



CEDEFOP

European Centre for the Development
of Vocational Training

Area Resources
Finance and Procurement, Procurement Service

Thessaloniki, 11/07/2013
RS/PRO/CALU/RB(2013)01472

OPEN INVITATION TO TENDER

AO/RPA/KPOUL-GRUSSO/Mobility and Skill Mismatch/011/13

“Labour Market Mobility and Skill Mismatch in EU Labour Markets”

REFERENCE: *Contract notice 2013/S 132-227576 of 10/07/2013*

Dear Sir/Madam,

We thank you for the interest you have shown in this tender.

The purpose of this tender and additional information necessary to present a tender can be found in the attached Tender Specifications. You should note however the following important points concerning the submission of a tender and its implications.

1. Tenders (and documents included in them) should be submitted preferably in English, but in any case in one (or in any) of the official languages of the European Union.
2. Tenders may be submitted exclusively in one of the following ways:
 - a) **by post** to be dispatched **not later than the date and time specified in the timetable in point 8 below**, in which case the evidence shall be constituted by the date of dispatch on the postmark or the date of the deposit slip, to the following post address of Cedefop:

**European Centre for the Development of Vocational Training (Cedefop),
Procurement Service, Attention of Mr G. Paraskevaïdis
PO Box 22 427
GR – 55102 Thessaloniki, Greece**

Important:

If using a postal service, tenderers must use a registered, reliable one. If no postmark has been stamped or if the postmark is not legible, Cedefop will accept deposit slip issued by the postal service, provided that this clearly indicates the date as filled in by the post office and not by the tenderer.

Tenderers shall inform Cedefop by e-mail (c4t-services@cedefop.europa.eu) or fax (+30 2310 490028)

✓ that they have submitted an offer in time, and

✓ that they request Cedefop to confirm receipt of the e-mail or fax.

Tenderers should not attach their offer to any of the above informative e-mail or fax.

or

- b) **by courier service** to be dispatched not later than **the date and time specified in the timetable in point 8 below**, in which case the evidence shall be constituted by the date of dispatch to the address below or the date of the deposit slip,

or

- c) **delivered by hand** not later than **the date and time specified in the timetable in point 8 below**, in which case a receipt must be obtained as proof of submission, signed and dated by the official in the above mentioned Service who took delivery,

to the following address (for points **(b1)** and **(b2)** above):

**European Centre for the Development of Vocational Training (Cedefop),
Procurement Service, Attention of Mr G. Paraskevaidis
123, Europe Str,
GR-57001 Thessaloniki-Pylea, Greece
Tel: +30 2310 490111 / 490 064**

Please note that Cedefop is open from 09h00 to 17h00, Monday to Friday. It is closed on Saturday, Sunday and Cedefop holidays.

3. Tenders must be submitted strictly adhering to the following.
Tenders must be submitted in a sealed envelope itself enclosed within a second sealed envelope. If self-adhesive envelopes are used, they must be sealed with adhesive tape and the sender must sign across this tape.
The **outer envelope**, addressed simply to Cedefop (address depending on the means of submission, see point 2 above), should only bear additionally **the name and address** of the sender.
The **inner envelope**, addressed to the Procurement Service must bear a self-adhesive label with the indication **“Open Invitation to tender – Not to be opened by the internal mail service”** and all the necessary information, as shown below:

OPEN INVITATION TO TENDER

CEDEFOP No: AO/RPA/KPOUL-GRUSSO/Mobility and Skill Mismatch/011/13

“Labour Market Mobility and Skill Mismatch in EU Labour Markets”

Name of tenderer:

NOT TO BE OPENED BY THE INTERNAL MAIL SERVICE

The inner envelope must also contain three sealed envelopes, namely, Envelope A – “Supporting Documents”, Envelope B – “Technical Proposal” and Envelope C – “Financial Proposal”. The content of each of these three envelopes is described in Section 6 of the attached Tender Specifications.

4. Tenderers must ensure that their tenders are signed by an authorised representative and that tenders are legible. It is mandatory to include in the offer a **Cover Letter, signed by the person/s that is/are authorised to sign the contract in case of contract award, stating that the tenderer accepts in full and without restriction the requirements of**

these Tender Specifications, and the Special and General conditions governing this contract as the sole basis of this tendering procedure (see also point 1 of the Tender Specifications).

5. **Submission of a tender implies acceptance of all the terms and conditions set out in this Invitation to Tender, in the specifications and in the draft contract** and, where appropriate, waiver of the tenderer's own general or specific terms and conditions. It is binding on the tenderer to whom the contract is awarded for the duration of the contract.
6. The opening of tenders will take place at Cedefop on the date and time specified in the timetable in point 8 below. Each tenderer may be represented at the opening of tenders by one person. The name of the person attending the opening must be notified in writing by fax (Fax No +30 2310 490 028) or by e-mail (C4T-services@cedefop.europa.eu) at least two working days prior to the opening session.
7. Contacts between the contracting authority (Cedefop) and tenderers are prohibited throughout the procedure save in exceptional circumstances and under the following conditions only:

7.1 Contacts before the final date for submission of tenders:

- At the request of the tenderer, the Cedefop Procurement Service may provide additional information solely for the purpose of clarifying the tender documents. Any request for additional information must be made in writing by e-mail (C4T-services@cedefop.europa.eu) or by fax (fax No +30 2310 490 028).

Requests for additional information/clarification (if any) from potential tenderers should preferably be written in English and should be received by the date and time as specified in the timetable in point 8 below. No such requests will be processed after that date.

- Cedefop may, on its own initiative, inform interested parties of any error, inaccuracy, omission or any other clerical error in the text of the call for tenders.

The Answers/Clarifications of Cedefop to the requests for additional information/clarification of the tenderers, including that referred to above, will be published on Cedefop's website under the same link where this Open Tender Procedure is announced (<http://www.cedefop.europa.eu/EN/working-with-us/public-procurements/calls-for-tenders.aspx>).

Tenderers must ensure that they visit regularly the site for updates up to the closing date for receipt of tenders.

7.2 Contacts after the final date for submission of tenders and before opening:

- Tenderers should not contact the Contracting Authority (i.e. Cedefop) on their own initiative.
- Tenderers are not allowed to amend their offers, e.g. by completing the documents they sent, replacing them with amended ones or sending new documents initially not included in the tender, as this may lead to rejection of the tender at a later stage. Any such need for additional information/document identified by the Evaluation Committee during the evaluation process will be notified to the tenderer concerned at Cedefop's initiative, providing for a reasonable deadline for response (see also the provisions under the heading below).

7.3 Contacts after the opening of tenders:

- Tenderers should not contact Cedefop on their own initiative at that stage.
- If clarification on the compliance with the Eligibility and/or Selection Criteria is required or if obvious clerical errors in the tender need to be corrected Cedefop

may contact tenderer/s in writing to obtain further clarification or documents on specific points of the tender or to correct obvious clerical errors.

- If the necessary information and/or supporting documents for the assessment of an award criterion are missing, these may not be requested as clarification if this might alter the proposal. Any requests for clarification in that regard should not lead to amendment of the terms of the tender. Tenderers must not modify their tender or add any new elements to it. The reply must therefore make clear reference to the relevant information already present in the file. This will serve solely the purpose to provide the Evaluation Committee with a clarification regarding the technical proposal, provided the terms of the tender are not modified as a result.
- In regards to possible clarifications on obvious clerical errors in the financial offer, tenderers must not add any new prices, but only explain the quotation on the basis of elements and prices already present in the offer. In case a tenderer alters his financial offer during a clarification (beyond the correction of any obvious clerical/calculation errors), this offer will be automatically rejected.
- Tenderers should be prepared to reply to such requests for clarification within a short reasonable deadline as it will be stated in the request for clarification.

8. Timetable:

	DATE	TIME
Deadline to request any clarification from the Contracting Authority (Cedefop)	02/09/2013	.....
Last date on which clarifications are issued by Cedefop	As soon as possible	.....
Deadline for submission of tenders (hand delivered)	10/09/2013	.....
Deadline for submission of tenders by post / courier	10/09/2013	.....
Validity of the tenders	10/03/2014	.....
Tender opening session	23/09/2013	.....

9. Tenderers must maintain the validity of their tender for at least 6 months following the deadline of submission of tenders.

In exceptional cases, before the period of validity expires, Cedefop may ask the tenderers to extend the period for a specific number of days, which may not exceed 40.

The selected tenderer must maintain his tender for a further period of 60 days from the date of notification that his tender has been recommended for the award of the contract. The further period of 60 days is added to the initial period of 6 months irrespective of the date of notification.

10. All costs incurred in preparing and submitting tenders should be borne by the tenderers.
11. Up to the point of signature, the contracting authority may either abandon the procurement or cancel the award procedure, without the candidates or tenderers being entitled to claim any compensation. If such decision is taken, the tenderers will be notified accordingly.
12. This invitation to tender is in no way binding on Cedefop. Cedefop's contractual obligation commences only upon the signature of the Contract with the successful tenderer.
13. Evaluating your tender and your possible subsequent replies to questions in accordance with the specifications of the invitation to tender, will involve the recording and processing of personal data (such as your name, address and CV). Unless indicated otherwise, such personal data will be processed by Cedefop's Finance and Procurement Service solely for

that purpose and pursuant to Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of data by the Union institutions and bodies and on the free movement of such data. Details concerning the processing of your personal data are available on the privacy statement at: http://ec.europa.eu/dataprotectionofficer/privacystatement_publicprocurement_en.pdf.

