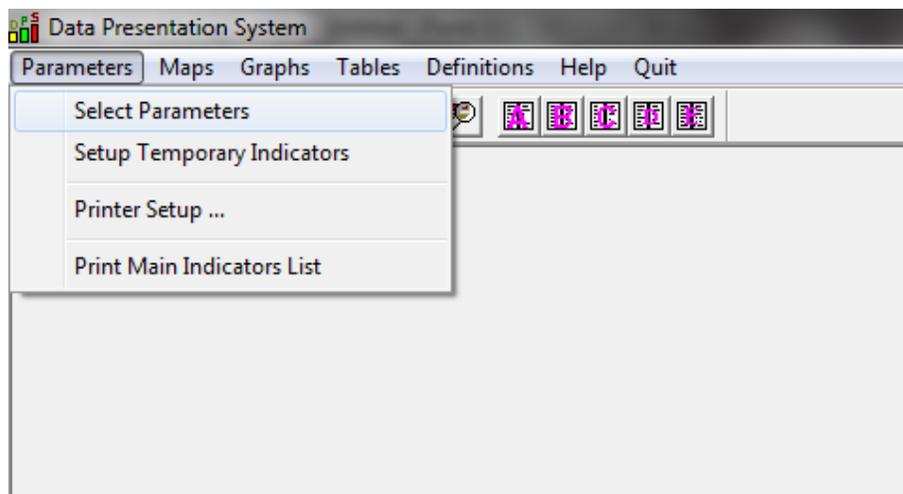


Figure 3: Opening of the main window from the main menu

In the main window there is a choice of parameters and the desired indicators, regions and years for which we want to display the selected indicators.

HOW TO SELECT PARAMETERS

Select option on the main menu *Parameters* → *Select parameters* (Figure 3).

How to choose an indicator

It is necessary to check-in preferred indicators, which are located in the list of indicators. Selected indicators will be displayed in the list of *Selected indicators* (Figure 4).

How to choose a region

In the same way we check-in indicators, it is necessary to mark the regions for which we want to display data. Selected regions will be displayed in the list of *Selected regions* (Figure 4).

How to choose a year

In the window *Time periods* it is necessary to indicate the year/years for which we want to display certain indicators.

After selecting all the necessary parameters it is necessary to press the **OK** button (Figure 4).

