

SIRIUS

Skills and Integration of Migrants,
Refugees and Asylum Applicants
in European Labour Markets

Guidelines¹

Description of the Software

The aim of the software is the estimation of the employment potential of migrants, refugees and asylum seekers (MRAs) for the SIRIUS countries (Czech Republic, Denmark, Greece, Italy, Finland, Switzerland and United Kingdom). The estimation of the employment potential is approached at the level of sectors and occupations. Moreover, the methodology is based on the identification of sectors and occupations which show simultaneously high growth potential and required skills level compatible to MRAs' ones.

The present software is based on the construction of two (2) composite indicators, which are aggregate measures calculated as the weighted combination of selected components. The composite indicators are used to monitor and evaluate the performance of the sectors and the occupations in each country and to identify the compatibility of MRAs with the labour demand of the host countries. For each SIRIUS country, the most dynamic sectors and occupations are determined, and the MRAs integration potential is estimated based on the similarity of their educational attainment level with the educational attainment level's demand, at the sectoral and occupational levels, respectively.

The software is able to provide the user with the opportunity to conduct her own independent scenario analysis in order to unveil how migration flows could integrate in the labour market of the host country. The approach is based on both: the features of the examined labour market (demand side) and the skills of MRAs (supply side). In other words, if, for example, the policy makers of a SIRIUS country consider that the future MRAs flows will be characterized by different skills level than the current MRAs flows, with the use of the software they can identify the sectors and the occupations with higher employability potential for the future MRAs.

¹ Any further requests on how to interpret the result of the software should be directed to: Dr. Spyridon Stelios at: stelioss@central.ntua.gr.

The composite indicator SIRIUS 1 is employed for each sector to quantify into a single value: i) the growth potential of the sector, and ii) the similarity of the employment attainment level of MRAs with the employment attainment level of the sectoral employment. SIRIUS 1 is used to rank the importance of the sectors to the promotion of MRAs employment. The rank-order sectoral priorities, based on SIRIUS 1, are used to answer the research question:

“Which sectors of an economy have, simultaneously, high growth potential and required educational attainment level compatible to the MRAs educational attainment level?”.

The composite indicator SIRIUS 2 is employed for each occupation to quantify into a single value: i) the growth potential of the specific occupation, and ii) the similarity of the employment attainment level of MRAs with the employment attainment level of the specific occupation. SIRIUS 2 is used to rank the importance of the occupations to the promotion of MRAs employment. The rank-order occupational priorities, based on SIRIUS 2, are used to answer the research question:

“Which occupations of an economy have simultaneously high growth potential and required educational attainment level compatible to the MRAs educational attainment level?”.

How to use

In order to perform scenario analyses for the employability potential of MRAs in SIRIUS economies, please follow the steps described below.

First Step: Select the economy of interest among: Czech Republic (CZ), Great Britain (GB), Greece (GR), Finland (FI), Italy (IT) and Switzerland (CH), by clicking on the top of the page.

Second Step: The values of the fields for the economy that you selected in the first step are pre-filled. The pre-filled data describe the current number of MRAs flows by educational attainment level. It is possible to change the value of the fields, in order to estimate the employability potential for different MRAs flows characteristics. Fill in the number of individuals by educational attainment level. Note that the educational attainment level is classified in three categories: Level 1 (Less than primary, primary and lower secondary education), Level 2 (Upper secondary and post-secondary non-tertiary education) and Level 3 (Tertiary education)