You have the right of recourse at any time to the European Data Protection Supervisor for matters relating to the processing of your personal data

14. Your personal data (name, given name if natural person, address, legal form, registration number and name and given name of the persons with powers of representation, decision-making or control, if legal person) may be registered in the Early Warning System (EWS) only or both in the EWS and Central Exclusion Database (CED) by the Accounting Officer of the Commission, should you be in one of the situations mentioned in:
 - the Commission Decision 2008/969 of 16.12.2008 on the Early Warning System (for more information see the Privacy Statement on http://ec.europa.eu/budget/info_contract/legal_entities_en.htm), or
 - the Commission Regulation 2008/1302 of 17.12.2008 on the Central Exclusion Database (for more information see the Privacy Statement on http://ec.europa.eu/budget/library/sound_fin_mgt/privacy_statement_ced_en.pdf).
15. All tenderers will be informed in writing of the results of this tender procedure.

Yours sincerely,

G. Paraskevaïdis

Head of Finance and Procurement

OPEN INVITATION TO TENDER

AO/RPA/KPOUL-GRUSSO/Mobility and Skill Mismatch/011/13

**LABOUR MARKET MOBILITY AND SKILL MISMATCH IN EU LABOUR
MARKETS**

TENDERING SPECIFICATIONS

Table of contents

Introduction to Cedefop - Europe's agency for training policy	3
1 Overview of this tender procedure.....	5
1.1 Description and type of the contract	5
1.2 Place of delivery or performance	5
1.3 Division into lots	5
1.4 Variants.....	6
1.5 Value or quantity of purchase	6
1.6 Duration of the contract	6
1.7 Main terms of financing and payment	6
1.8 Publication rights and intellectual property	6
2 Terms of Reference	7
2.1 Background.....	7
2.2 General purpose	9
2.3 Specific research questions.....	10
2.4 Description of tasks and methods.....	11
2.5 Deliverables and timetable	14
2.6 Meeting and travel expenses.....	15
3 Specific information concerning participation to this tender procedure	17
3.1 Exclusion criteria	17
3.2 Selection criteria.....	17
3.3 Legal Position.....	20
4 Additional information concerning participation to this tender procedure	20
4.1 Joint Offers/ Groupings (Consortia)	20
4.2 Subcontracting/Subcontractors	21
5 Award of the contract	23
5.1 Technical evaluation.....	23
5.2 Technical proposal	24
5.3 Financial evaluation.....	26
5.4 Financial proposal	26
6 Information on presentation and content of tender	28
6.1 Envelope A – Supporting documents	28
6.2 Envelope B – Technical proposal	28
6.3 Envelope C – Financial proposal	28

ANNEXES:

Annex A: CONTRACT NOTICE	1
Annex B: DRAFT CONTRACT	2
Annex C: DECLARATION OF HONOUR WITH RESPECT TO THE EXCLUSION CRITERIA AND ABSENCE OF CONFLICT OF INTEREST	3
Annex D: LEGAL ENTITY FORM.....	4
Annex E: FINANCIAL IDENTIFICATION FORM	5
Annex F: CHECK LIST OF MANDATORY DOCUMENTS	6
Annex G: QUESTIONNAIRES	7
Annex H: CEDEFOP STYLE MANUAL	8
Annex I: POWER OF ATTORNEY MODELS	9
Annex J: MODEL OF LETTER OF INTENT FOR SUBCONTRACTOR/S	10

INTRODUCTION TO CEDEFOP - EUROPE'S AGENCY FOR TRAINING POLICY

Source: <http://www.cedefop.europa.eu/EN/about-cedefop.aspx>

To provide people with the skills they need, vocational education and training systems (VET) need to adapt quickly to changing demands. European VET policy's central aim is to promote excellence through VET. To make it both an attractive learning option for the brightest and best young people and adults and an effective way of helping those with low levels of qualification to develop their skills.

Cedefop, (the European Centre for the Development of Vocational Training) founded in 1975 and based in Greece since 1995, is a European Union (EU) agency. It provides the European Commission, Member States ⁽¹⁾ and social partners with insights into trends concerning VET and offers advice on how European VET policy should meet the challenges Europe and its citizens face.

The evidence Cedefop provides comes from its:

- Monitoring of VET policy developments and reforms in Member States;
- Comparative research and analyses, including anticipation of future skill supply and demand;
- Forums for debates among policy-makers, social partners, researchers and practitioners on the best ways to tackle the challenges Europe faces.

Cedefop's objective and priorities for 2012-14

Cedefop's activities are guided by its strategic objective and medium-term priorities for 2012-14. Cedefop's strategic objective is to contribute to designing and implementing policies for an attractive VET, that promotes excellence and social inclusion and to strengthening European cooperation in developing, implementing and analysing European VET policy. This objective is supported by three priorities:

- **Supporting modernisation of VET systems**

Modern VET systems must be relevant to individual and labour market needs. They should take into account learning acquired in different ways (for example through work experience) and at different times, and allow people to move between countries and sectors.

Member States decide national VET policies and Cedefop monitors and reports on the reforms and changes they make to their systems. Cedefop also works to improve international VET statistics.

European cooperation in VET, led by the European Commission working with Member States and social partners, has agreed shared objectives. As part of this cooperation, Cedefop has helped develop, and is now working to implement, common European tools and principles which aim to make it both easier to work and study abroad and move between different parts of a national education and training system (for example between general and vocational education).

¹ Cedefop also works with Iceland and Norway

- **Careers and transitions – Continuing VET, adult and work-based learning**

Today, people are likely to change jobs more often. Cedefop is looking at how continuing training and work-based learning for adults can help people to manage their careers better and improve their job prospects. Cedefop is also examining how work-based learning for adults can help enterprises to deal with technological change, generate innovation and increase competitiveness.

New demands are also being made of VET teachers and trainers and Cedefop is looking at their changing roles and their skill and learning needs.

- **Analysing skills needs to inform VET provision**

Europe's growth and competitiveness will be held back if people's skills do not meet job requirements. Unemployment currently coexists with skill shortages. Understanding and anticipating the skills required helps ensuring that training meets labour market needs. It helps to promote a better match between individuals' potential and jobs' requirements.

Cedefop's skill needs analysis provides insights into the trends that influence skill supply and demand and the imbalances that may arise both in the EU and individual Member States. Cedefop is also finding out more about sectorial and occupational developments, such as the demand for 'green' skills for sustainable growth and, as the population ages, the potential for jobs creation and impact of skill needs of the 'silver' economy.

CEDEFOP'S INFORMATION

Cedefop shares its expertise through its publications, networks, conferences, seminars and web portal <http://www.cedefop.europa.eu>. The web portal provides news on Cedefop's major themes "Identifying skills needs", "Understanding qualifications", "Analysing policy" and "Developing lifelong learning". All Cedefop [publications](#) are available for download. Cedefop hosts and organises conferences and events throughout the year. Cedefop also coordinates the study visits programme for the European Commission. [Study visits](#) are short-term visits of three to five days for a small group of 10 to 15 specialists to examine a particular aspect of lifelong learning.

In addition to its web portal <http://www.cedefop.europa.eu>, Cedefop's work can be followed on Facebook at <http://www.facebook.com/cedefop> and Twitter at <http://www.twitter.com/cedefop>.

1 OVERVIEW OF THIS TENDER PROCEDURE

In submitting his tender in response to this tender procedure, the tenderer accepts in full and without restriction the requirements of these Tender Specifications, and the Special and General conditions governing this contract as the sole basis of this tendering procedure, whatever his own conditions of sale and terms of business may be, which he hereby waives. No account can be taken of any reservation or disclaimer expressed in the tender as regards the tender dossier's Tender Conditions and Specifications and the Contract's Special and General Conditions. If necessary, clarification may be requested by the potential tenderer concerned while the tender submission phase is open – see point 7 of the Invitation to tender. Any reservation or disclaimer may result in the rejection of the tender without further evaluation on the grounds that it does not comply with the conditions of the Tender Dossier.

Tenderers are expected to examine carefully and comply with all instructions, forms, contract provisions and specifications contained in this tender dossier. Failure to submit a Technical and Financial Proposals containing all the required information and documentation may lead to the rejection of the tender.

1.1 Description and type of the contract

- a) Title of the contract: *Labour Market Mobility and Skill Mismatch in EU Labour Markets*
- b) Purpose of the contract: to undertake a quantitative empirical investigation of the causal relationship between different measures of labour market mobility/transitions of individuals and the incidence and trend of their skill mismatch. To derive multivariate regression estimates of the relationship between **skill development and accumulation** (acquired via formal initial and continuing vocational education and training, and non-formal or informal learning), **labour market mobility** and **skill mismatch**. As a minimum requirement the study should use the European dataset that contains a longitudinal data collection component, namely the EU Survey on Income and Living Conditions (EU-SILC).² Available data from the year 2004 until the most recently available wave released from Eurostat should be explored, covering all countries included in the dataset.³ The aim of this tender is to enhance the evidence-base and to assess the validity of policies emphasising skill development and labour market mobility as strategies for mitigating skill mismatch in EU Member States.
- c) Type of contract: *Service contract (Study contract related to research)*

1.2 Place of delivery or performance

The tasks must be completed externally.

1.3 Division into lots

This invitation to tender is **not** divided into lots.