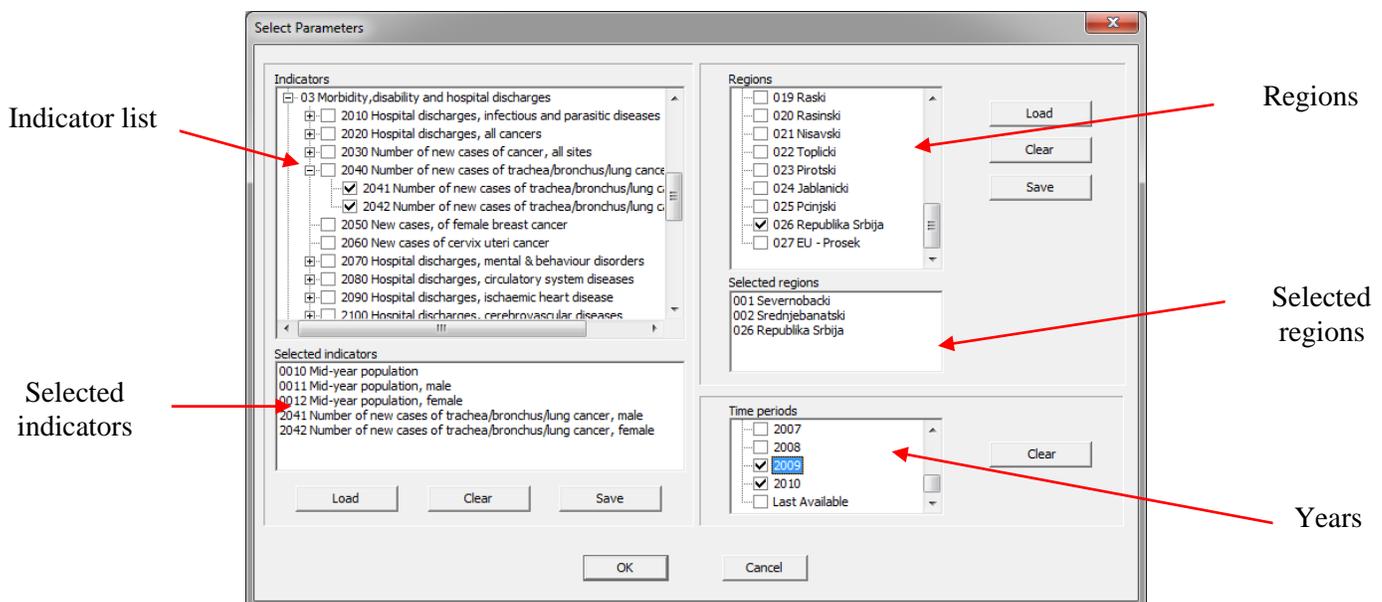


Figure 4: Display of selected parameters

TABULAR PRESENTATION OF DATA

The application offers several ways to display data. One way is tabulation. This type of data review is possible by selecting option **Tables** that is in line of the main menu. By the opening of this option we can select the type of table (type A, B, C, D or E) (Figure 5).

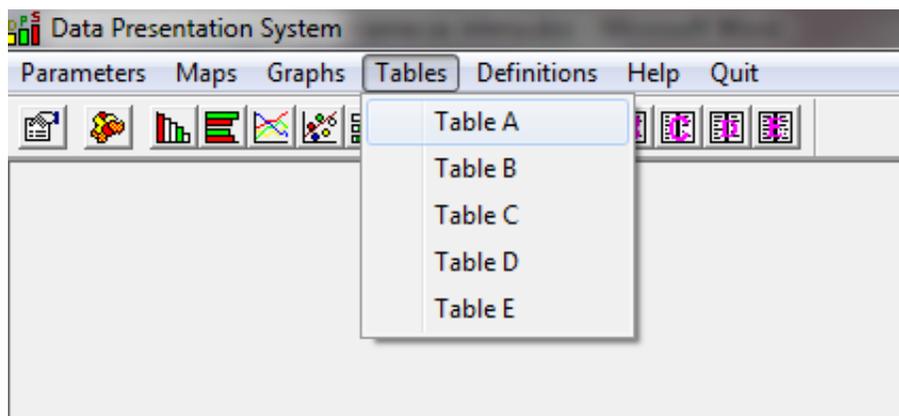


Figure 5: How to select a table

By choosing the type of table we get tabulation of data based on previously selected parameters (Figures 6 and 7).

 A screenshot of the 'Table A' window showing a tabulation of 'Mid-year population' data. The window has a menu bar with 'Regions', 'Indicators', 'Copy', 'Export', 'Print', and 'Quit'. The table has columns for 'Regions', '2008', '2009', and '2010'. The data is as follows:

| Regions | 2008 | 2009 | 2010 |
|---------------------|----------|-----------|---------|
| 1 Severnobački | 183329 | 182118 | 180919 |
| 2 Srednjobanatski | 195190 | 193067 | 191831 |
| 3 Severnobañatski | 155387 | 153708 | 151982 |
| 4 Jambouanatski | 303392 | 300874 | 298402 |
| 5 Zapadnobački | 189978 | 189573 | 189332 |
| 6 Jambouanski | 165929 | 167082 | 168028 |
| 7 Drenjski | 208397 | 205734 | 203197 |
| 8 Beograd | 1621396 | 1630582 | 1639905 |
| 9 Macvanski | 111708 | 110839 | 107954 |
| 10 Kolubarski | 182015 | 180293 | 178464 |
| 11 Podunatski | 204442 | 203118 | 201908 |
| 12 Branovanski | 191906 | 189566 | 187941 |
| 13 Sumedjski | 290806 | 289496 | 288151 |
| 24 Pomoranski | 218862 | 218186 | 214680 |
| 15 Boraki | 134375 | 132464 | 130537 |
| 16 Zepcarski | 126217 | 124423 | 122805 |
| 17 Zlatibarski | 209360 | 206958 | 204400 |
| 18 Moravicki | 216977 | 215422 | 213939 |
| 19 Raski | 206444 | 205155 | 203689 |
| 20 Raevski | 246522 | 244241 | 242040 |
| 21 Nisavski | 375453 | 374017 | 372670 |
| 22 Topliki | 197323 | 194970 | 192512 |
| 23 Prvotki | 197223 | 195861 | 194575 |
| 24 Jakkidski | 229430 | 227116 | 224776 |
| 25 Pirovski | 228704 | 228254 | 227554 |
| 26 Republika Srpska | 750222 | 730807 | 729436 |
| 27 EU - Prosek | 49641696 | 497935424 | ... |