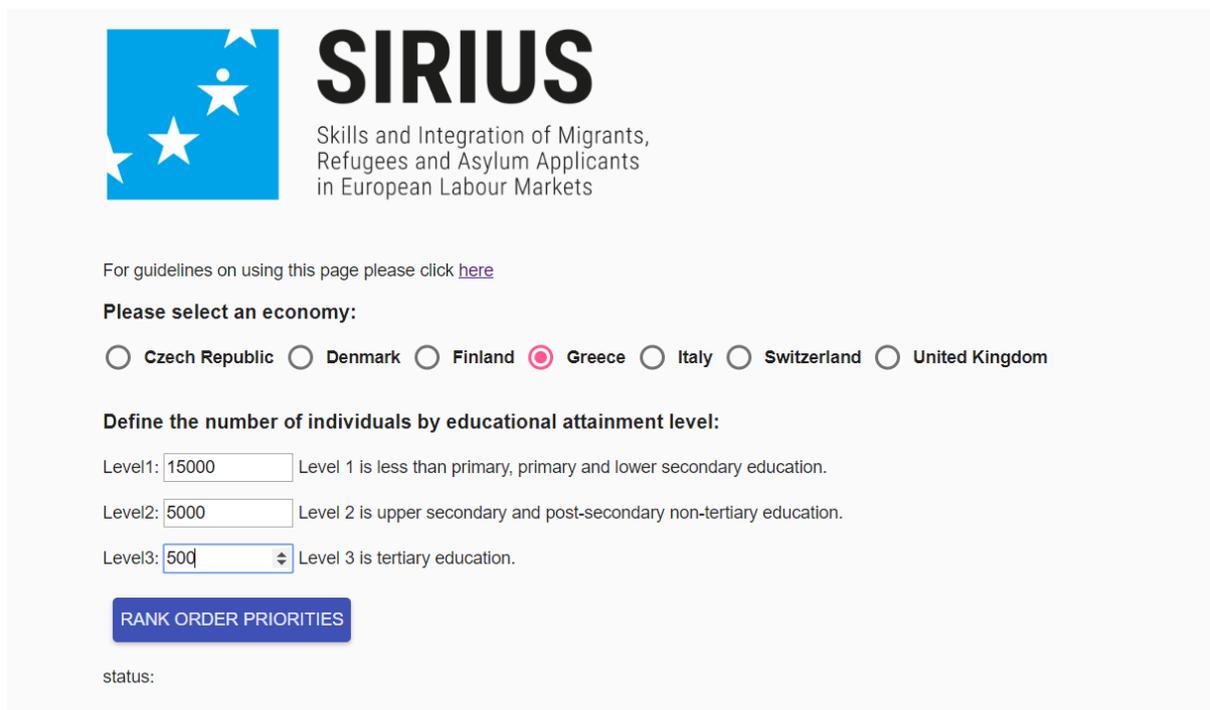
Third Step: Select the “RANK ORDER PRIORITIES” button at the end of the page and wait for the generation of the relevant report online and in .xls form. Once the report is generated, a link will appear on the screen that will allow you to download the generated file.

Fourth Step: Select the link that appears in the screen and download/open the .xls file generated.

How to read the generated results

The online report and the generated .xls files present the *rank-order priorities* of the sectors and the occupations in which the MRAs are expected to have a high integration potential. For each sector the model provides the five most important occupations and for each occupation the five most important sectors. The results are in the 2-digit level of analysis for the countries: Czech Republic, Denmark, Great Britain, Greece and Switzerland, and in the 1-digit level of analysis for Finland and Italy.

For example: We select Greece and we set the required values as follows:



The screenshot shows the SIRIUS web interface. On the left is a blue square logo with three white stars. To its right is the text "SIRIUS" in large bold letters, followed by "Skills and Integration of Migrants, Refugees and Asylum Applicants in European Labour Markets". Below this is a link "here" for guidelines. The main section is titled "Please select an economy:" and has radio buttons for "Czech Republic", "Denmark", "Finland", "Greece" (which is selected), "Italy", "Switzerland", and "United Kingdom". Below that is the section "Define the number of individuals by educational attainment level:" with three input fields: "Level1: 15000" (with a note "Level 1 is less than primary, primary and lower secondary education."), "Level2: 5000" (with a note "Level 2 is upper secondary and post-secondary non-tertiary education."), and "Level3: 500" (with a note "Level 3 is tertiary education."). At the bottom of this section is a blue button labeled "RANK ORDER PRIORITIES". Below the button is the text "status:".

