







Notice n. 32/2023

Date of publication of notice on the web: 2023, March 2

Closing date of selection notice: 2023, March 19

Notice of public selection for qualifications and interview at the Consorzio Nazionale Interuniversitario per le Telecomunicazioni (National Interuniversity Consortium for Telecommunications - CNIT for short) pursuant to art. 11 of the "Regulations for non-managerial employees of CNIT" with reference to the tiers and tabulars of the employees of the public Education and Research sector - (section: Institutions and research and experimentation bodies) for the recruitment of no. 1 unit of fixed-term personnel for the duration of 24 months with professional profile "Experienced research collaborator", V level, Research Area, through the stipulation of a full time employment contract, to carry out the research activities envisaged in the project financed by PNRR MUR funds - M4C2 - Investment 1. 3 - Notice "Partnerships extended to universities, research centres, companies for the financing of basic research projects" - D.D. no. 341 of 15 March 2022- Project "RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART (RESTART)", code PE00000001 - CUP F83C22001690001 at the headquarters of the CNIT's Research Unit of Cassino Via G. Di Biasio n.43, 03043 Cassino (FR)

The Director

Given the CCNL for the public sector "Education and Research - Section: Institutions and Research and Experimentation Bodies" in force;

Given the Statute, the Regulations for non-managerial employees of CNIT, the code of conduct and the code of ethics in force at CNIT;

Given Legislative Decree no. 198 of 11 April 2006 "Code of equal opportunities between men and women", as amended by Legislative Decree no. 6 of 25 January 2010, implementing directive 2006/54/EC;

Given the Interministerial Decree of 07.12.2021 adopting the guidelines aimed at fostering equal gender and generational opportunities, as well as the labour inclusion of persons with disabilities;

Given Regulation (EU) No 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC General Data Protection Regulation published in the European Official Journal on 4 May 2016 and applicable as of 25 May 2018;

Given the adoption of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, based on the Recommendation of the Commission of the European Community of 11 March 2005, no. 251, which the Institution has resolved to inspire its action (resolution of the Members' Meeting no. 114 of 2018);

Given Decree-Law No. 80 of 9 June 2021 on "Urgent measures to strengthen the administrative capacity functional to the implementation of the National Recovery and Resilience Plan (PNRR) and for the efficiency of justice", converted with amendments by Law No. 113 of 6 August 2021;









Given Ministerial Decree no. 1233 of 10 November 2021 of the Ministry of Universities and Research, establishing the MUR - MISE steering committee, for the purposes of activities connected to the initiatives of the M4C2 component "From Research to Enterprise" of the National Recovery and Resilience Plan;

Given Ministerial Decree no. 1314 of 14 December 2021, containing "Provisions for the granting of financial subsidies", issued by MUR in the implementation of the above-mentioned reform 1.1 of M4C2;

Given the transversal principles set out in the NRP, such as, inter alia, the principle of contribution to the climate and digital objective, the principle of gender equality and the obligation to valorise young people;

Given the obligations to ensure the achievement of targets and milestones and the financial objectives set by the NRP;

Given the National Recovery and Resilience Plan (PNRR) submitted to the European Commission, pursuant to Article 18 of EU Regulation No. 2021/241 and approved by the ECOFIN Council decision of 13 July 2021 and communicated to Italy by the General Secretariat of the Council by note LT161/21;

Given that pursuant to the Decree referred to in the foregoing, the Ministry of Universities and Research (hereinafter, MUR) is allocated resources for the implementation of the PNRR interventions under Mission 4 - Component 2 "From Research to Enterprise" (hereinafter, "M4C2"), totalling EUR 11.732 billion;

Given that investment 1.3 of M4C2 - Creation of "Partnerships extended to universities, research centres and companies for the financing of basic research projects" aims to strengthen research chains at the national level and promote their participation in strategic European and global value chains;

