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## Plan Overview

*A Data Management Plan created using DMPonline*

**Title:** Previziuni spațio-temporale pentru piețele muncii locale prin modelare în GIS [P5] / Spatio-temporal forecasting of local labor markets through GIS modeling [P5]

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**Template:** Flemish Minimal DMP standard

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### Project abstract:

The new broadened context of the paradigm shift marked by the European Green Deal and the digital transformation is accompanied by a complex job creation and destruction process. The model of sectoral descent in the process of industrial and technological change also depends on space and the speed with which this process is carried out. The project offers forecasts of the directions of evolution of the occupational and geographical mobility of the labour force in the context of societal, economic and ecological transitions in the European context. Occupational and geographic mobility for all age groups represents an intra- and inter-sectoral allocation mechanism, especially in new sectors that must be created locally, especially by young people. Anticipating these trajectories is, therefore, essential to create a thriving economy capable of creating new jobs and achieving sustainable and inclusive economic growth. The development of long-term forecasts in alternative scenarios ensures the success of these transformations because they take into account the principles of just transition applied to the new sectoral trajectories, harmonized with the S4 profile of locations resulting in increased resilience of places.

The systemic spatiotemporal treatment of mobility ensures the originality of the project in the context of the responses of local labour markets to challenges classified by seasonality to obtain anticipatory solutions for the support of labour market policies with evidence correlated with education and social protection policies through integrating and amplifying the contribution of science in the new context of the opportunities offered by the adoption of Open Science practices.

The anticipatory spatiotemporal modelling of the transition from school to work and the

occupants and geographical mobility of human capital at the level of local labour markets allows the identification of innovative solutions. These solutions contribute to the development of policies based on location (space) as part of the mix of optimized policies based on the principles of "smart specialization, stimulation of win-win potential and, last but not least, on the design of institutions that ensure not only the quantity but also the quality in spending public money". (Südekum, 2021)

The main results of the project are represented by the creation of 6 econometric models of spatiotemporal analysis, accompanied by six sets of maps, 2D, 3D and 4D, in the Gis software for the spatiotemporal representation of forecasts regarding developments on the labour market, with detail at the level of local labour markets.

**ID:** 119093

**Start date:** 03-01-2023

**End date:** 08-12-2026

**Last modified:** 08-03-2023

**Grant number / URL:** PN 22\_10\_0105

**Copyright information:**

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# Previziuni spațio-temporale pentru piețele muncii locale prin modelare în GIS [P5] / Spatio-temporal forecasting of local labor markets through GIS modeling [P5]

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## Data description

### Will you generate/collect new data and/or make use of existing data?

We shall reuse exiting data from Eurostat, Oecd.stat, TEMPO.insse

### Describe the origin, type and format of the data (per dataset) and its (estimated) volume.

Data format: microragregated data in .xls, .csv files with metadata associated  
Estimated volume: 100 MB

## Ethical and legal issues

### Will you use personal data? If so, shortly describe the kind of personal data you will use AND add the reference to your file in your host institution's privacy register.

No

### Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, add the reference to the formal approval by the relevant ethical review committee(s).

No ethical issues (no human subject data collected).

### Does your work possibly result in research data with potential for tech transfer and valorisation? Will IP restrictions be claimed for the data you created? If so, for what data, and which restrictions will be asserted?

According to ESRI ARC GIS software restriction.  
The results of the research will be disseminated in open-access sources.

### Do existing 3rd party agreements restrict dissemination or exploitation of the data you (re)use? If so, to what data do they relate and what restrictions are in place?

It is possible if we access INS microdata.

## Documentation and metadata

### What documentation will be provided to enable understanding and reuse of the data collected/generated in this project?

Metadata on Zenodo.  
Some results will be published in CESA.

Infrastructura EERIS de Analiză Spațială localizată în INCSMPS: CESA (<https://erris.gov.ro/Spatial-analysis>), disponibil la linkul <http://incsmpls.maps.arcgis.com/home/gallery.html#c=organizație&o=numviews>.

**Will a metadata standard be used? If so, describe in detail which standard will be used. If not, state in detail which metadata will be created to make the data easy/easier to find and reuse.**

I need to learn.

I find today 6.03.2023:

Metadata standards (<https://www.dcc.ac.uk/resources/metadata-standards/ddi-data-documentation-initiative>)  
**[DDI - Data Documentation Initiative](https://www.dcc.ac.uk/resources/metadata-standards/ddi-data-documentation-initiative)**

An international standard for describing data from the social, behavioral, and economic sciences. Expressed in XML, the DDI metadata specification supports the entire research data life cycle.

- DDI Codebook (or DDI version 2) is the simpler of the two, and intended for documenting simple survey data for exchange or archiving. Version 2.5 was released in January 2014.
- DDI Lifecycle (or DDI version 3) is richer and may be used to document datasets at each stage of their lifecycle from conceptualisation through to publication and reuse. It is modular and extensible. Version 3.2 was published in March 2014.

Both versions are XML-based and defined using XML Schemas. They were developed and are maintained by the DDI Alliance.

<b>Mappings</b>	<a href="#">DataCite Metadata Schema</a> ; <a href="#">Dublin Core</a>
<b>Related Vocabularies</b>	<a href="#">DDI Controlled Vocabularies</a>
<b>Specification</b>	<a href="http://www.ddialliance.org/Specification/">http://www.ddialliance.org/Specification/</a>
<b>Standard's website</b>	<a href="http://www.ddialliance.org/">http://www.ddialliance.org/</a>

Use Cases [Eurostat](#)

The statistical office of the European Union, which implementats SDMX in a number of projects.