² In addition the Contractor may propose to use and analyse suitable national data sources that contain a longitudinal or rotating panel wave element from any of the EU Member States, as validation of the main findings obtained on the basis of the EU-SILC (see points 2.2 and 2.4.3 below).

³ The study should investigate all of the countries that are included up to the most recently available wave of the EU-SILC dataset released by Eurostat, taking into consideration that some countries were added incrementally to the database during this time period. Eurostat has released the cross-sectional UDB SILC 2009 in March 2011 with coverage of 29 countries (EU27 + NO, IS) and the longitudinal UDB SILC 2009 in August 2011 with coverage of 26 countries (EU27 except DE, IE, RO + NO, IS). The Contractor is required to make all necessary efforts to obtain access to the latest available waves of data by Eurostat, namely the cross-sectional and longitudinal UDB SILC 2010.

1.4 Variants

Tenderers **may not** offer variant solutions to what is requested in the technical specifications.

1.5 Value or quantity of purchase

The estimated total budget for the required services described in this call for tenders is of the order of **170.000 EUR, excluding VAT**.

1.6 Duration of the contract

The contract shall enter into force on the date of signature of the last contracting party (i.e. Cedefop) and shall have duration of eighteen (18) months.

1.7 Main terms of financing and payment

Payments will be made within **30** days (pre-financing) **and 60** days (other payments) of submission of invoices and at the conditions set out in the draft contract.

1.8 Publication rights and intellectual property

Following the provisions of the framework service contract to be signed and Cedefop's citation policy, Cedefop's name will appear on the title page of publications. Acknowledgment to the external service providers/contractors, experts and other contractors will appear on a specific acknowledgement page. Articles published by Cedefop in readers will bear the name of their authors and be cited as such.

Any results or rights, including copyright and other intellectual or industrial property rights, obtained in performance of the Contract, shall be owned solely by Cedefop, which may use, publish, assign or transfer them as it sees fit, without geographical or other limitation. Please note that Cedefop shall not be required to distribute or publish documents or information supplied in performance of the Contract.

Documents and/or analyses based in whole or in part upon the work undertaken in the context of the contract may be published given prior written approval by Cedefop.

2 TERMS OF REFERENCE

2.1 Background

Cedefop's (2012a) skills forecasts provide a core input to debates on the future employment prospects or skill imbalances of occupations and economic sectors in European labour markets ⁽⁴⁾. Policy-makers increasingly recognise the added value of anticipating skill trends to support evidence-based policy-making, as highlighted in the European Commission's Communication 'New Skills for New Jobs' ⁽⁵⁾ and in one of the flagship initiatives of the Europe 2020 strategy, the 'Agenda for new skills and jobs' ⁽⁶⁾. The EU Communication 'Towards a job-rich recovery' ⁽⁷⁾ has also recently made recommendations to Member States emphasizing the need to boost job creation in Europe and to make better targeted use of education and employment policies and programmes that encourage investment in skills training and the matching of job seekers with available jobs across Europe.

By examining developments in economic sectors, occupations and skill levels, the regularly updated Cedefop projections also comprise a key pillar of the *EU Skills Panorama* ⁽⁸⁾, a new initiative of the EU Commission that seeks to facilitate the exchange of information on skill needs and skill mismatches in EU Member States.

Parallel and in close connection to its skill demand and skill supply forecast, Cedefop is also analysing skill mismatch. To guide such analysis, five priorities for research have been identified ⁽⁹⁾. These priorities are: 1) improve measurement of skills and skill mismatch; 2) **examine the persistence of skill mismatch and its impacts**; 3) **improve understanding of skill mismatch processes, its dynamics and the consequences of skill mismatch**; 4) focus on skill mismatch for vulnerable groups on the labour market; and 5) improve data availability and use. The work carried out by Cedefop in recent years has aimed to address aspects present in all of the above research priorities ⁽¹⁰⁾. Cedefop research on skill mismatch has paid particular attention to training and skill development strategies and practices that can help mitigate mismatch at the individual, organisational and macro level ⁽¹¹⁾.

Attention among policy makers on the issue of skill mismatch has persisted because of fast-paced technological, organisation and demographic changes in the nature of work, which are believed to have increased employer's demands for individuals that possess higher-level "21st century skills". It is also widely acknowledged that skill mismatch that persists over time imposes real costs on individuals, enterprises and societies. Furthermore, the Great Recession has reinforced the trend of skill mismatch, as the sectorial reallocation of economic activity has resulted in ever higher unemployment rates in a number of European countries, particularly affecting the lower-skilled and

⁴ See Cedefop (2012a). Europe's skill challenge: Lagging skill demand increases risks of skill mismatch. Cedefop Briefing note. March Available online at <http://www.cedefop.europa.eu/EN/publications/19651.aspx>.

⁵ The Commission Communication 'New Skills for New Jobs' (COM(2008) 868, 16.12.2008) is available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008DC0868:EN:NOT>.

⁶ The Commission Communication 'An Agenda for new skills and jobs: A European contribution towards full employment' (COM(2010) 682, 23.11.2010) is available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0682:EN:NOT>

⁷ The Commission Communication 'Towards a Job Rich recovery' (COM(2012) 173, 18.4.2012) is available at <http://ec.europa.eu/social/main.jsp?catId=89&langId=en&newsId=1270&moreDocuments=yes&tableName=news>

⁸ <http://euskills Panorama.ec.europa.eu/>

⁹ See Cedefop (2009). Skill mismatch: Identifying priorities for future research. Cedefop working paper No 3, Thessaloniki Available online at <http://www.cedefop.europa.eu/EN/publications/5987.aspx>

¹⁰ See Cedefop (2010). The skill matching challenge: Analysing skill mismatch and policy implications, available on-line: <http://www.cedefop.europa.eu/EN/publications/15275.aspx>.

¹¹ Work in previous years has primarily looked at skill mismatch as a phenomenon in different countries. It has investigated the causes of mismatch and analysed how it affects vulnerable groups: e.g. older workers and people with a migrant background. See Cedefop (2010). The right skills for silver workers: An empirical analysis, available on-line: <http://www.cedefop.europa.eu/EN/publications/17066.aspx> and Cedefop (2011), Migrants, minorities, mismatch? Skill mismatch among migrants and ethnic minorities in Europe, available on-line: <http://www.cedefop.europa.eu/EN/publications/18670.aspx>

the younger sections of the EU population. This greater share of idle workers has coexisted with available job vacancies in several EU regions and countries. Skill mismatch has also materialized in the form of a greater share of workers whose formal qualifications do not correspond closely to the skill requirements of their jobs ⁽¹²⁾⁽¹³⁾.

A significant proportion of employees in the EU are observed to be hired in jobs with qualification requirements that deviate from the ones that they possess (e.g. over-qualification or under-qualification). In the face of an anaemic demand for labour during the years following the economic crisis of 2008, an increasing share of higher educated workers has been finding employment in positions that are not commensurate with their qualifications (e.g. tertiary education graduates employed in skilled non-manual and elementary occupations). Qualification mismatch is found to primarily affect younger individuals, who are characterised by an informational disadvantage relative to older workers and insufficient job experience. Cedefop (2012) also shows that the probability of mismatch is higher in the Southern Mediterranean economies, which are more likely to be characterized by segmented labour markets and less mobile workforces. This is apparent by the fact that the rate of over-qualification in these countries is higher among younger individuals who were unemployed prior to finding their current job, or among those who take up a part-time/temporary contact after re-entering the job market.

The adverse economic situation has called for better public policies that will invest in the reskilling of unemployed or precariously employed workers found in declining sectors of economic activity and for stronger VET systems that are responsive to labour market needs. Efficient policies that can ensure the matching of the skills of jobless, precariously employed or dissatisfied workers with the needs of the job market have also become necessary so as to prevent the atrophy and underutilization of their skills and discouragement or withdrawal from the active workforce. Policies that foster the mobility of workers across different sectors and occupations are thus often espoused as a remedy for skill mismatch, on the grounds that they can facilitate a faster and more effective matching of people's skills with available and better-suited jobs. Nevertheless, a crucial question for policy is the extent to which the encouragement of labour market mobility is a beneficial and cost-effective strategy for realigning individual's skills with job requirements and for career improvements.

Most of the available evidence on the relationship between labour market transitions and skill mismatch has been limited to insights based on available cross-sectional data and in specific countries (e.g. UK, NL, US, Australia). This has prevented meaningful conclusions to be drawn about skills mismatch processes, its dynamics and the causal nature of its relationship with important economic variables (e.g. productivity, job satisfaction, job mobility etc.). It has also not allowed for the exploration of the phenomenon in countries characterised by different labour market institutions, employment regulations as well as education and training systems. In order to make definitive statements on such issues, analysis based on longitudinal data and across a number of countries is required¹⁴.

The majority of current studies also only provide a partial picture of mismatch persistence, as they focus on the transition from school to work. Far less attention is paid on how mismatch changes

¹² See EU Commission (2012), European Vacancy and Recruitment Report 2012 available at <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7267&type=2&furtherPubs=no>

¹³ See Cedefop (2012), The Skill Mismatch Challenge in Europe, Ch.6 in: EU Commission, *Employment and Social Developments in Europe*, Luxembourg: Office for Official Publication, available at: <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7315&type=2&furtherPubs=no>.

