

**EXTENSION****VACANCY NOTICE FOR:
EXPERT IN
QUANTITATIVE RESEARCH AND DATA ANALYSIS**

Drawing up a list of suitable candidates

Deadline for applications	Tuesday 30 May 2023 – 13:00 Greek time (CET+1)
Reference	Cedefop/2023/03/AD
Type of contract	Temporary Agent 2f ⁽¹⁾
Function group/grade	AD 6 ⁽²⁾
Initial contract duration	5 years renewable
Place of employment	Thessaloniki (Greece)

We are looking for highly motivated and professional candidates with quantitative research and data analysis or data science expertise to join Cedefop's Department for VET and Skills.

Making use of mostly quantitative data analysis approaches and techniques, the expert in quantitative research and data analysis will contribute to the department's collaborative research on labour market and skills analysis with a view to support European policy making on vocational education and training (VET).

With this vacancy notice Cedefop intends to fill up to two positions in the immediate future and create a list of suitable candidates that may be used at a later date, in line with the needs of the service.

1. Why Cedefop?

Whether you are a data analyst, data scientist, or a researcher using quantitative/statistical data processing and analysis techniques, Cedefop offers exciting challenges and opportunities.

As expert in quantitative research and data analysis, you will work in the Department for VET and Skills. The department counts 23 researchers/experts, and 7 research and administrative assistants, organised in 2 thematic areas: Skills and Labour Market and Learning and Employability. The work in the Department is project- and team-based. You will report to the Head of Department.

The Department produces state-of-the-art evidence on labour market and skills trends. We aim to better understand changes in work and their implications for education and training, and to inform policies addressing skills gaps and mismatches at EU and Member States level.

⁽¹⁾ [Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Union](#)

⁽²⁾ Internal and interagency mobility: Internal and interagency candidates in the grade AD6-AD7 may apply, and the selected candidate shall conclude a contract of employment in accordance with [Cedefop's rules](#).

In particular, we provide key data on skill needs, skill mismatches and trends in jobs in EU labour markets:

- together with Eurostat, we manage the only EU-wide collection of online job advertisements data. [Cedefop OVATE](#) reaches thousands of websites to collect millions of job advertisements all over Europe. This offers a unique opportunity to use big data to extract information on skills and jobs;
- Cedefop [European skill forecast](#) uses quantitative macro-economic modelling to project future labour market and skill trends. Cedefop is also developing a sophisticated model for [short term employment forecasts](#) by sector and occupation, using quarterly and annual data. This exciting project pitches different time series models against each other and produces forecasts using the best predictor among competing models. We are also investigating how online job advertisement data can enrich short-term employment forecasts;
- on top of using mainstream European datasets (e.g. EU Labour Force Survey, EU SILC, Community Innovation Survey, Adult Education Survey), we collect primary data by developing and running own EU-wide surveys, such as the [European skills and jobs survey](#), the [European Company Survey](#), a new [survey on teachers in vocational schools](#), and the forthcoming [Cedefop European Training and Learning Survey](#).

These are examples of the unique opportunities we offer to a motivated expert in quantitative research and data analysis.

As expert in quantitative research and data analysis, your tasks and duties will include:

- the collection and analysis of survey-based or administrative data, and of novel big data (web-based, real-time and other);
- contributing to expanding Cedefop's big data analysis capacity, utilising suitable analytical methods (e.g. machine or deep learning, text mining and natural language processing);
- shaping research projects, as part of one or more multi-cultural and multi-disciplinary teams;
- communicating complex messages in a simple manner to a wide audience of stakeholders; this includes shaping and participating in Cedefop events and representing the organisation at high profile EU and/or national events.

To enable its own research work, Cedefop funds data collections and regularly outsources research. Therefore, the job also entails being involved in public procurement and monitoring external contractors.

Finally, on top of engaging in cutting edge quantitative/statistical research, we will offer you varied opportunities to acquire additional knowledge and expertise and to grow as a professional. While we expect you to contribute to Cedefop reference and other publications, we also encourage own publications in Cedefop's Working Paper series and in academic journals.

2. WHAT IS CEDEFOP

Cedefop is one of the EU's decentralised Agencies. It supports the design of well-informed Union policies on vocational education and training (VET), skills and qualifications and

contributes to their implementation. These policies help citizens to acquire the skills they need in today's and tomorrow's society and labour market.