[SDMX - Statistical Data and Metadata Exchange](#)

A set of common technical and statistical standards and guidelines to be used for the efficient exchange and sharing of statistical data and metadata.

## Data storage & backup during the research project

### Where will the data be stored?

Short term Storage on 360 clouds and PC first step

On long-term intention: Zenodo

### Funder questions

- Identify which of the data sets produced are considered to be of long-term value
- Outline the plans for preparing and documenting data for preservation and sharing
- Explain your archiving/preservation plan to ensure the long-term value of key datasets

### How will the data be backed up?

Arc Gis Pro Software

**Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.**

360 Cloud

INCSMPS server

## What are the expected costs for data storage and backup during the project? How will these costs be covered?

from the project budget

## Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

- "Develop and maintain a comprehensive information security program
- Maintain software and encryption programs to safeguard people's personal information
- Separate its cardholder data from the rest of its computer network
- Rigorously control who has access to the network
- Regularly bring in an independent and well-qualified third party to conduct regular, comprehensive security assessments of its security measures."

Compile a list, perhaps in a spreadsheet or using the template below, of the different types of information you store on your computer or online. For example, you may have personal correspondence, photographs, work documents or personal details such as your National Insurance number, insurance policy details and passwords for online services.

For each type of information, think of its value to you. Label the most valuable types of information as 'High', the least valuable as 'Low' and those that are in between as 'Medium'.

Source <https://www.futurelearn.com/courses/introduction-to-cyber-security/24/steps/1237060>

## Data preservation after the end of the research project

### Which data will be retained for the expected 5-year period after the end of the project? In case only a selection of the data can/will be preserved, clearly state the reasons for this (legal or contractual restrictions, physical preservation issues...)

The result from the:

Phase 11. Anticipating the responses of local labor markets to new challenges - selection of the best unverified spatio-temporal forecast using the smallest Forecast RMSE, for the same data set

Phase 12. Anticipating the responses of local labor markets to new challenges - selection of the best verified spatio-temporal forecast  
Original text:

[Faza 11 . Anticiparea răspunsurilor piețelor muncii locale la noile provocări - selecția **celeii mai bune prognoze spațio-temporale neverificate** folosind cel mai mic RMSE de Prognoză, pentru același set de date

Faza 12 . Anticiparea răspunsurilor piețelor muncii locale la noile provocări - **selecția celeii mai bune prognoze spațio-temporale verificate**]

### Where will these data be archived (= stored for the long term)?

ZENODO

### What are the expected costs for data preservation during these 5 years? How will the costs be covered?

10000 lei from the Project Budget

Accessing Other Sources - Looking for Funding form ANCS

**ZENODO<sup>[1]</sup> managed by Open Aire**

20GB 0-109 Euro

75GB 245-340Euro

200GB 790-906Euro

[1] <https://zenodo.org/record/3837717#.Y36K2HZByUk>

## Data sharing and reuse

**Are there any factors restricting or preventing the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)?**

- No

**If no, please specify**

We use public data for public interest.

**Which data will be made available after the end of the project?**

Forecast scenarios.

**Where/how will the data be made available for reuse?**

Publishing Open Access datasets/results under license using Creative Commons Attribution 4.0 International (CC BY 4.0) - free to share and adapt

Publicare Open Acces seturi de date /rezultate sub licența utilizarea licenței Creative Commons Atribuire 4.0 Internațional **CC BY 4.0)- liber să împărtășești și să adaptezi**

**Will a DOI be registered for each of the datasets that are appropriate for public disclosure?**

- Yes

Upload to Zenodo (this automatically allocates PID DOI, allows storage of both data and publications),

**When will the data be made available?**

Faze - Maps	t1	t2	T1.3
Faza 3	11.08.2023	8.12.2023	1
Faza 6	15.08.2024	6.12.2024	1
Faza 8	14.04.2025	11.08.2025	1
Faza 9	12.08.2025	8.12.2025	1
Faza 11	3.04.2026	10.08.2026	1
Faza 12	11.08.2026	8.12.2026	1

T1.4: Published FAIR datasets/ Seturi date FAIR publicate:

faza	t1	t2	T1.4
Faza 11	3.04.2026	10.08.2026	1
Faza 12	11.08.2026	8.12.2026	1

**Who will be able to access the data and under what conditions?**

target group of research results; Ministry of Labour, Ministry of Labor and Social Solidarity (MMSS); Ministry of Family, Youth and Equal Opportunities (MFTES), Ministry of Research, Innovation and Digitization (MCID); Ministry of Development, Public Works and Administration (MDLPA); Ministry of European Investments and Projects (MIPE); Ministry of Education, Ministry of Economy, ANDR and local ADR, ANOFM and AJOFMs, Social Partners; Other social actors.

**grup țintă al rezultatelor cercetării** Ministerul Muncii, Ministerul Muncii și Solidarității Sociale (MMSS) ; Ministerul Familiei, Tineretului și Egalității de Șanse (MFTES), Ministerul Cercetării, Inovării și Digitalizării (MCID); Ministerul Dezvoltării, Lucrărilor Publice și Administrației (MDLPA); Ministerul Investițiilor și Proiectelor Europene (MIPE); Ministerul Educației, Ministerul Economiei, ANDR și ADR locale, ANOFM și AJOFM-uri, Partenerii sociali; Alți actori sociali.

**What are the expected costs for data sharing? How will these costs be covered?**

From project budget  
contribution from interested stakeholders

## **Responsibilities**

**Who will be responsible for the data documentation & metadata?**

Cristina Lincaru

**Who will be responsible for data storage & backup during the project?**

Cristina Lincaru