Given the fact that by MUR's Directorial Decree no. 341 of 15 March 2022, a "Public Notice for the submission of Proposals for the creation of "Partnerships extended to universities, research centres, companies for the financing of basic research projects" was issued - within the framework of the National Recovery and Resilience Plan, Mission 4 "Education and Research" - Component 2 "From research to enterprise" - Investment 1. 3, funded by the European Union - NextGenerationEU' (hereinafter the 'Notice');

Given that MUR Directorial Decree no. 1549 of November 11, 2002 allocated to the implementation of the Research Programme "RESEARCH and innovation on future Telecommunications systems and networks, to make Italy more smART" the amount of EUR 115,902,093.13 (one hundred and fifteen million nine hundred and two thousand one hundred and ninety-three/13 euros), in the form of a contribution to expenditure under Mission 4, Component 2, Investment 1. 3 "Creation of "Partnerships extended to universities, research centres, companies for the financing of basic research projects" of the PNRR; and that the aforesaid financing will be disbursed by MUR, in compliance with the regulations in force and the provisions set forth in Ministerial Decree no. 1314 of 14 December 2021, as amended and supplemented, and on the basis of the Chronoprogramme of implementation and on the basis of the Schedule of Payments under Attachment C of the Decree granting the Financing;

Given that the HUB implementing party has been established (as provided for in Article 4, paragraph 4 and in compliance with the timeframe indicated in Article 7, paragraph 1 of the Notice) in the legal form of a Foundation named "RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART" in short "RESTART" with notarial deed rep. no. 102859 collection no. 43161, and of which the following entities are









members UNIVERSITA' DEGLI STUDI DI ROMA "TOR VERGATA", CONSIGLIO NAZIONALE DELLE RICERCHE, POLITECNICO DI BARI, POLITECNICO DI MILANO, POLITECNICO DI TORINO, SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO SANT'ANNA, ALMA MATER STUDIORUM - UNIVERSITÀ DI BOLOGNA, UNIVERSITA' DEGLI STUDI DI CATANIA, UNIVERSITY OF FLORENCE, UNIVERSITY OF NAPLES "FEDERICO II", UNIVERSITY OF PADUA, UNIVERSITY OF MEDITERRANEAN STUDIES OF REGGIO CALABRIA, NATIONAL INTERUNIVERSITY CONSORTIUM FOR TELECOMMUNICATIONS (CNIT), FONDAZIONE UGO BORDONI, OPEN FIBER S. P.A., PRYSMIAN S.P.A., ATHONET S.R.L., TIESSE S.P.A., WIND TRE S.P.A., VODAFONE ITALIA S.P.A., TIM ITALIA S.P.A., UNIVERSITÀ DEGLI STUDI DI ROMA "LA SAPIENZA" AND ITALTEL S.P.A.;

Considering that in the Research Programme, Annex A to the MUR Grant Decree, the Extended Partnership "RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART" will have eight (8) Spokes in which 25 partners will participate as Affiliates; each partner, including the CNIT Consortium, will participate as Affiliate in more than one Spoke;

Considering that CNIT is participating as an Affiliate in the project proposal submitted by the University of Rome Tor Vergata for the establishment of the Extended Partnership "RESearch and innovation on future Telecommunications systems and networks, to make Italy more smart (RESTART)", relating to the Thematic Area: "14. Telecommunications of the future" - Project PE000001- and that the amount granted, as a contribution to expenditure by MUR, amounts to Euro 4,981,990.00.