Selecting the button “Rank Order Priorities”, two tables are generated. Below you can find the top parts of the tables.

Rank order priorities of sectors for Greece

Sectors	ID	Related Occupations
Crop and animal production, hunting and related service activities	A01	Market-oriented skilled agricultural workers, Cleaners and helpers, Science and engineering professionals, Assemblers, Sales workers
Forestry and logging	A02	Market-oriented skilled forestry, fishery and hunting workers, Protective services workers, Cleaners and helpers, Agricultural, forestry and fishery labourers, Other clerical support workers
Retail trade, except of motor vehicles and motorcycles	G47	Sales workers, Health professionals, Hospitality, retail and other services managers, Numerical and material recording clerks, Electrical and electronic trades workers
Fishing and aquaculture	A03	Market-oriented skilled forestry, fishery and hunting workers, Cleaners and helpers, Electrical and electronic trades workers, Agricultural, forestry and fishery labourers, Production and specialised services managers
Accommodation and food service activities	I	Personal service workers, Drivers and mobile plant operators, Customer services clerks, Labourers in mining, construction, manufacturing and transport, Hospitality, retail and other services managers

Rank order priorities of occupations for Greece

Occupations of Greece	ID	Related Sectors
Cleaners and helpers	91	Accommodation and food service activities, Administrative and support service activities, Education, Human health and social work activities, Public administration and defense, compulsory social security
Market-oriented skilled forestry, fishery and hunting workers	62	Fishing and aquaculture, Forestry and logging
Handicraft and printing workers	73	Printing and reproduction of recorded media, Manufacture of furniture, other manufacturing, Manufacture of other non - metallic mineral products, Manufacture of wood and of products of wood and cork, Manufacture of textiles, wearing apparel and leather products
Market-oriented skilled agricultural workers	61	Crop and animal production, hunting and related service activities, Manufacture of food products, beverages and tobacco products, Public administration and defense, compulsory social security, Administrative and support service activities, Arts, entertainment and recreation and other service activities
Agricultural, forestry and fishery labourers	92	Crop and animal production, hunting and related service activities, Administrative and support service activities, Fishing and aquaculture, Manufacture of food products, beverages and tobacco products, Forestry and logging
Assemblers	82	Manufacture of rubber and plastic products, Manufacture of wood and of products of wood and cork, Manufacture of electrical equipment, Manufacture of fabricated metal products, except machinery and equipment, Manufacture of other non - metallic mineral products

The first table shows the priorities at sectoral level. The integration policies for MRAs with the specific characteristic (structure of educational attainment level), for Greece, should focus in the sectors of higher priority. The first five sectors of high priority in the case of Greece, for the aforementioned example, are: Crop and animal production, hunting and related service activities; Forestry and logging; Retail trade, except of motor vehicles and motorcycles; Fishing and aquaculture; Accommodation and food service activities. Furthermore, the occupations related with each sector can be found in the second column of the table. For example, the occupations, which in the case of Greece are usually found in the sector “Crop and animal production, hunting and related service activities”, are: Market-oriented skilled agricultural workers; Cleaners and helpers; Science and engineering professionals; Assemblers; Sales workers.

The second table shows the priorities by occupation. The integration policies for MRAs with the specific characteristic (structure of educational attainment level), for Greece, should focus in the occupations of higher priority. The first five occupations of high priority in the case of Greece, for the above example, are: Cleaners and helpers; Market-oriented skilled forestry, fishery and hunting workers; Handicraft and printing workers; Market-oriented skilled agricultural workers; Agricultural, forestry and fishery labourers. Furthermore, the sectors related with each occupation can be found in the second column of the table. For example, the sectors, which in the case of Greece are usually connected with the occupation “Cleaners and helpers”, are: Accommodation and food service activities; Administrative and support service activities; Education; Human health and social work activities; Administrative and support service activities.