¹⁴ McGuinness S. and Wooden M. (2009), Over-skilling, job insecurity and career mobility, *Industrial Relations*, 48(2), 265-286; Tsai Y. (2010), Returns to over-education: a longitudinal analysis of the US labor market, *Economics of Education Review*, 29(4), 606-617. Mavromaras K., Sloane P. and Wei Z. (2012b), The role of education pathways in the relationship between job mismatch, wages and job satisfaction: a panel estimation approach, *Education Economics*, 20(3), 303-321; Bender K.A and Heywood, J.S. (2011), Educational mismatch and the careers of scientists, *Education Economics*, 19(3): 253-274.

during different types of transitions, i.e., the transition from unemployment to work, or transitions across alternative employment labour market states (e.g. temporary/part-time work to permanent/full time; salaried employment to self-employment; within-firm mobility; occupational or industrial mobility¹⁵). It is also impossible to draw reliable conclusions on the basis of single period data about the potential endogenous nature of mismatch and job mobility. In particular, are skill mismatches the driving force behind labour market transitions or do transitions between different employment states exacerbate/mitigate skills mismatches?

The labor market outcomes of transitions in terms of mismatch also depend on the type of event triggering the transitions. Trigger events may be labour market events (layoffs and quits) but also life events (child birth, divorce, career changes of spouses and personal events). The extent to which skill mismatch is more likely to arise is likely to depend on the type of trigger event, yet data limitations have constrained an in-depth analysis of the causative link between reasons for mobility and its effect on skill mismatch.

Related to the above motives for mobility is another crucial issue in the mismatch literature, namely that qualification mismatch, as identified in cross-sectional datasets, is a statistical artefact that merely reflects unobserved labour market sorting due to differences in individual abilities/skills or preferences among people holding similar qualifications or different task requirements among broadly classified occupations. Appropriate empirical analysis of the incidence and implications of skills mismatch is therefore crucially dependent on the ability of the empirical methodology to take unobserved differences in individual and job characteristics into account.

2.2 General purpose

The general purpose of this contract is to engage in an in-depth empirical analysis of the causal relationship between different types of labour market mobility (e.g. different forms of labour market status; different types of employment contract; an alternative job associated with a change in the main occupation or industry; a different job accepted in another country; a different job associated with a better combination of skill and pay level) and the incidence and trend of skill mismatch (e.g. defined by the correspondence of an individual's highest attained level of qualification and the skill requirements of his/her job or some other appropriate measure of skill mismatch).

The Contractor should undertake a state-of-the-art statistical analysis (i.e. exploiting the most relevant and recent statistical techniques available in the scientific literature) using a European microeconomic data source that allows for the (partial) tracing of individual labour market histories over time, namely the EU-SILC data set. The analysis should be done for the time period 2004 until the year of the most recently available wave of data released by Eurostat. The study should engage in an in-depth investigation of the causal relation between labour market transitions and the incidence and trend in skill mismatch of individuals in all countries contained within the database (taking into consideration that data for only a subset of member states is available in the EU-SILC dataset in earlier years).

¹⁵ Since occupational changes are inferred by comparing occupations in two time periods, measurement errors (errors in reporting occupations or errors in describing the occupations) can inflate the extent of occupational mobility. There is a non-exhaustive literature on the extent of measurement error in occupational affiliation:

<http://economics.sas.upenn.edu/~manovski/papers/CautionaryNote.pdf>,
http://www.diw.de/documents/publikationen/73/diw_01.c.361912.de/diw_sp0318.pdf,
http://mpra.ub.uni-muenchen.de/9313/1/MPRA_paper_9313.pdf,
<http://www.sole-jole.org/13027.pdf>

The study should identify patterns of labour market mobility of individuals in the samples of the EU Member States examined, such as transitions of individuals between alternative states of labour market participation (employment, unemployment, inactivity), different jobs (between employers or within the same employer; from paid employment to self-employment etc.), different types of contractual arrangements (temporary, permanent, part-time or full-time contract), a different industry or occupation. The association of such patterns of labour market mobility with individuals' initial/continuous skill development and the degree of skill accumulation in their prior jobs (e.g. occupational experience; job tenure; participation in continuous VET or learning) should be clearly investigated. The causal relation of the different forms of labour market mobility of individuals with the incidence and trend of their current skill mismatch should be established, after taking into account any observed and/or unobserved heterogeneity in characteristics that may bias the raw correlations between the variables.

In particular, the study should aim to examine the historical relation between the initial/continuous skill development and degree of skill accumulation and mismatch of employees in their previous jobs, their decision to engage in labour market mobility (e.g. change in employment status/type of contract/occupation/industry/country), the reasons underlying such mobility patterns and whether it is associated with a move to a job entailing a higher occupational skill profile (e.g. a vertical move to a more skilled occupational group; a move to a position entailing a higher level of pay within the same occupational category), and the subsequent incidence of skill mismatch in their new employment.

In order to validate the findings based on the required European source (EU-SILC), the Contractor may propose to extend the analysis (either on his own or via a subcontracting entity), by using other suitable and publicly accessible (for research purposes) national datasets of EU Member States that contain a longitudinal or rotating panel component.¹⁶ The Contractor may use such longitudinal national datasets to augment and strengthen the analysis of the EU-SILC database, via the inclusion of additional or more detailed variables of interest, extra years of data or superior measures of labour market mobility, occupational transitions and/or skill mismatch (see also Award criterion 3 (AC3) in point 5.1 below).

2.3 Specific research questions

Applying state-of-the-art theoretical and empirical approaches, the Contractor should undertake a study that provides answers to the following research questions:

- (i) what percentage of the population of EU Member States exhibits labour market mobility (e.g. defined by transitions between alternative labour market statuses (employment, unemployment, inactivity); types of contract; industry, occupation or country; different combinations of skill and pay levels)?
- (ii) what percentage of the (employed) populations of EU Member States is affected by skill mismatch (defined by a discrepancy between the highest level of qualification held by individuals and the skill requirement of their jobs or another similar measure)?

¹⁶ Indicative examples of longitudinal datasets that are publicly accessible for non-commercial research purposes include: Understanding Society (UK); British Household Panel Survey (UK); 1970 British Cohort study; National Child Development Study (UK); German Socio-economic Panel; Dutch Socio-economic Panel; Longitudinal Internet Studies for the Social Sciences (NL); Belgian Household Panel; Swedish Longitudinal Individual Data Base etc. In addition, most national Labour Force surveys (LFS) contain a rotating panel element that allows tracking people across waves (though the longitudinal information component is not available in the anonymised European Labour Force Survey database).

- (iii) what demographic and socioeconomic characteristics of individuals are associated with a greater likelihood of labour market mobility?
- (iv) are there significant differences in the patterns of labour market transition between individuals characterised by a different status of skill mismatch?
- (v) are there dissimilarities across EU Members States in the degree of persistence and dynamics of skill mismatch?
- (vi) what is the causal relation between labour market mobility and skill mismatch?
- (vii) how is this relation between labour market mobility and skill mismatch moderated by the extent of prior skill development and skill accumulation (e.g. proxied by years of job tenure, occupational experience or participation in continuous vocational training and learning) of individuals? How is labour market mobility affected by the degree of skills transferability between industries and occupations¹⁷?
- (viii) can any potential differences in the relation between labour market mobility and skill mismatch in different EU Members States be accounted for by differences in education and training systems (particularly VET systems), employment regulations and the policy environment of their labour markets? Which policies can act as institutional support structures or barriers to mobility and skill development?
- (ix) what are the implications of the findings for policies promoting skill development and labour market mobility as a strategy that can facilitate the matching of skills with labour market needs?

2.4 Description of tasks and methods

The study should follow a quantitative multivariate regression statistical approach. It should be based on primary data analyses of the EU-SILC data set (exploiting the relevant information in the cross-sectional but mainly in the longitudinal version), taking into account existing research and policy documents on labour market mobility, skills and skill mismatch. The contractor is required to carry out four main tasks. In the following sections, the tasks are described in detail.

2.4.1 Task 1: review of available theoretical and empirical evidence on the relation between skill accumulation, labour market mobility and skill mismatch

The Contractor should engage in a comprehensive review of the available scientific and policy literature on the nature of the relation between skill development and accumulation (e.g. proxied by participation in initial and continuous education and training; occupational experience, seniority on the job), labour market mobility and skill mismatch. The review should discuss existing theoretical approaches that focus on the link between skills development and accumulation, the decision to engage in labour market transitions and the incidence and evolution of skill mismatch among individuals. The analysis should also review the extent to which mismatch is related to life events (child birth, divorce, career changes of spouses and personal events) and how can appropriate institutional support structures (e.g. possibilities for up-skilling and retraining; career counselling and guidance; state financial support) be put in place to foster effective mobility episodes in terms of

¹⁷ See EU Commission (2011), *Transferability of skills across economic sectors*, available at: <http://ec.europa.eu/social/BlobServlet?docId=7124&langId=en>

attaining better skill-job matches. The Contractor should engage in a thorough review of available studies and research sources in a broad spectrum of EU countries. He should clearly outline the relevance of existing policy initiatives undertaken in EU Member States with respect to the facilitation of the labour market mobility of individuals as a policy strategy for mitigating skill mismatch.