Given the fact that MUR with official registry doc. U.0007554 of 10 October 2022, and any subsequent amendments and additions, has issued the "Guidelines for Reporting to Implementers of System Initiatives Mission 4 Component 2;

Noting that the financial responsibilities of the charges associated with the fixed-term employment will be borne by the funds from the aforementioned PNRR Project PE_000001 "RESearch and innovation on future Telecommunications systems and networks, to make Italy more smart" in short RESTART - MUR concession decree no. 1549 of 11.10.2022;

Given the resolution of the Board of Directors of the CNIT Consortium no. 23 of 3 February 2023;

PROVIDES

Art.1 Position to be filled - type of contract - duration - location - remuneration - reference principles

A public selection, based on qualifications and interview, is hereby announced, pursuant to art. 11 of the "Regulations for non-managerial employees of CNIT" with reference to the grades and scales of personnel employed in the Education and Research public sector - (section: Institutions and research and experimental bodies) in force, for the recruitment of no. 1 units of personnel with professional profile "Experienced research collaborator", V level, Research Area, on a fixed-term basis and by stipulating a subordinate work contract, for a duration of no. 24 months, through the stipulation of a full-time employment contract in order to carry out the research and training activities as envisaged in the PNRR research project called "RESearch and innovation on









future Telecommunications systems and networks, to make Italy more smART" code PE00000001 - CUP F83C22001690001.

The activity will be carried out at the site of the CNIT's Research Unit of Cassino Via G. Di Biasio n.43, 03043 Cassino (FR).

Willingness to carry out the activity at other CNIT sites is also sought.

The relative remuneration is that provided for by the "Regulations for non-managerial CNIT employees" with reference to the salary tables of the Collective Labour Agreement for Research and Experimentation Organisations.

The selection procedure is conducted with reference to the principles of legality enshrined in the European and Italian regulations in force on the recruitment of personnel; criteria of cost-effectiveness, effectiveness, impartiality, publicity and transparency are also followed.

Art. 2 Specific requirements for admission to the selection process, non-eligible personnel and documents to be enclosed for assessment

- 2.1 Italian and foreign candidates who meet the following requirements are eligible to take part in this selection process:
 - Italian citizenship or citizenship of a Member State of the European Union or of a non-Member State, in this case, provided that they have complied with the regulations in force concerning residency;
 - majority age;
 - physical fitness for the job;
 - enjoyment of civil and political rights;
 - not to have been deposed, dismissed, discharged or declared disqualified from employment for the reasons set out in the notice;
 - that they have not been convicted of any criminal offence which has the force of res judicata or are in the process of criminal proceedings which would prevent the establishment of an employment relationship;
 - that possess the following qualification: Master's Degree in Telecommunications Engineering or Master's Degree in Electronic Engineering or Master's degree in Computer Engineering or equivalent Engineering qualification;
 - knowledge of the English language.

Skills that will be subject to preferential evaluation in the context of the C.V. presented:

- PhD in any discipline in the sector Information Engineering;
- Knowledge of Matlab/LaTex/Office package;
- fundamentals of wireless networks, with emphasis on cell-free massive MIMO and reconfigurable intelligent surfaces.

For academic qualifications obtained abroad, non-academic recognition is required in accordance with the procedure set out in Article 38 of Legislative Decree no. 165/2001 in the manner set out in Article 2 of Presidential Decree 189/2009, amended by Article 1, paragraph 28-quinquies of Law no. 15/2022. Applicants who are not yet in possession of the provision recognising their foreign qualification, issued by the competent authorities, must









declare in their application form that they have submitted the relative request. In this case, the candidate will be admitted to the selection process with reservation, it being understood that this measure must be presented prior to the possible stipulation of the employment contract.

The requirements for admission must be met on the date of the deadline for submitting applications. Candidates are required to give prompt notice of any change in their possession of the requisites for admission.

CNIT may at any time, by reasoned decree of the Director, order exclusion from the selection process due to failure to meet the prescribed requirements

2.2 Requirements to ensure compliance with the requirements and specific PNRR conditions and all requirements related to the measure with which the RESTART Project is associated (Ref. EU Regulation 2021/241)

In order to encourage the employment of young people and women in particular, it should be noted that in assessing the C.V. submitted by candidates, particular importance will be attached to the indication of having participated in activities/projects aimed at overcoming the "glass ceiling". In fact, it is considered that the sensitivity and attention shown towards social issues aimed at overcoming the gender gap is an element to be valued when choosing the suitable candidate to be included in the CNIT staff.