The work of the Agency includes research and policy analysis at EU level to provide innovative evidence, share data and support mutual learning across EU countries.

Cedefop's areas of work comprise VET and apprenticeship reforms, current and future skill needs in the labour market, recognition of qualifications and validation of non-formal and informal learning.

Cedefop works together with the European Commission, Member States and social partners. The work of the Agency is governed by a [Founding Regulation](#), which also defines its objectives and tasks.

Cedefop has its seat in Thessaloniki, Greece ([Life in Thessaloniki](#)). The Agency offers an international and stimulating workplace, with about 120 staff from EU countries.

To find out more about Cedefop, visit our [website](#).

3. ELIGIBILITY CRITERIA

For your application to be considered eligible, you must fulfil all the following requirements on the closing date for submission of applications:

- be a citizen of one of the Member States of the European Union ⁽³⁾ and enjoy full rights as a citizen;
- have a level of education which corresponds to completed university studies of at least 3 years attested by a diploma ⁽⁴⁾ plus 3 years of professional experience;
- have a thorough knowledge of one of the languages of the European Union and a satisfactory knowledge ⁽⁵⁾ of another language of the European Union ⁽⁶⁾;
- have fulfilled any obligations imposed by the laws on military service;
- be physically fit to perform the duties relating to the post ⁽⁷⁾;
- be able to communicate well in English ⁽⁸⁾.

For your application to be evaluated further you need to meet all of the above eligibility criteria.

⁽³⁾ In accordance with the Article 127, paragraph 7(c) of the [Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community](#) (OJ 2019/C 384 I/01).

⁽⁴⁾ Only qualifications issued by EU Member State authorities and qualifications recognised as equivalent by the relevant EU Member State authorities (e.g. Naric) will be accepted.

⁽⁵⁾ As defined in the [European Language levels](#) – Self-assessment Grid, thorough knowledge is considered level C1 or above and satisfactory knowledge is considered level B2 or above.

⁽⁶⁾ Knowledge of a third language of the European Union is necessary for the first promotion after recruitment.

⁽⁷⁾ Before appointment, the successful candidate must undergo a medical examination.

⁽⁸⁾ English is the working language at Cedefop.

4. SELECTION PHASE

The selection will be carried out by a selection board appointed by the Executive Director.

The selection board will assess all eligible applications (see Section 3) against the selection criteria described in this Section 4, using as a reference the description of the role in Section 1 of this vacancy notice.

The selection procedure will be organised in several stages.

4.1. *Preselection based on the application documentation*

Your application will be assessed by the selection board, based on the information provided in your online application (see Section 7. 'How to apply?').

It is important that you explain explicitly how you meet (a) each of the essential preselection criteria and (b) each of the other preselection criteria. The assessment of both (a) and (b) is carried out solely based on the information you will provide for each criterion.

(a) Essential pre-selection criteria

For your application to be considered further, you must meet all the below essential criteria:

- a university degree in one or more of the following fields ⁽⁹⁾: (a) social sciences, (b) mathematics and statistics, (c) Information and communication technology;
- at least 2 years of work experience ⁽¹⁰⁾ using quantitative/statistical data analysis approaches and techniques;
- English: level C1 in all dimensions as per the CEFR ⁽¹¹⁾.

Only if your application meets all the above essential preselection criteria it will be scored against the other preselection criteria listed below under 4.1 (b).

(b) Other pre-selection criteria

The non-fulfilment of one or more of these other preselection criteria will not result in your exclusion from the preselection process but may affect your score and thus your chances of being invited for test and interview.

The criteria below are presented in order of priority:

- experience in using Data Science and Analysis techniques including big data and AI methods, such as machine learning, data mining, predictive modelling and analytics, causal inference, natural language processing and advanced text analytics, etc.;
- experience in applying quantitative/statistical data analysis approaches and techniques to socio-economic and related phenomena and issues;
- university degree in Data Science, Computer Science, Artificial Intelligence, Computer Engineering, Computational Social Science, Statistics; or a university degree in

⁽⁹⁾ <https://uis.unesco.org/sites/default/files/documents/isc-ed-fields-of-education-and-training-2013-en.pdf>

⁽¹⁰⁾ PhD studies are considered as professional experience for up to three years, even when unpaid, provided that the PhD has been successfully completed.