Figure 6: Tabulation of selected indicators by table A

| Time periods | Zapadobacki | Jugobacki | Republika Srbija |
|--------------|-------------|-----------|------------------|
| 2000 | 16.3 | 13.9 | 16.1 |
| 2001 | 16.6 | 14.2 | 16.4 |
| 2002 | 17 | 14.4 | 16.7 |
| 2003 | 17.3 | 14.6 | 16.9 |
| 2004 | 17.6 | 14.8 | 17 |
| 2005 | 17.7 | 14.9 | 17.2 |
| 2006 | 17.8 | 15 | 17.2 |
| 2007 | 17.9 | 15 | 17.2 |
| 2008 | 17.9 | 14.9 | 17.2 |
| 2009 | 17.9 | 14.7 | 17.2 |
| 2010 | 17.7 | 14.6 | 16.9 |

Figure 7: Tabulation of selected indicators by table B

If more indicators are selected in the main window, they can be displayed by using option **Indicators** located on the menu of the opened window (Figure 8).

| Time periods | Zapadobacki | Jugobacki | Republika Srbija |
|--------------|-------------|-----------|------------------|
| 2002 | 17 | 14.4 | 16.4 |
| 2003 | 17.3 | 14.6 | 16.7 |
| 2004 | 17.6 | 14.8 | 17 |
| 2005 | 17.7 | 14.9 | 17.2 |
| 2006 | 17.8 | 15 | 17.2 |
| 2007 | 17.9 | 15 | 17.2 |
| 2008 | 17.9 | 14.9 | 17.2 |
| 2009 | 17.9 | 14.7 | 17.2 |
| 2010 | 17.7 | 14.6 | 16.9 |

Figure 8: Overview of indicators tabulation selection

GRAPHIC PRESENTATION OF DATA

If we want selected indicators to be displayed by graphs, it is necessary to select the option **Graphs** on the main menu (Figure 9), and then choose a particular type of graphic display (Figures 10, 11, 12).

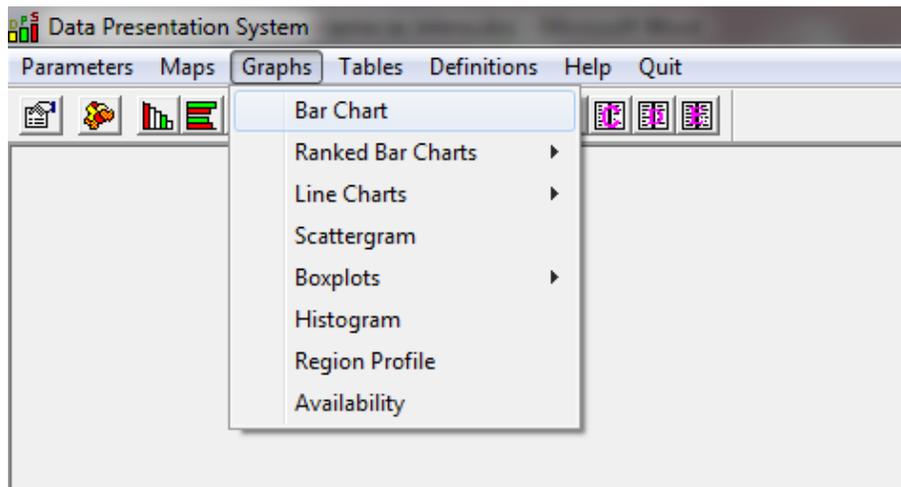


Figure 9: Selection of the graphic display

The desired indicator can be changed for each of the individual graph from the main menu (Figures 15, 16 and 17).

