

## Project description sheet issued by a federal administration

This description sheet is issued by a federal administration. It describes the nature of the project it wants to implement, the tasks that should be attributed to a scientific team yet to be selected, the budget and timing devoted to the scientific team. It also describes the way the public institution will implement the end result of the scientific team both in terms of integration in its own functioning as in terms of dissemination of valuable information for researchers and the public at large.

### **Practical information**

Name of the public institution who has issued the project: Federal Public Service Social Security (<http://socialsecurity.fgov.be/> )

Name of the project: The Micro Simulation Model Social Protection (MIMOSIS): an update and further verification in view of the optimal valorisation of the model

Timing of the scientific tasks to be accomplished: 12 months

Deliverables and valorisation activities by the scientific team (not foreseen in the project description below):

- *International seminar (beginning of the project, state of the art concerning the data/work to perform) ;*
- *report* exposing the way the data concerned by the project could make international/European comparisons or harmonisation possible by the public authority;
- *Valorisation activity by the end of the project:* the team will make a proposal in this respect in its submission form.
- Deliverables from the research contract with federal Science Policy Office: *project description* (max. 25 lines in French, Dutch, English and German for the Web site of the Science Policy Office), *summary of the project* in max. 10 pages in F/D/EN/G for the web site of the Federal Science Policy Office, *a document in max. 40 lines* destined to the AGORA Newsletter at the end of the project in F/D/EN, *interims reports* (max. 2 pages, issued every 6 months destined to the financing of the project), *reports for the users' committee* (see below) ;

All these activities are to be financed within the allocated budget.

Working of the project:

The public authority steers and manages the project and collaborates closely with the team and the federal Science Policy Office (which form the technical committee of the project). The project is followed up by a users' committee who comes together at least three times in the course of the project (at the beginning, in the middle and at the end). Its role is to give a positive input to the team and the public authority in the management of the project. It is composed by representatives of other public administrations and by other researchers. The scientific team is in charge of preparing the documents for this committee, the public institution is responsible of the agenda and the minutes of the meetings.

Date of the information session with a delegate of the public institution (inscription at least a week in advance by e-mail – [naji@belspo.be](mailto:naji@belspo.be) . without mark of interest, the meeting will be cancelled):  
**15 January**, Federal Science Policy Office, **10 a.m.**

# **The project**

## **1. Name of the Public institution**

Federal Public Service Social Security,

## **2. Name of the project**

The Micro Simulation Model Social Protection (MIMOSIS): an update and further verification in view of the optimal valorisation of the model

## **3. Acronym**

MIMOD (MIMOSIS & EUROMOD)

## **4. Description of the project and situation within the framework of the institution**

In the framework of two AGORA projects (AG/01/086 "Micro simulation model social security" and AG/01/116 "Valorisation of the micro simulation of social protection")<sup>1</sup>, a calculation model (MIMOSIS) was developed that makes it possible to calculate the distributional and budgetary implications of reforms in social security on the basis of administrative data. The essence of the model consists in a detailed coding of the social security regulations and its implementation on a representative sample of the Belgian population. The MIMOSIS model was integrated in the functioning of the FPS Social Security and used to support the policy-makers when formulating policy changes.

In order to optimise the use of the MIMOSIS model, it also has to be examined to which extent the model could be used for international comparative simulations. The 'European Tax/benefit Model' (EUROMOD) may provide an important advantage in this context.

The EUROMOD model makes it possible to make simulations of European measures on the European population (EU-15, but incorporation new member states planned via I-CUE-project), as well as international comparative simulations for the EU member states. This project aims to examine to which extent the set-up of the EUROMOD model (and more specifically the Belgian sub model) differs from MIMOSIS, with regard to the underlying data as well as with regard to modelling.

In order to compare the results of simulations on the basis of the EUROMOD model with those of the MIMOSIS model, it is essential to compare the used routines as well as the underlying data. An important difference between both models is that the EUROMOD model uses micro data, while the MIMOSIS model uses administrative data. For Belgium, the EUROMOD model is based on the data of the Belgian section of the 'European Community Household panel' (ECHP) and its successor, the 'European Union Statistics on Income and Living Conditions' (EU-SILC). The basic data of the Belgian section of the EU-SILC, especially the income data, should be compared with the (income) data of the MIMOSIS model, originating from administrative data.