2.4.2 *Task 2: statistical examination and quality control testing of key variables and of the raw differences in the labour market mobility patterns and the incidence of skill mismatch of EU Member States*

A detailed quality control analysis of the raw descriptive statistics of key variables of interest and of the transition probabilities of individuals exhibiting differential labour market mobility patterns should be undertaken, using all information available from the EU-SILC dataset for the time period 2004 until the most recently available wave released by Eurostat. The Contractor should investigate and clearly identify data problems in variables (e.g. significant number of missing observations, small cell sizes, breaks in the trends of the data) and fully account for country-specific data complications or other data quality concerns (e.g. attrition bias). As a minimum the study should examine the following types of labour market transitions:

- Labour transitions by employment status (e.g. from unemployment to employment or vice versa; from unemployment to inactivity or vice versa; from inactivity to employment or vice versa);
- Labour transitions by type of contract (permanent vs. temporary contract; part-time vs. full-time contract);
- Labour transitions by industry;
- Labour transitions by occupation (identifying whether the transition entailed a move to a higher-skilled/higher-paid job);
- Labour transitions by country.

The study should also clearly conceptualise, define and derive appropriate measures of skill mismatch of individuals, as permitted by the data (e.g. correspondence of individual's occupation with mean or mode educational level within at least 2-digit occupations; share of university graduates employed in semi-skilled, manual or elementary occupations; share of university graduates employed in "graduate" jobs, defined on the basis of a combination between the share of university graduates within an occupation and the rate of return to education). The Contractor should undertake a robustness analysis using alternative measures of skill mismatch as confirmation of the underlying trends and correlations in the data. Furthermore, the Contractor should evaluate the impact of misclassification and measurement error in occupational classification on the various measures produced.

2.4.3 *Task 3: multivariate empirical investigation, using state-of-the-art statistical or econometric techniques, of the causal relationship between skill development and accumulation, labour market mobility and skill mismatch*

An empirical investigation of the causal relation between an individual's prior skill accumulation and mismatch, labour market mobility patterns and subsequent skill mismatch should be performed using multivariate regression analysis. The analysis should employ state-of-the-art statistical or econometric techniques (i.e. exploiting the most relevant and recent techniques available in the scientific literature). A coherent technical discussion of the empirical modelling adopted for the purposes of the analysis should be provided. It should clearly highlight the value added or

limitations of using a longitudinal empirical analysis relative to cross-sectional estimates. The empirical analysis should adequately take into account the observable and unobserved heterogeneity of individuals in the samples examined, the potential selectivity bias associated with the differential aptitude for mobility among individuals and the dynamic nature of skill mismatch over time.¹⁸ It should also account for measurement error in occupational classification and wherever possible for the impact of trigger events that underlie the labour market transition event. The analysis should break down the results according to particular demographic and socioeconomic variables of interest (e.g. country; gender; age groups; nationality).

The Contractor may propose to use and analyse (either on his own or via a subcontracting entity) appropriate (and publicly accessible for research purposes) national datasets from a variety of EU Member States (EU27 + Croatia) that contain a longitudinal or rotating panel component¹⁹. The purpose should be to extend the empirical specification and to validate the main findings obtained as part of the required analysis of the EU-SILC dataset (see also Award criterion 3 (AC3) in point 5.1 below).

At a second stage the analysis should clearly investigate the reasons for any cross-country variation in the empirical relation of labour market mobility and skill mismatch, by taking into account time-series information on the differential education and training systems, employment regulations and institutional or policy situation of EU Member States over the analysed time period.²⁰ Multilevel modelling or other appropriate multivariate regression techniques should be explored to assess the extent to which the cross-country differences in the labour market mobility-skill mismatch nexus can be explained by differences in education or training systems, institutional characteristics or other labour market policies of European Member States.

2.4.4 Task 4: discussion of the implications of the empirical findings and analysis of the effectiveness of public policies on education and training and labour market mobility as a strategy for tackling skill mismatch

A clear evidence-based discussion of the potential effectiveness of public policies on education and vocational training and on labour market mobility as tools for mitigating skill mismatch should be provided on the basis of the empirical findings and literature review. The discussion should clearly summarise the main findings of the analysis and ultimately display in a policy-friendly format (e.g. using easy-to-understand graphs or tables) the output(s) of the study. It should draw clear-cut distinctions between the individual types of labour market transitions, and relate the cross-country differences to particular institutional and policy arrangements of countries (alternatively the discussion may be organised according to blocks of countries, characterised by similar education and training systems, labour market characteristics/policies and/or skill mismatch challenges). The discussion should clearly link the results of the analysis with the current European policy framework on skills, labour market flexibility and skill mismatch and provide suitable policy recommendations.

¹⁸ Wooldridge J. (2005), Simple solutions to the initial conditions problem in dynamic, non-linear panel data models with unobserved heterogeneity, *Journal of Applied Econometrics*, 37(3), 343-349.

¹⁹ The use and exploitation of longitudinal or rotating panel datasets from individual EU Member States should respect and be in line with the specific access requirements of the individual national statistical services.

²⁰ Indicatively the following variables related to labour market flexibility could be exploited: degree of employment protection legislation; share of employees with non-permanent or full-time contracts; degree of home ownership; union density; availability of targeted mobility schemes; percentage of job seekers using public employment services; participation in continuing vocational training or adult learning etc.

2.5 Deliverables and timetable

The Contractor is required to submit the following deliverables, in accordance with the indicated timetable. The timetable allows for the potential time lag that may exist between the date of signature of the contract and the date at which the Contractor will sign a contractual agreement with Eurostat, granting him access to the EU-SILC dataset for the purposes of the present study of Cedefop (herein denoted as time period t). If the time period t exceeds a period of 6 months after the date of signature of the contract (for reasons that lie outside the control of the Contractor), an additional extension to the contract of up to 6 months may be granted.

2.5.1 Inception report

An inception report 1 month after the date of signature of the contract, which refines the methodology proposed in the tender, including a 5-page summary outline of the proposed steps and techniques to be undertaken as part of the project as well as an updated work plan and timetable.

2.5.2 Draft interim report

A draft interim report, within $t+4$ months (i.e. the date of signature of a contractual access agreement with Eurostat + 4 months), which will contain a comprehensive overview of the available theoretical and empirical literature on the relation between skills accumulation, labour market mobility and skill mismatch as specified in Task 1.

The report should also discuss the data quality control procedures undertaken for the variables to be included in the subsequent empirical analysis, using either the EU-SILC or any proposed national datasets. In addition, it should display the raw descriptive statistics of key variables in the data (e.g. transition probabilities, derived measures of skill mismatch) and correlations between the labour market mobility patterns and the incidence of skill mismatch in EU Member States in appropriately structured tables (Task 2).

2.5.3 Final interim report

A final interim report within $t+6$ months (i.e. the date of signature of a contractual access agreement with Eurostat + 6 months), which will comprise of:

- An introductory section containing the literature review, along with the exposition of a theoretical model that links labour market mobility and skill mismatch (Task 1);
- Updated descriptive statistics of key variables and correlations in the data (relative to those included in the draft interim report) (Task 2);
- A coherent technical discussion of the empirical modelling and techniques adopted, including appropriate specification and robustness tests of the empirical relationships to be estimated (Task 3);
- Regression tables containing the econometric output for all countries and years in the EU-SILC data (pooled and by individual years) and of any national longitudinal dataset analysed, broken down according to particular demographic and socioeconomic categories of interest (e.g. country, gender, age groups, nationality) (Task 3);

2.5.4 Final report

A draft final report, within $t+11$ months (i.e. the date of signature of a contractual access agreement with Eurostat + 11 months), and a final report within $t+12$ months, following the guidelines provided in these Technical Specifications and including:

- An executive summary, highlighting the main findings and key considerations for policy, which can also be distributed as a self-standing document;
- An introductory section containing the literature review, along with the exposition of a theoretical model that links labour market mobility and skill mismatch (Task 1);
- Descriptive statistics and correlations between the labour market mobility patterns of individuals and the incidence of skill mismatch of all EU Member States in appropriately structured tables (Task 2);
- A coherent technical discussion of the empirical modelling and techniques adopted, including appropriate specification and robustness tests of the empirical relationships to be estimated (Task 3);
- Full regression tables containing the econometric output for all countries and years in the EU-SILC data (pooled and by individual years) and of any national longitudinal dataset analysed, broken down according to particular demographic and socioeconomic categories of interest (e.g. country, gender, age groups, nationality) (Task 3);
- Full regression tables based on an analysis of any cross-country differences in the labour market mobility-skill mismatch nexus as a function of differences in education and training systems, institutional and policy arrangements among EU Member States (Task 3);
- An in-depth discussion of the potential effectiveness of labour market mobility policies as a tool for mitigating skill mismatch, based on the findings of the empirical analysis (Task 4);
- Annexes including a complete list of data descriptions, bibliographical sources and list of abbreviations; the Annexes should also contain tables of the raw descriptive statistics of key variables in the data.

The contractor shall submit all deliverables in English, in hard copy and in electronic format.

Figures and tables should be delivered separately in Ms Excel or in Ms Word, as appropriate. Ms Excel charts must include the data used to enable Cedefop to reproduce the charts.

The electronic files must correspond fully to the hard-copy version.

The scripts (e.g. STATA log and do-files) used to run the analysis will be delivered to Cedefop to ensure the transparency and replicability of results.

Lay-out and format of the text – in particular for citation, bibliography, tables and figures – must comply with Cedefop's style manual (Annex H).

The Contractor shall ensure that the final reports as submitted to Cedefop have been subject to professional proof-reading and editing in English, the cost for which should be included in the financial offer (see point 5.4, item 2c in Price Schedule table).