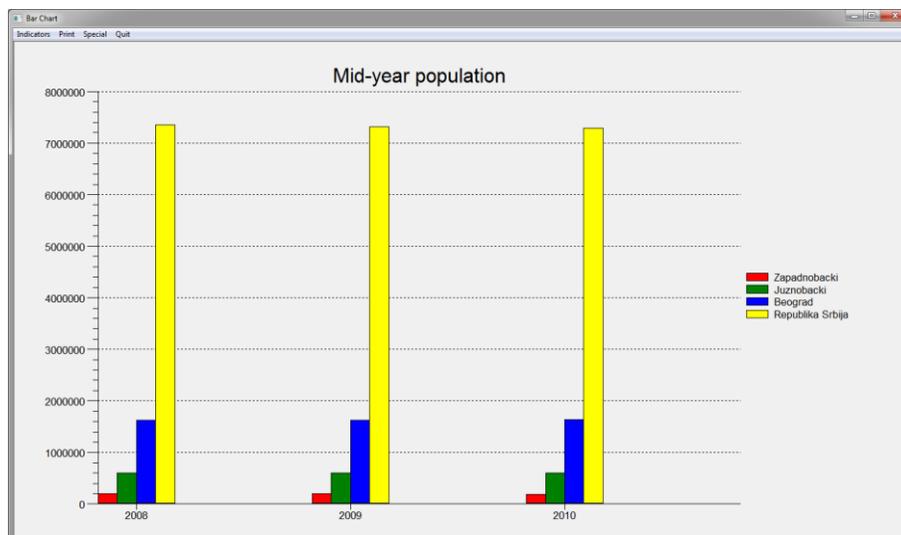


Figure 10: Graphic presentation of the selected indicators using Bar Chart

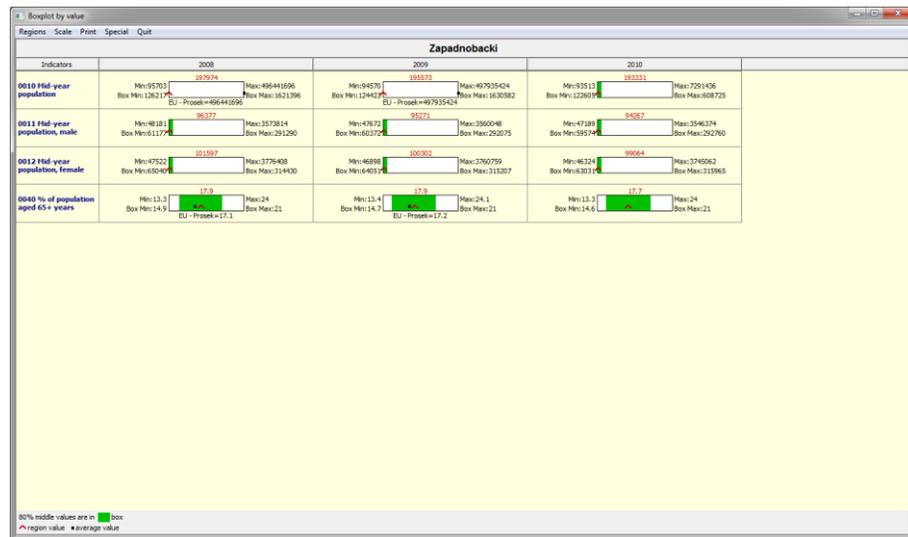


Figure 11: Graphic presentation of average, mean, and regional values of selected indicators

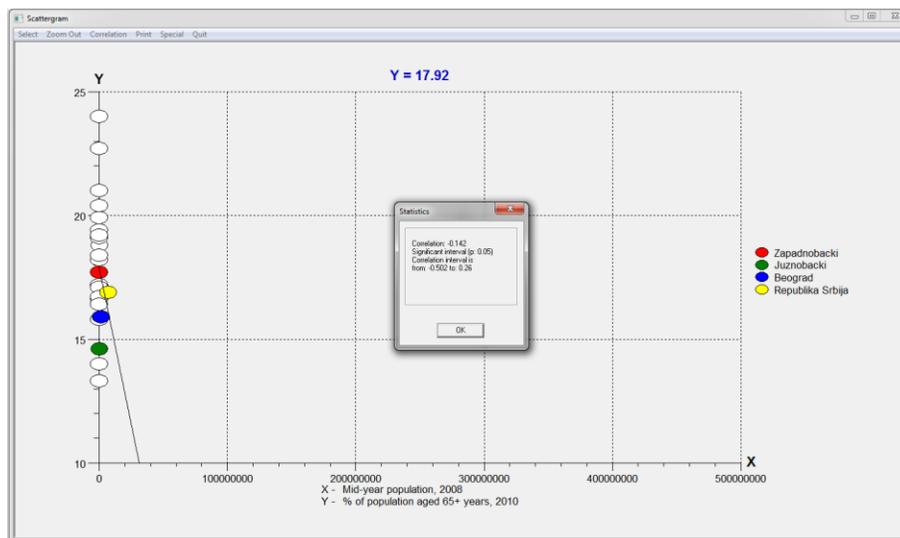


Figure 12: Graphic presentation of the selected indicators using Scattergram

It is possible to review the availability of entered data at any moment (Figure 13).