⁽¹¹⁾ Cedefop's working language; See [Common European Framework of Reference](#) for a description of the level C1.

economics, sociology or other social sciences with a strong focus on quantitative research methods and tools;

- authored peer-reviewed publications including quantitative data analysis approaches and techniques ⁽¹²⁾;
- experience in using python, R or other programming languages relevant to data science/AI/big data analysis, and in relevant (big) data visualisation tools;
- advanced degree in field(s) relevant to the vacancy notice (at least EQF level 7);
- work experience in carrying out research on labour market and/or skills analysis.

Around 12 eligible candidates, who obtain the highest scores in this phase, and at least 50% of the maximum score for the above other preselection criteria, will be invited for a written test.

4.2. *Written test and interview*

This stage of the selection procedure will allow you to prove your suitability for this post.

(a) Written test

The written test will give you the opportunity to demonstrate your skills and competencies in quantitative research and data analysis. It will test your:

- knowledge and skills in data analysis methods and techniques and their application;
- ability to develop a research proposal that uses data sets;
- ability to process and analyse data sets.

The selection board will assess the written test anonymously. Only candidates who obtain at least 50% of the maximum score for the written test will be invited to take part in interviews with the selection board.

The written tests are planned to take place in June 2023 but this may be subject to change.

(b) Interview

The interview will cover the following areas of professional knowledge and competences in quantitative research and data analysis. It will test your:

- ability to identify suitable data analysis approaches and techniques and to reflect on their strengths and limitations;
- ability to work constructively in a multicultural and multidisciplinary team;
- ability to communicate clearly complex research findings;
- ability to challenge established thinking and consider alternative thinking;
- ability to plan and organise research projects;
- command of the English language.

The interviews are planned to take place in June 2023 but this may be subject to change.

Further information on the organisation of the written test and interviews, which will take place remotely, will be provided upon invitation.

(c) Final score

The written test and the interview will each count for 50% of the final score.

⁽¹²⁾ A list of relevant authored peer-reviewed publication(s) must be attached to your application.

5. LIST OF SUITABLE CANDIDATES AND APPOINTMENT

Following the tests and interviews, the selection board will propose the list of the most suitable candidate(s) for this post.

In order to be proposed to be placed on this list, you must obtain a minimum of 60% overall score and minimum 50% of the scores for the written test and the interview, respectively.

A second interview may also be organised with candidates placed on this list prior to taking the final decision. The second interview will assess further the suitability of the candidate for the post in view of the main functions and duties that it entails.

A job offer will be made to up to 2 successful candidates, only after the necessary supporting documents have been provided by the candidate and Cedefop's HR service has confirmed their completeness.

The appointed candidate(s) will undergo a probation period of 9 months.

The list may be used for future recruitment for the position advertised in the notice of vacancy, however, inclusion in the list does not guarantee recruitment.

This list is valid until 31 December 2024. The Executive Director may extend the validity of the list. The status of the lists of suitable candidates can be consulted on [Cedefop's website](#).

6. WHAT DO WE OFFER?

- temporary agent 2f with an initial duration of 5 years (renewable);
- function group/grade AD 6 (or AD 7 for internal or inter-agency candidates);
- the monthly basic salary for grade AD 6 step 1 is 6,067 EUR, and is multiplied by the corrective coefficient for Greece (currently 89.4 % and reviewed annually);
- salaries are subject to a Union tax deducted at source and are exempt from national taxation;
- depending on the individual family situation and the place of origin, the jobholder may be entitled to expatriation allowance (16% of the basic salary), household allowance, dependent child allowance, education allowance, pre-school allowance, installation allowance, reimbursement of removal costs, initial temporary daily subsistence allowance, VAT exemption allowance on certain goods for a period of a year;
- example of net monthly salaries as currently applicable:

AD 6 – Step 1 Net salary		
Minimum final net salary (without any allowances)	Final net salary with expatriation allowance	Final net salary with expatriation, household, one child and education allowances
4,232 EUR	5,100 EUR	6,331 EUR

- additional financial support for the schooling of children;
- annual leave entitlement of two days per calendar month plus additional days for age, grade, home leave if applicable, and in addition circa 18 public holidays per year;
- EU Pension Scheme (after 10 years of service);
- EU Joint Sickness and Insurance Scheme (JSIS), accident and occupational disease coverage, unemployment, invalidity allowance and insurance;
- professional training and development opportunities;

- flexible working arrangements, including teleworking.