It further has to be examined to which extent the routines used by the EUROMOD model are compatible with those of the MIMOSIS model. In principle, the routines of the EUROMOD model can be used to apply aspects of foreign social security and tax systems to the Belgian population, via MIMOSIS. This way, e.g., aspects of the Danish unemployment system can be simulated on the Belgian population via MIMOSIS. This would mean a huge enrichment for the current MIMOSIS model.

## **5. Tasks to be accomplished**

a. by the research team:

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<sup>1</sup> A description of the AGORA project AG/FF/086 can be found on: <http://www.belspo.be/belspo/fedra/proj.asp?l=en&COD=AG/FF/086> The description of project AG/HH/116 can be downloaded on: <http://www.belspo.be/belspo/fedra/proj.asp?l=en&COD=AG/HH/116>

MIMOSIS could in principle be used in an international comparative context. Thereto, it has to be examined to which extent the set-up of the 'European Tax/benefit Model' - EUROMOD (and more specifically the Belgian sub model) differs from the MIMOSIS model, with regard to the underlying data as well as with regard to modelling.

Thereto, the basic data of MIMOSIS and of the Belgian section of the EU-SILC have to be thoroughly analysed. It is more specifically about a comparison of the distribution of the available incomes in both data sources. This implies that the possible differences have to be interpreted and explained.

The routines of the EUROMOD model have to be compared with the routines of the MIMOSIS model. This implies that the possible differences have to be interpreted and explained. E.g., it has to be examined to which extent the routines of the EUROMOD model could be used to apply aspects of the foreign social security and tax systems to the Belgian population, via MIMOSIS.

**b. By the public institution:**

*1. Prior to the project*

The FPS Social Security will provide the research team with all information on the integration of the MIMOSIS model in its policy-oriented work and, more specifically, on the developed procedures, the documentation and the results of the extended validation of the model on the basis of combined administrative data.

*2. In the course of the project*

The FPS Social Security will inform the research team on the validation of the technical work with regard to the model carried out within FPS Social Security. This means more specifically the progress concerning the validation of the updated data on the basis of combined data.

**6. Final product to be delivered:**

**a. By the research team:**

1. An evaluation of the possibilities with regard to the use of the model in an international context. This means e.g. a description and interpretation of the differences between MIMOSIS and the European Tax/benefit Model - EUROMOD (and more specifically the Belgian sub model), with regard to the underlying data as well as with regard to modelling.
2. A comparative analysis of the distribution of the available incomes as it arises from MIMOSIS and EU-SILC. Here, the possible differences have to be interpreted and explained.

**b. For the public institution**

The necessary assistance in view of a timely update of the MIMOSIS model and the coordination of the use of the model in view of an optimal valorisation.

**7. Valorisation of the end product**

**a. For the public institution: integration of the end product into its own way of working**

The FPS Social Security will apply the model in view of:

- recurrent (per trimester, per six months, per year, ...) and ad-hoc reporting;
- the analysis of policy proposals in a national and international context (working groups SPC, OECD, etc.); and
- the execution of policy-oriented research by third parties.

**b. for the 'public': access conditions and modalities for scientific users and for the general public**

On the basis of the Micro Simulation Model Social Protection, the FPS Social Security will make information available in the form of:

- Recurrent (per trimester, per six months, per year, ...) and ad-hoc reporting;
- Combined data in view policy-oriented research;
- After the evaluation of an official application filed with the competent bodies, data at micro level may be made available to the scientific world.

## **8. Timing, planning and allocated budget**

### a. timing of the activities:

1 September 2007 - 31 August 2008.

### b. planning of the activities:

#### *1. For the research team:*

The proposed planning of the selected team will be the basis of a discussion with the public institution and the Federal Science Policy Office when preparing the contract.

#### *2. For the public institution:*

a list of priorities will be developed taking into account the availability of the primary data and the policy needs

## **9. Special conditions**

### a. Suggestions for the composition of the support committee:

The support committee preferably consists of the representatives of the social security institutions that are also part of the Interdepartmental Support Committee of the AGORA project;

### b. Clause of confidentiality and intellectual property:

The confidentiality of the data will be guaranteed in accordance with the provisions of article 5 of the law on the Crossroads Bank for Social Security<sup>2</sup> and the law on the handling of personal data<sup>3</sup>.

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<sup>2</sup> Law of 15 January 1990 *on the establishment and the organisation of a Crossroads Bank for Social Security*.

<sup>3</sup> Law of 8 December 1992 *on the protection of the personal privacy with respect to the handling of personal data* and Royal Decree of 13 February 2001 *executing the law of 8 December 1992 on the protection of the personal privacy with respect to the handling of personal data*.