| Indicators | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| 0010 Mid-year population | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0011 Mid-year population, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0012 Mid-year population, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0020 % of population age 0-14 years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0021 % of population age 0-14 years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0022 % of population age 0-14 years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0023 population age 0-14 years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0024 population age 0-14 years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0025 population age 0-14 years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0030 % of population 15-64 years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0031 % of population 15-64 years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0032 % of population 15-64 years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0033 population 15-64 years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0034 population 15-64 years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0035 population 15-64 years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0040 % of population aged 65+ years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0041 % of population aged 65+ years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0042 % of population aged 65+ years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0043 population aged 65+ years | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0044 population aged 65+ years, male | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0045 population aged 65+ years, female | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0050 % of fertility age women (15-49 years) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0051 fertility age-women (15-49 years) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| 0060 Total fertility rate | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 100% | 100% | 100% | 100% |
| 0070 Live for the year 1000 | | | | | | | | | | | |

Figure 13: Graphical representation of data availability

DEFINITION OF INDICATORS

The individual definitions of each selected indicators can be reviewed by selecting *Definitions* option from the main menu (Figure 14).

Indicator definitions

Quit

- Selected indicators
 - 0010 Mid-year population
 - 0011 Mid-year population, male
 - 0012 Mid-year population, female
 - 0060 % of population aged 65+ years**

% of population aged 65+ years
 Population data were estimated on the basis of the Census and results of annual statistics of natural and mechanical migration data processing.
 Estimated population at mid-year (June 30th) represents de facto status (due to missing data for Kosovo and Metohija (temporary not available)).
 This data is often used as a denominator to calculate other indicators.
 Data Source: Statistical Office of the Republic of Serbia

Figure 14: Display of the definitions for selected indicator

HOW TO SET A TEMPORARY INDICATOR

Setting of the temporary indicators is possible by selecting *Setup temporary indicators* from the line of the main menu (Figure 15).

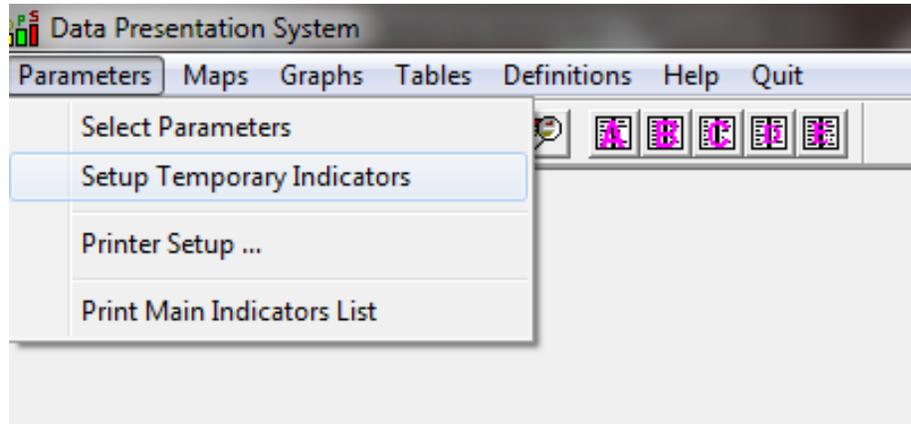


Figure 15: How to open a setup of temporary indicators from the main menu

After selecting this option, a window opens (Figure 16) in which users can:

- Define a new temporary indicators
- Modify existing temporary indicators
- Delete existing temporary indicators.

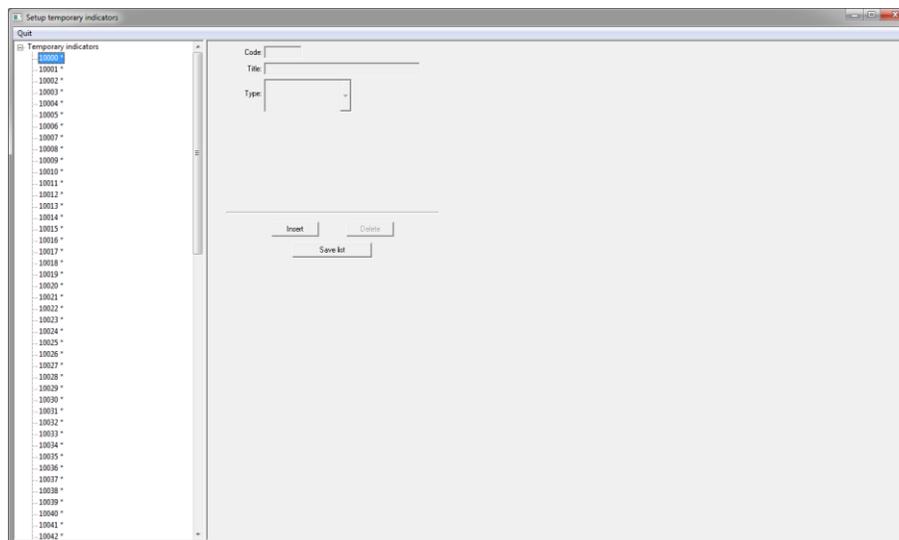


Figure 16: Display of the window for defining, modifying and deleting of temporary indicators