Further information regarding rights, conditions of employment and benefits can be found in the [Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Union](#). Information on Working conditions at Cedefop can be downloaded [here](#).

7. HOW TO APPLY?

Please submit your application through the online system by **Tuesday 30 May 2023 at 13:00 Greek time (CET+1)**.

To register and apply, please go to the [vacancies section on Cedefop's website](#), click on the name of the vacancy notice and follow the instructions.

The online application must be completed in English.

Supporting documents (diploma(s), work experience certificate(s), etc.) may be requested in the context of the selection phase.

Please note that the assessment of both (a) essential preselection criteria and (b) other preselection criteria (Section 4.1. (a) and (b) of this vacancy notice) is carried out solely based on the information provided for each criterion in the online application form.

Applicants are strongly advised to submit their applications well in advance of the deadline, since heavy internet traffic or fault with the internet connection could lead to difficulties in submission last minute.

If you have a query, please refer first to the [Frequently Asked Questions](#). You may also send an email to hr-recruitment@cedefop.europa.eu.

Candidates are strictly forbidden to make any contact relating to this selection process with the selection board and the Executive Director, or members of Cedefop's management, either directly or indirectly. Any infringement of this rule will lead to disqualification from the selection process.

8. EQUAL OPPORTUNITIES

Being European Union Agency, Cedefop believes in equality and diversity and is committed to providing equal opportunities to all its employees and applicants for employment and to preventing discrimination on any grounds.

Cedefop actively welcomes applications from all qualified candidates from diverse backgrounds, across all abilities, without any distinction on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age, marital status or other family situation or sexual orientation, and from the broadest possible geographical basis amongst the EU Member States.

Cedefop wishes to further increase the diversity of our talent pool to be representative of the diversity of the EU citizens we serve.

9. PROTECTION OF PERSONAL DATA

Cedefop ensures that applicants' personal data are processed in line with [Regulation \(EU\) 2018/1725](#) of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002 and on the free movement of such data. You can find detailed information on how personal data is processed in the context of the selection procedures in the [privacy statement](#).

10. DECLARATION OF COMMITMENT TO SERVE PUBLIC INTEREST INDEPENDENTLY

The successful candidate will be required to sign a declaration of commitment to act independently in the public interest and to sign a declaration in relation to interests that might be considered prejudicial to his/her independence. Applicants must confirm their willingness to do so in their application.

11. APPEAL PROCESS

If a candidate considers that s/he has been adversely affected by a particular decision, he/she has the possibility, **within 3 months** after being informed of the decision concerning his/her application, to lodge a complaint under Article 90(2) of the Staff Regulations of Officials and Conditions of Employment of Other Servants of the European Union.

Complaints must be addressed by email to the Chairperson of Cedefop's Appeals Committee using the following email address: selections-appeals@cedefop.europa.eu.

Should the complaint be rejected, pursuant to Article 270 of the Treaty on the Functioning of the European Union and Article 9d1 of the Staff Regulations of Officials and the Conditions of Employment of Other Servants, a candidate may request judicial review of the act. For details on how to submit a judicial appeal and how to determine the deadlines, please consult the website of the [General Court](#).

Any citizen of the European Union or any natural or legal person residing in a Member State may make a complaint for maladministration pursuant to Article 228(1) of the Treaty on the Functioning of the European Union. Please consult the website of the [European Ombudsman](#) for further information on the arrangements for complaints to the Ombudsman.

Please note that:

- complaints to the European Ombudsman do not have the effect of suspending the period mentioned in Articles 90 and 91 of the Staff Regulations of Officials and Conditions of Employment of Other Servants for lodging complaints or submitting an appeal pursuant to Article 270 of the Treaty on the Functioning of the European Union;
- under Article 2(4) of the [General conditions governing the performance of the Ombudsman's duties](#), any complaint lodged with the European Ombudsman must be preceded by the appropriate administrative approaches to the institutions and bodies concerned.