CNIT guarantees equal employment and growth opportunities within the structure by activating internal policies aimed at overcoming difficulties related to the reconciliation of home/work activities and in general a better work/life balance.

In order to protect and enhance the value of young people, preference will be given to the candidate with the lowest age in the assessment of qualifications and subsequently in the interview.

In relation to the principle aimed at overcoming territorial gaps, the selection notice is open to both Italian and foreign citizens and there is no differentiation by Italian region or country of residence. Considering that the Restart project envisages the carrying out of specific activities in the areas of Southern Italy, candidates, who may not reside there, are asked to be willing to relocate to the areas involved. Vice versa, in the event that the reference activity is to be carried out in the Consortium's Laboratories/Research Units located in other areas of Italy, candidates who may not reside there are asked to be willing to relocate if necessary.

2.3. The following individuals are not eligible to take part in the selection process:

- 1) CNIT personnel already employed on a permanent basis, even if terminated from service;
- II) those who have had fixed-term employment contracts with CNIT for a period that, added to the duration envisaged by the contract put out to tender, exceeds a total of 24 months, even if not continuous.

The CNIT Consortium guarantees equality and equal opportunities between men and women for access to employment and treatment at work.









2.4 For the purposes of evaluation, the following must be attached to the application:

- curriculum vitae and studiorum;
- curriculum vitae and studiorum in European format, without sensitive data, for possible publication on the CNIT website in the event of winning this call for applications, in compliance with privacy regulations
- photocopy of an identification document
- photocopy of tax code.

Art. 3 Job description and background of skills required

Scientific reference project for the activity:

PE 14 — Extended Partnership RESTART - RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART

CUP: **CUP F83C22001690001**

Spoke n. 07: Green and Smart Environments Progetto: Smart Propagation Environments (\$12)

Contact person:

Prof. Ing. Stefano Buzzi

Subject:

Support research activities within RESTAR projects

Detailed description of the planned research activity:

The research activity will focus on:

The research activities will be focused on cell-free massive MIMO systems and on 6G wireless networks aided by reconfigurable intelligent surfaces (RISs).

With regard to the former topic, the activities will concern: development of cooperative beamforming schemes for performance enhancement; Investigation on the joint multiplexing of URLLC, eMBB and mMTC services in the same frequency bands; design of resource allocation schemes for cell-free systems operating at mmWave carrier frequencies; integration of capacity extending devices (e.g., smart repeaters) into cell-free massive MIMO systems.

With regard to RIS-aided wireless networks, the activities will concern the investigation of RIs-aided antenna structures for the low-complexity emulation of large-scale massive MIMO arrays. The activities will also concern the development of software simulators to test the developed algorithms and the collaboration of the writing of the project reports.

The willingness to operate on other lines of project activity may be required if necessary.

Art. 4 Application for admission to the selection, deadlines and submission procedures









Applications to participate in the selection, dated and signed, drawn up on plain paper and addressed to the Director of CNIT with the precise indication of selection notice no. **32/2023** must be sent exclusively by e-mail to: direzione@cnit.it.

In the application candidates declare under their personal responsibility:

- -surname and first name, date and place of birth;
- -residence and tax code;
- -citizenship;
- -if Italian citizens, the municipality in whose electoral roll they are registered;
- -if foreign citizens, that they enjoy civil and political rights in the State of their nationality or origin (with the exception of
- if they have refugee status or subsidiary protection status);
- -they have not been convicted of any criminal offence and do not have any pending criminal proceedings against them; if this is not the case, the candidate must indicate any criminal convictions they may have, even if they have not been res judicata, as well as any pending criminal proceedings, specifying the details of the conviction, plea bargain or application of amnesty, remission, pardon or judicial pardon, the authority that issued the measure and the title of the offence; the declaration must be made in any case, even if negative;
- -the qualification held, indicating the full wording of the qualification, the date it was awarded and the institution that issued it;
- -any need for auxiliary aids during examinations in relation to a specific disability;
- -any services rendered with public administrations and any reasons for their termination;
- -possession of any preferential qualifications on the basis of equal merit per art. 6 of this notice;
- -for foreign citizens only: to have adequate knowledge of the Italian language;
- -an e-mail address for sending communications relating to this selection;
- -a telephone number.