How to define a new temporary indicator

The procedure of defining a new temporary indicator (Figure 17):

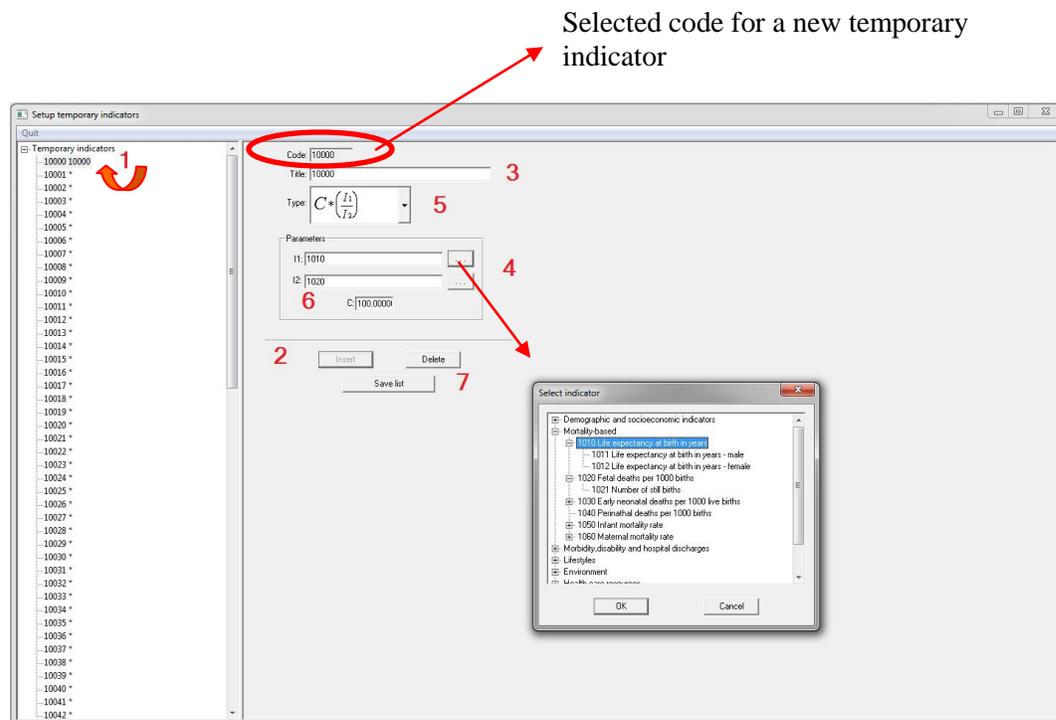


Figure 17: Steps in defining the new temporary indicator

Step 1: Mark the code for indicator that should be defined.

Step 2: Press the *Insert* button. The code for new indicator will be displayed in code box.

Step 3: In the *Title* field, enter the name of temporary indicator.

Step 4: Check-in indicators from the list of the main indicators that will be used for calculating a new indicator.

Step 5: Using the *Type* box select the function by which you want to calculate a new indicator. The application supports seven formulas for calculating:

1. $PI = C * (I1 / I2)$
2. $PI = C * I1 * I2$
3. $PI = I1 + I2$
4. $PI = I1 - I2$
5. $PI = I \text{ tekući} - I \text{ prethodni}$
6. $PI = C * (I \text{ tekući} - I \text{ prethodni}) / I \text{ prethodni}$
7. *Moving average*

With the first four formulas, temporary indicator is defined by using two main (existing) indicators. The next two formulas define a temporary indicator by using one main indicator for two consecutive time periods.

Step 6: For certain functions it is necessary to enter the desired value for the variable *C*.

Step 7: After successfully defined indicator it is necessary to save it by pressing the button **Save list**.

Going back to the main window, by selecting certain temporary indicator from the list of the main indicators (Figure 4), the application will automatically calculate its value.

These new temporary indicators can be also presented by tables and graphs using the same procedures as for those from the main list.