2.6 Meeting and travel expenses

- a) Meetings at Cedefop premises in Thessaloniki

The contractor (**up to 2 persons**) will be requested to attend in total **three one day meetings with the responsible project manager(s) at Cedefop's premises in Thessaloniki, Greece:**

1. a kick-off meeting 4 weeks after the contract is signed to fine-tune the research methods to be applied, the sources to be used and the final study planning, described in the inception report;
2. a meeting at about $t+6$ months (i.e. date of signature of a contractual access agreement with Eurostat + 6 months) to discuss the draft interim report and preliminary findings of the study, monitor progress and agree on the outline of the final report;
3. a meeting at about $t+11$ months (i.e. date of signature of a contractual access agreement with Eurostat + 11 months) to discuss and provide comments on the final outcomes and key policy messages included in the draft final report. The Contractor will take these comments into account in the preparation of the final version of the study (final report).

All costs incurred, including travel & accommodation related to Cedefop's meetings in Thessaloniki (described above), have to be included in the financial offer (see point 5.4, item 2a in Price Schedule table).

b) Other meeting costs

Any other travel, accommodation etc. expenses that may occur in performing the tasks as described in the Technical Specifications have also to be included in the financial offer (see point 5.4, item 2b in Price Schedule table).

Any extra travel expenses, besides those mentioned above, that might be needed to perform the tasks related to the contract, shall be subject to Cedefop's prior written approval and shall be reimbursed by Cedefop separately, according to its relevant rules (see Annex III of the Draft Contract in Annex B).

3 SPECIFIC INFORMATION CONCERNING PARTICIPATION TO THIS TENDER PROCEDURE

3.1 Exclusion criteria

Participation to this tender is only open to tenderers who are in a position to subscribe in full to the Declaration on Exclusion Criteria and absence of conflict of interest given in Annex C. Therefore all tenderers, all group (consortium) members (if any) and any subcontractor/s, (identified as per the two bullet-points in the fourth paragraph of point 4.2 below) **must** provide the self-declaration found in Annex C duly signed and dated. The exclusion criteria will be assessed in relation to each company individually.

Cedefop reserves the right to check the situations described in points c) and f) of the Declaration.

In the event of recommendation for contract award, point l) of Annex C will apply.

3.2 Selection criteria

The selection criteria concern the tenderer's capacity to execute similar contracts.

The tenderers **must** submit documentary evidence (or statements, where required) of their economic, financial, technical and professional capacity to perform this contract.

Each and all requirements for economic and financial capacity should be fulfilled by the tenderer - alone (in the case of single tenderers) or as a whole (in case the tenderer is a grouping/consortium). Participation in tendering is open to all legal persons bidding either individually or in a grouping (consortium) of tenderers.

An economic operator may, where appropriate and for a particular contract, rely on the capacities of other entities, regardless of the legal nature of the links which he has with them. He must in that case prove to the contracting authority that he will have at his disposal the resources necessary for performance of the contract, for example by producing an undertaking on the part of those entities to place their resources at his disposal. This obligation may be fulfilled by presenting signed Statements from those entities. Please note that natural persons (individuals, freelancers) are also considered 'entities' for this purpose.

3.2.1 Economic and financial capacity

The tenderer must be in a stable financial position and have the economic and financial capacity to perform the contract.

Requirement:

- The average annual turnover of the tenderer for the last **three (3) financial years concerning the type of services covered in this call for tenders** should be at least **200,000 €**.

Proof of economic and financial capacity **must** be furnished by the following document:

- Signed statement (please fill-in and sign your Statement in Questionnaire 2 of Annex G) of the tenderer's turnover concerning the type of services covered in this call for tenders during each of the last 3 (three) financial years.

In the case of a consortium (grouping) or subcontracting each member of the consortium and all sub-contractors must provide the required statement for the economic and financial capacity (Questionnaire 2 of Annex G), **but the assessment of whether the minimum requirement is met will bear on the consortium as a whole or the tenderer together with his subcontractors.**

In the event of recommendation for contract award the winning tenderer (single tenderer or in the case of a consortium (grouping) each member of the consortium) will be requested to prove the above by submitting Audited Financial Statements (Audited Profit and Loss Account/ Statement or equivalent) if these are foreseen by the respective national legislation. Should total subcontracting exceed 40% of the work by value, Cedefop reserves the right to request audited financial statements also from the subcontractors.

If, for some exceptional reason the tenderer is unable to provide one or more of the above documents, he is required to justify the non-provision and may prove his economic and financial capacity by any other document which Cedefop considers appropriate.

Cedefop reserves the right to request any other document enabling it to verify the tenderer's economic and financial capacity.

3.2.2 Technical and professional capacity

The Tenderers are required to have sufficient technical and professional capacity to perform the contract. They must demonstrate qualifications, knowledge, skills and the ability to perform the tasks outlined in the terms of reference.

Requirements:

- The tenderer must have a **minimum of three (3) years' experience in the field of comparative European data and policy analysis and the capacity to analyse socio-economic data at national and European levels;**
 - Previous professional experience working with Eurostat micro-data and/or institutional eligibility to access Eurostat micro-data;
 - The tenderer's proposed team of experts must have the profiles, knowledge and experience relevant to the subject of the study for the successful implementation of the contract. In particular, the following requirements are mandatory:
- **For the proposed Team Leader:**
 - **Minimum five (5) years** of individual experience in European research project management;
 - **Minimum Four (4) years** of individual professional research experience in total, in one or more of the following fields:
 - Comparative research on the issue of labour market transitions
 - Comparative research on education and training policy
 - Comparative research on labour market and/or employment policy analysis;
 - **Minimum Four (4) years** of individual professional research experience in handling, processing and engaging in data analysis of large European or national micro-data sources;

- Linguistic ability to communicate and draft to a **high standard in English** (Level C1 ⁽²¹⁾ as determined in “Language levels of the Common European Framework of Reference (CEF)”).
- **For the proposed Senior Researcher:**
 - **Minimum Four (4) years** of individual professional research experience in total, in one or more of the following fields:
 - Comparative research on the issue of labour market transitions
 - Comparative research on education and training policy
 - Comparative research on labour market and/or employment policy analysis;
 - **Minimum Four (4) years** of individual professional research experience in handling, processing and engaging in data analysis of large European or national **longitudinal/panel** micro-data sources;
 - Linguistic ability to communicate and draft to a **high standard in English** (Level C1 as determined in “Language levels of the Common European Framework of Reference (CEF)”).
- **For each of the proposed Researchers/team members** who will be involved in the study:
 - **Minimum Three (3) years** of individual experience in total, in one or more of the following fields:
 - Comparative research on the issue of labour market transitions
 - Comparative research on education and training policy
 - Comparative research on labour market and/or employment policy analysis
 - Linguistic ability to communicate and draft to a **high standard in English** (Level B2 as determined in “Language levels of the Common European Framework of Reference (CEF)”).

Proofs / Evidences of technical and professional capacity

The following documents or information must be presented by the tenderer to prove his technical and professional capacity to perform the proposed contract:

- **A brief company profile** with short presentation of the Tenderer (experience in comparative European data and policy analysis, previous professional experience working with Eurostat micro-data, capacity to analyse socio-economic data at national and European levels);
- Copy of an existing contract signed with Eurostat for access to Eurostat micro-data, or statement of eligibility to be checked against the legal entity form attached in annex D of the Tender documents, in line with Eurostat restrictions on access to micro-data²²;
- A list of at **least 3 contracts** performed in the past three (3) years ⁽²³⁾ similar to the scope, size and nature of this call for tenders as per the above noted criteria, describing the contracting authorities, the subjects, the amounts, the dates, the percentage and the specific tasks performed by the tenderer (please fill-in Annex G, Questionnaire 3);

²¹ <http://europass.cedefop.europa.eu/LanguageSelfAssessmentGrid/en>

²² <http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/introduction>

²³ Concluded by the deadline of submission of offers

- **The detailed CVs of the experts** (preferably in Europass format)²⁴ who will be proposed to implement the contract (the Team Leader, Senior researchers and the team of Researchers), i.e. of the persons whose involvement will be crucial for performing the contract, including reference to linguistic abilities and list of publications.

In case of consortium or subcontracting, the consortium or the tenderer with all subcontractors together must provide evidence of technical and professional capacity as a whole (see also 4.1 and/or 4.2 below).

3.3 Legal Position

Tenderers may choose between submitting a joint offer (see 5.1) as a Consortium / Grouping or introducing a bid as a single tenderer, in both cases with the possibility of having one or several subcontractors (see 5.2). Whichever type of bid is chosen, the tender must stipulate the legal status and role of each legal entity in the tender proposed (see also 5th bullet of point 4.1. below). To identify himself (and any other participating entities, if applicable), the tenderer must complete Questionnaire 1 in Annex G. Tenderers are also requested to complete a Legal Entity Form found in Annex D, accompanied by all documents and information indicated in the form.

The Legal Entity Form must be completed and signed by the representative(s) of the tenderer (who sign(s) the cover letter as per point 4 of the Invitation to tender) authorised to sign contracts with third parties.

The Legal Entity Form should not be submitted by sub-contractors (if any).