How to change the existing temporary indicator

When changing the temporary indicators, which are already defined, it is necessary to mark the code of indicator that we want to change (1). After that, you can make the following changes (Figure 18):

1. Changing the name of the indicator (2),
2. Changing the formula (3),
3. Changing the parameters, ie. the main indicators as means of defining a temporary indicator (4),
4. Changing the variable *C* (5),

After successful change of all desired fields it is necessary to click the **Save list** button (6), otherwise the changes will not be remembered.

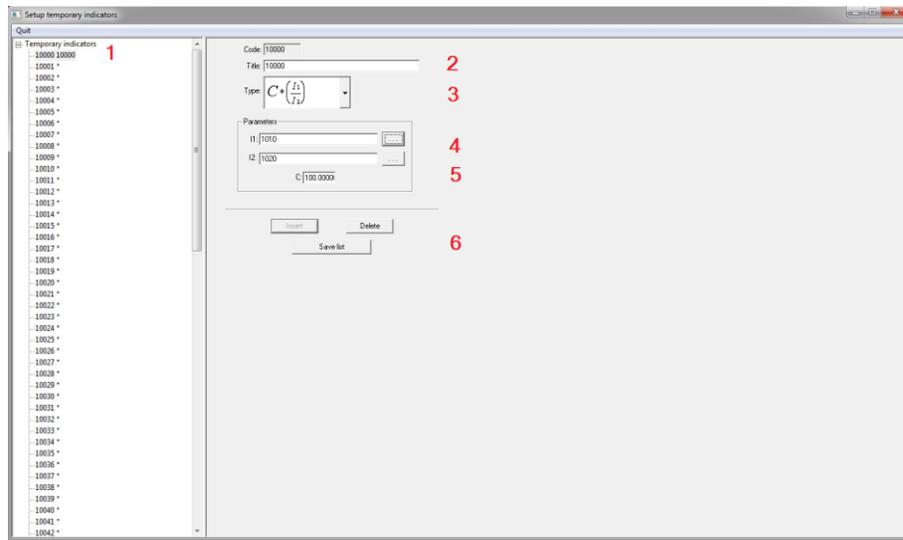


Figure 18: Display of changes that can be made on a temporary indicator

Deletion of temporary indicators

The existing temporary indicators can be deleted. When deleting indicators first check the code of the indicator that needs to be deleted (1), and then press the **Delete** button (2) (Figure 19).

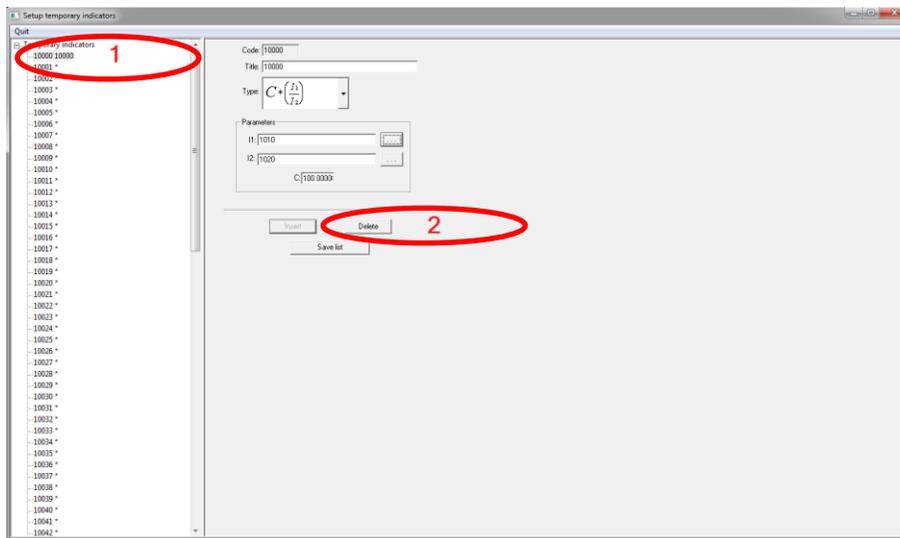


Figure 19: Display of deletion process of a temporary indicator

HELP

For better understanding of the possibilities offered by the application choose the option **Help** from the main menu (Figure 20).