4 ADDITIONAL INFORMATION CONCERNING PARTICIPATION TO THIS TENDER PROCEDURE

Participation in Cedefop tendering procedures is open on equal terms to all natural and legal persons or groupings of such persons (consortia) falling within the scope of the Treaties. It includes all economic operators registered in the EU and all EU citizens. Pursuant to Article 119 of the general Financial Regulation the participation is also open to all natural and legal persons from non-EU countries that have a ratified agreement with the European Union in the field of public procurement on the conditions laid down in that agreement. Cedefop can therefore accept offers from and sign contracts with tenderers from 34 countries, namely: the 28 EU Member States, 3 EEA Countries (Lichtenstein, Norway, Iceland) and 3 SAA Countries (FYROM, Albania and Montenegro).

The procurement (tender) procedures of Cedefop are **not** open to tenderers from GPA countries.

A legal person can take part (as an individual tenderer or as a member of a consortium submitting a tender) in only one tender. In the opposite case all tenders in which that person has participated may be excluded from the evaluation.

4.1 Joint Offers/ Groupings (Consortia)

Groupings (consortia), irrespective of their legal form, may submit a tender on condition that it complies with the rules of competition. A consortium may be a legally-established permanent grouping, or informally constituted group of tenderers submitting an offer (joint offer) for a specific tender procedure.

²⁴ <http://europass.cedefop.europa.eu/europass/home/vernav/Europass+Documents/Europass+CV.csp>

Cedefop does not require consortia (if any) to have a given legal form in order to submit a tender, but reserves the right to require a consortium to adopt a given legal form before the contract is signed (if this change is necessary for proper performance of the contract). This can take the form of an entity with or without legal personality but offering sufficient protection of the contractual interests of Cedefop.

If awarded the contract, the tenderers of the group (consortium) will have an equal standing towards Cedefop in executing it.

A grouping (if any) of firms must nominate one party to be responsible for the receipt and processing of payments for members of the grouping, for managing the service administration, and for coordination.

Tenders submitted by consortia of firms must specify the role, qualifications and experience of each member or of the group (please fill-in the respective Questionnaires in Annex G).

Each member of the group (consortium) must provide the required evidence for the exclusion and selection criteria. Concerning the selection criteria, the evidence provided by each member of the group (consortium) will be checked to ensure that the consortium as a whole fulfils the criteria.

The offer has to be signed by all members of the group (consortium). However, if the members of the group so desire they may grant an authorisation to one of the members of the grouping (consortium). In this case they should attach to the offer a power of attorney (see model in Annex I) authorising this company or person to submit a tender on behalf of the grouping (consortium).

- For groupings not having formed a common legal entity, Annex I, model 1 should be used and separate legal entity forms (see Annex D) should be completed and signed by all members.
- For groupings with a legal entity in place, Annex I, model 2 and one legal entity form (Annex D) should be completed and signed only by the single representative of the consortium.

The contract will have to be signed by all members of the group (consortium). If the members of the group (consortium) so desire, they may grant authorisation to one of the members of the grouping by signing a power of attorney. The same model as above duly signed and returned together with the offer is valid also for signature of the contract.

Partners in a joint offer assume joint and several liabilities towards Cedefop for the performance of the contract as a whole.

4.2 Subcontracting/Subcontractors

Subcontracting is defined as the situation where a contract has been or is to be established between Cedefop and a contractor and where the contractor, in order to carry out that contract, enters into legal commitments with other entities for performing part of the service. If awarded, the contract will be signed by the selected Tenderer (the Contractor), who will be vis-à-vis Cedefop the only contracting party responsible for the performance of this contract. Cedefop has no direct legal commitment with the subcontractor(s).

The contractor retains full liability towards Cedefop for performance of the contract as a whole. Cedefop will treat all contractual matters (e.g. payments) with the contractor, whether or not some

tasks are performed by a subcontractor. Under no circumstances can the contractor avoid liability towards Cedefop on the grounds that the subcontractor is at fault. Any subcontracting/subcontractor must be approved by Cedefop, either by accepting the bidder's tender, or, if proposed by the Contractor after contract signature, in writing by an exchange of letters. In the latter case subcontracting/subcontractor will be accepted only if it is judged necessary and does not lead to distortion of competition.

Tenderers are free to choose their subcontractors from both eligible and non-eligible countries. Thus, in principle all economic operators can act as subcontractors of eligible tenderers. However the sub-contracting of persons/economic operators from non-eligible countries is limited to maximum 30% of the work by value.

The tenderer must clearly indicate the identity of each subcontractor and the percentage of work by value that he will perform for this contract (please fill in Annex G).

Only in cases when:

- a subcontractor undertakes between 10% and 40% of the work by value,
- the total subcontracting is above 40% of the work by value, independently of the individual Subcontractor's contribution to the work by value,

the tenderer should submit with the offer:

1. the Declaration on exclusion criteria and absence of conflict of interest (Annex C) filled-in and signed by the respective Subcontractor;
2. the required documents related to the economic/financial and technical/professional capacity of the Subcontractor as described in points 3.2.1 and 3.2.2;
3. the Form in Annex J (Model of Letter of Intent for Subcontractor/s) duly filled-in and signed by each respective Subcontractor, stating his unambiguous undertaking to collaborate with the tenderer if the latter wins the contract. Also should be stated the roles, activities and responsibilities of the subcontractor(s) and the extent of the resources that the respective subcontractor will put at the tenderer's /contractor's disposal for the performance of the contract.

N.B.: The Subcontractor(s) (if any) have to provide the documents to prove their capacity only for the parts of the contract that are relevant to them. The evidence provided will be checked to ensure that the tenderer with the subcontractor(s) altogether fulfil the criteria.

5 AWARD OF THE CONTRACT

Only the tenders meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality and price.

The contract shall be awarded to the tenderer submitting the tender that offers the best-value-for-money as represented by the highest Total Score (TS) out of 100.

The Total Score (TS), comprising quality + price score, will be calculated for each tender by applying the formula below:

$\text{Total Score (TS)} = X \cdot (\text{TQV} / 100) + Y \cdot (\text{Cheapest TFO} / \text{TFO})$

Whereby:

TQV = Total Quality Value of the tender, obtained as per point 5.1;

TFO = Total Financial Offer of the tender (as per point 5.4);

X is the weighting for quality score (TQV) and for this tender procedure it is fixed to **(70)**;

Y is the weighting for price (TFO) and for this tender procedure it is fixed to **(30)**.

Cheapest TFO is the Cheapest Tender Price of a technically compliant tender (i.e. among those having achieved a minimum of 50% of the possible score for each of the award (evaluation) criteria 1, 2 and 4 and in total a minimum of **65** out of 100 points (TQV) in the technical evaluation – see below).

5.1 Technical evaluation

The assessment of the technical quality will be based on the ability of the tenderer to meet the purpose of the study contract as described in the Tender Specifications.

The following Award Criteria for the technical evaluation will be applied to this tender procedure:

Award criteria		Points
Award criterion 1 (A.C.1) – <i>Level of understanding of the nature of the assignment, its context and results to be achieved (10 points)</i>	A.C.1. Demonstration of an in-depth knowledge and understanding of the concepts and research issues related to skills accumulation, labour market mobility and skill mismatch	<i>10 points</i>
Award criterion 2 (A.C.2) – <i>Quality and appropriateness of the methods suggested to carry out the work (50 points)</i>	A.C.2.a. Relevance and soundness of the approach, the method for data analysis, envisaged steps and empirical procedure to be used to meet the requirements and tasks outlined in the technical specifications	<i>30 points</i>
	A.C.2.b. Rationale and proposed methodology for deriving and testing alternative measures of skill accumulation, labour market mobility and skill mismatch (in the presence of measurement error in reported measures of occupation and skill mismatch).	<i>20 points</i>

Award criterion 3 (A.C.3) – Ability to validate and extend the main analysis based on the EU-SILC dataset with one or more national datasets containing a longitudinal or rotating panel wave component (replicating the tasks outlined in the technical specifications) (20 points)	A.C.3 Analysis of national datasets containing a longitudinal or rotating panel component, beyond the minimum required analysis of the EU-SILC database	20 points
Award criterion 4 (A.C.4) – Organisation and management arrangements (20 points)	A.C.4.a. Allocation of tasks, type and degree of involvement of the proposed experts	10 points
	A.C.4.b. Project organisation and mechanisms to guarantee successful and on-time delivery of tasks with adequate quality and risk management (clarity, coherence and feasibility of the work programme and timetable)	10 points

In order to guarantee a minimum threshold of quality, offers that

- do not reach a minimum of 50% of the possible score for each award (evaluation) criterion 1, 2 and 4, and
- obtain an overall total score (Total Quality value) of less than the total **65** (of a maximum of 100) points against the award (technical) criteria,

will not be considered acceptable and will be eliminated from further evaluation.

Only the technically compliant (acceptable) tenders as per the above will be subject to Financial (Price) Evaluation (5.3).

5.2 Technical proposal

The tenderer's technical proposal should consist of a clear and comprehensive response to all requirements as per the Terms of Reference above providing a practical, detailed description of the goods or services proposed for performance of the contract.

Tenderers are requested to organise the technical proposal in headings or to structure it in such a way as to ensure that the content of the technical proposal meets the requirements set out in the Terms of Reference as closely as possible and to facilitate the subsequent evaluation of tenders against the technical award criteria. It is up to the tenderer to present in his Technical Proposal a detailed organisation and methodology such that they fulfil (comply in full to) all requirements outlined in the Terms of Reference.

The Technical Proposal should prove that the Tenderer is capable of meeting the tender specifications, by providing all the information related to the scope of this project. All the information and means of proof provided in the tender commit the contractor throughout the duration of the contract.