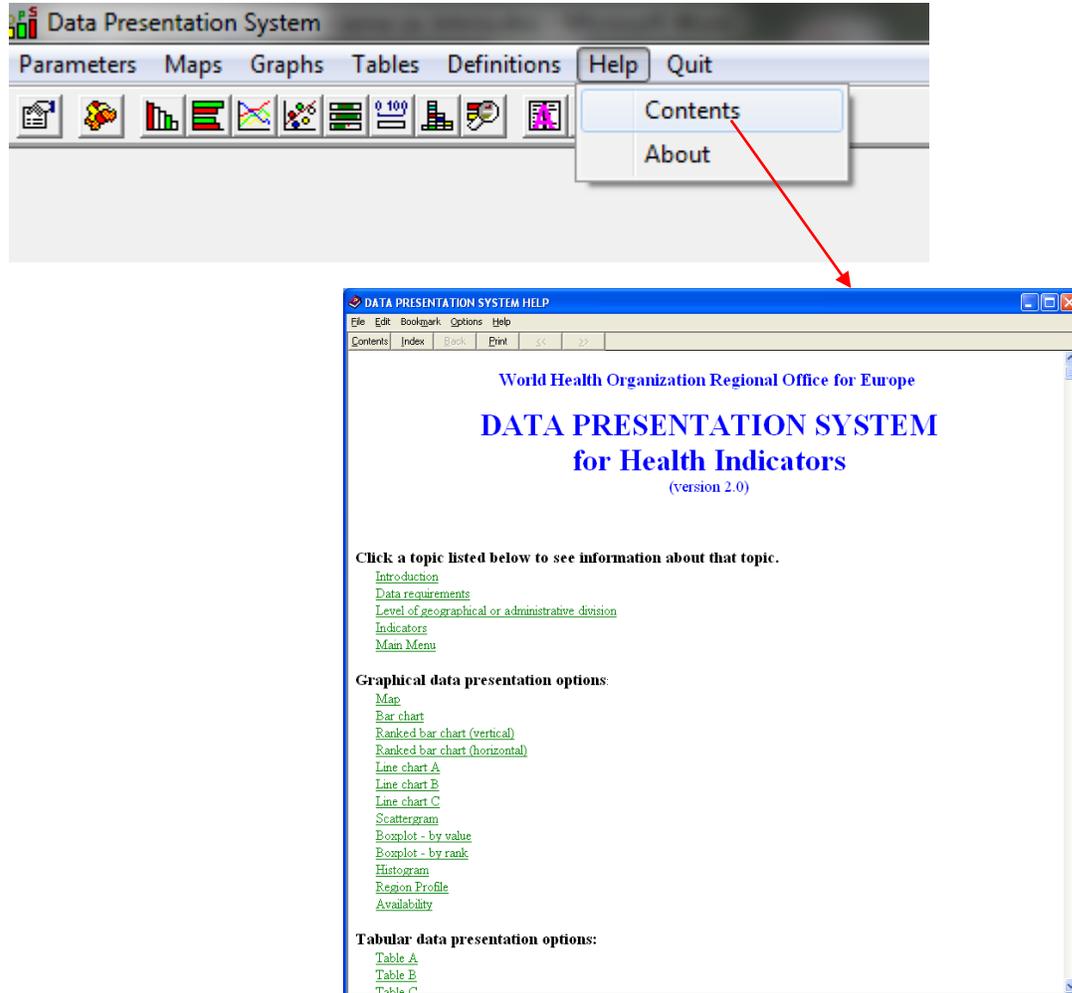


Figure 20: How to open the Help option from the main menu

EXITING APPLICATION

If you want to exit the application, you can do so by choosing **Quit** option from the main menu or simply pressing the X button located in the upper right corner of the active window (Figure 21).

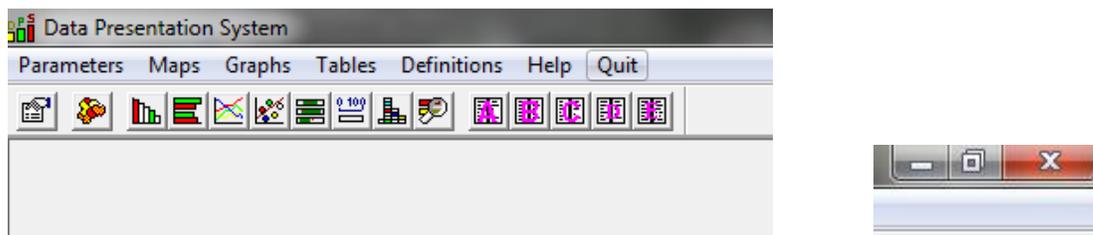


Figure 21: Display of the application exit option