For the technical evaluation of the proposal against the award (technical) criteria mentioned above, the tenderer must provide:

For award criterion 1

A concise discussion of the subject, demonstrating in-depth understanding of the objectives and research issues of the study (maximum 5 pages).

For award criterion 2**AC2.a**

- detailed description of the envisaged quantitative research approach, methods, tools and processes, including a clear description of the proposed methodology to analyse the longitudinal information available in the datasets to be used;
- a discussion of a clear empirical strategy for uncovering the causal nature of the relationship between skill accumulation, labour market mobility and skill mismatch;

AC2.b

- detailed suggestions with respect to the derivation and sensitivity testing of alternative measures of skill accumulation, labour market mobility and skill mismatch to be used in the main empirical specification (also accounting for measurement error).

For award criterion 3

- Inclusion in the analysis of at least one national dataset containing a longitudinal or rotating panel component, beyond the minimum required analysis of the EU-SILC data. In case such national sources are included in the proposal, the Tenderer should clearly emphasise in his proposal the value-added of the analysis of the specifically proposed data sets. This should be done by focusing on the potential inclusion of any additional variables in the specification or by emphasizing any anticipated differences in findings relative to the main findings of the EU-SILC dataset. This may be related to the inclusion of superior measures of mobility, skills and/or skill mismatch and/or additional years of data available in the national datasets.

The bid with the highest number of national longitudinal datasets proposed will receive 20 points, while the remaining tenderers will be awarded a number of points proportional to the bidder with the highest number of national longitudinal datasets proposed on the basis of the following formula:

$$\text{Points} = \frac{20 \times \text{number of national longitudinal datasets proposed}}{\text{highest number of national longitudinal datasets proposed in a bid}}$$

Example:

- Tenderer 1: number of national longitudinal datasets proposed: 3
- Tenderer 2: bid with highest number of national longitudinal datasets proposed: 4

Points awarded to Tenderer 1: $20 \times (3/4) = 15$ points.

Points awarded to Tenderer 2: 20 points.

For award criterion 4**AC4.a**

- structure of the proposed team, the nature and the extent of the team members' expertise and participation in the study and allocation of tasks;

AC4.b

- detailed work plan illustrating intended organisation and management of the tasks, including:
 - timetable with descriptions of the deliverables;
 - arrangements for secure and easy communication with Cedefop;
 - detailed quality assurance and preliminary assessment of likely difficulties in carrying out the tasks (risk assessment and proposed measures to mitigate risks).

The tenderer shall identify a Project Co-ordinator within his organisation who will represent the single contact point for all administrative and operational communication in regards to the contract implementation. As appropriate, the Team leader (see 4.2.2.) can also act as Project Co-ordinator, or two different persons can be identified. Cedefop will also designate the Contact Person in charge of handling the contact with the selected tenderer.

In addition to the above, the tenderer must clearly specify which parts of the work will be subcontracted (if any) and specify the identity of those subcontractors only undertaking more than 10% of the work by value (or of all subcontractors if total sub-contracting is above 40% of the work by value) as requested in point 4.2.

NB: All the information and means of proof provided commit the contractor throughout the duration of the contract.

5.3 Financial evaluation

Only tenders scoring **65** points or more (of a maximum of 100 points) against the technical award criteria and **50%** or more of the possible maximum score for each of the award criteria 1,2 and 4 above will have their financial proposal evaluated. The evaluation will be made on the basis of the **Total Price** offered in the Price schedule table (see 5.4 below).

The tenders are awarded points for the Total Price offered by using the following formula:

Financial score = (cheapest Financial Proposal / Financial Proposal of the tender considered) Y.*
Where Y = price weighting (see the complete formula under point 5 above)

5.4 Financial proposal

The financial offer must be clear and in compliance with the tender specifications. The financial proposal should indicate the total price in order to carry out all the activities indicated in the Terms of Reference.

The tenderer must fill in the Price Schedule table available below and present a detailed breakdown of the price offered. The financial proposal should clearly match the Terms of

Reference and take account of the estimated contract value ⁽²⁵⁾. All services that shall be procured should be included.

Price Schedule table

1)	Names/positions of the Experts ⁽²⁶⁾	Number of person-days	Unit price (EUR) per person-day	Price (in EUR) for services/experts
	1a)	.....	.....	.....
	1b)	.....	.....	.....
	1c)	.....	.....	.....
	...			
	1N)	.....	.....	.....
Subtotal 1(1a+1b+.....)				.....
2)	2a) Attending 3 one-day meetings at Cedefop premises in Thessaloniki (see 2.6.a)	Number of persons attending the 3 meetings	Price (EUR) per person	Amount (EUR) for all meetings
				
	2b) All estimated travel, accommodation, etc. expenses related to performance of the tasks (see 2.6.b)	Number of persons	Price (EUR) per person	Amount (EUR) for travel, accommodation, etc.
				
	2c) Other administrative expenses including professional proof-reading and editing in English of final report (see 2.5.4 – last paragraph)	Number of Units (if applicable)	Unit price (EUR) (if applicable)	Amount (EUR) for other administrative expenses
				
Subtotal 2 (2a+2b+2c)				.....
3)	Total Price = Subtotal 1 + Subtotal 2			.....

The VAT amount must be indicated separately here (this applies to tenderers established in Greece only): ... EUR.

The financial offers will be checked for any arithmetical errors in computation and summation. Errors will be corrected by the evaluation committee as follows:

- where there is a discrepancy between a unit price and the total amount derived from the multiplication of the unit price and the quantity, the unit price as quoted will be the price taken into account. Tenderers will be requested to confirm in writing the corrected calculation so that it may eventually be included in the contract.

²⁵ As indicated in section 2.5, the estimated total budget for the required services described in this call for tenders is of the order of 170.000 EUR, excluding VAT.

²⁶ Distinguish between: Expert/senior researcher - junior researcher - Secretary/assistant - External expert (if applicable). The estimated total number of working days must be justified by the methodology and work organisation.

Information concerning price

- The prices quoted must be fixed and are not revisable.
- Prices must be quoted in euro and include all expenses.
- Under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Union, Cedefop is exempt from all charges, taxes and dues, including value added tax (VAT). Such charges may not therefore be included in the calculation of the price quoted.

6 INFORMATION ON PRESENTATION AND CONTENT OF TENDER

It is important that tenderers provide all documents necessary to enable the evaluation committee to assess their tender. Tenderers should fully respect the instructions indicated under points 2, 3 and 4 of this open invitation to tender.

In addition, below you will find details of the required documentation.

6.1 Envelope A – Supporting documents

One original and one copy of:

- cover letter (art. 4 of the invitation), signed by the person/s (name and position) that is/are authorised to sign the contract in case of contract award
- the exclusion criteria declaration requested in section 3.1 and standard template found in Annex C
- the selection criteria documents as requested in section 3.2
- Questionnaires 1 – 4 as found in Annex G
- Power of Attorney (Model 1 or 2), as required in section 4.1 (if applicable) and found in Annex I
- Model of Letter of Intent for Subcontractor/s as required in section 4.2 (if applicable) and found in Annex J
- the Legal Entity Form as requested in section 3.3 and found in Annex D
- the Financial Identification Form as found in Annex E
- the checklist found in Annex F

In the case of tenders submitted by groupings (consortia) or involving contribution by subcontractors, envelope A should also contain all relevant documentation as requested in points 4.1 and 4.2 respectively (with reference to sections 3.1, 3.2 and 3.3).

6.2 Envelope B – Technical proposal

- **One original signed unbound version and three bound copies** of the Technical Proposal providing all information requested in section 5.2, including information relevant to subcontracting (if any) as requested in section 4.2.

6.3 Envelope C – Financial proposal

- **One original signed version and three copies** of the financial proposal containing all information requested in point 5.4.



Annex A: CONTRACT NOTICE

(Given as separate file in *.pdf)



Annex B: DRAFT CONTRACT

(Given as separate file in *.pdf)

Annex C: DECLARATION OF HONOUR WITH RESPECT TO THE EXCLUSION CRITERIA AND ABSENCE OF CONFLICT OF INTEREST

(Given as separate file in *.word)

Annex D: LEGAL ENTITY FORM

Legal Entity Form to be downloaded, depending on the nationality and legal status of the tenderer, from the following website:

http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm

Legal Entity Form to be completed and signed by a representative of the tenderer (name and function) authorised to sign contracts with third parties. It should not be signed by sub-contractors (if any).

Annex E: FINANCIAL IDENTIFICATION FORM

To be downloaded, depending on the nationality of the tenderer, from the following website:

http://ec.europa.eu/budget/contracts_grants/info_contracts/financial_id/financial_id_fr.cfm

and completed and signed by an authorised representative of the tenderer (with indication of name and function), but not by subcontractors.

PLEASE NOTE:

Please indicate the BIC (Bank Identification Code) in the REMARKS box of the downloaded form.



Annex F: CHECK LIST OF MANDATORY DOCUMENTS

(Given as separate file in *.word)



Annex G: QUESTIONNAIRES 1- 4

(Given as separate file in *.word)



Annex H

CEDEFOP STYLE MANUAL

(Given as separate file in *.pdf)



Annex I: POWER OF ATTORNEY MODELS

MODEL 1 - POWER OF ATTORNEY

MODEL 2 - POWER OF ATTORNEY

(Given as separate file in *.word)



Annex J: MODEL OF LETTER OF INTENT FOR SUBCONTRACTOR/S

(Given as separate file in *.word)