Communications concerning this procedure will be sent to the candidate's personal email address indicated above.

The application must be received, under penalty of exclusion, by midnight of 2013, March 19.

CNIT accepts no responsibility for the loss of communications due to incorrect sending, or for missed or late communication of the application, nor for any misunderstandings deriving from malfunctions of the e-mail service, or in any case attributable to third parties, fortuitous events or force majeure.

The application must be accompanied by a curriculum vitae, duly signed on every page and indicating all the elements aimed at proving possession of the requirements indicated in Article 2.

Art.5 Selection procedure and Evaluation Committee

The candidate selection process consists in the evaluation of the curriculum, by the Evaluation Commission appointed by the Board of Directors of the CNIT Consortium, and an interview may be required.

The Commission has a total of 30 points for the evaluation of qualifications and 60 points for the interview.

In order to be declared eligible, candidates must achieve a score of no less than 21/30 in the assessment of qualifications.









In the interview, the candidate must achieve a mark of no less than 42/60 in the assessment.

The Commission shall be appointed by CNIT's Board of Directors, after the deadline for the submission of applications, and shall be composed of at least three members of the Telecommunications Area and a member acting as secretary.

The members of the Commission will be required to sign a declaration attesting to the absence of any incompatibility or conflict of interest with the candidates or with the procedure in general.

The Commission may interview candidates to verify their experience and skills in the area of selection. The date, time and place of the interview will be communicated to candidates by e-mail to the address indicated in the application.

The Commission must conclude the procedure within one month from the date of the first meeting.

Art. 6 Criteria for the evaluation of qualifications and interview - qualifications for preference in the event of equal merit -

The Commission shall first adopt the evaluation criteria before examining the documents submitted by the candidates.

On the basis of the curriculum vitae submitted, the following elements in particular will be assessed:

	Maximum points
Grade earned for Master's Degree	5
Higher education qualifications	5
PhD in any discipline in the sector	8
Information Engineering	
Knowledge of Matlab/LaTex/Office package	3
Fundamentals of wireless networks, with emphasis on	3
cell-free massive MIMO and reconfigurable intelligent	
surfaces	
Participation in activities/projects aimed at	3
overcoming the 'glass ceiling'	
Carrying out activities in regions or states in developing	3
areas or with social gaps/emergencies	

The criteria will also be oriented to favour the employment of young people, and in particular women, as indicated in paragraph 2.2, in particular to protect and enhance the value of young people, in the case of equal points both in the evaluation of the qualifications and subsequently in the interview, preference will be given for the purposes of the composition of the ranking list to the candidate with the lowest age.

The Commission will assign the score on the basis of a reasoned overall judgement.









In the event of equal merit, for the purposes of the composition of the ranking list, preference will be given to personnel with disabilities enrolled in the lists relating to protected categories (Law no. 68/1999)

In order to pursue the objectives expected by the NRP in terms of the effective achievement of gender equality, in assessing the CV the Commission must take into account periods of inactivity or abstention from work due to maternity or parental leave.

Candidates must present themselves with valid identification. The interview, aimed at verifying the possession of the aptitude and professional requisites required in relation to the position to be filled, will focus on the activities and/or professional experience in the field of the competencies referred to in art. 3 and may be conducted in Italian or English.

In order to pass the interview, the candidate must obtain a score of no less than 42/60.

At the end of the session relating to the interview, the Board of Examiners will draw up a list of candidates with an indication of the score obtained by each of them in this test; this list, signed by the Chairman and the Secretary of the Board, will be posted on the same day on the notice board of the examination venue.

The Administration reserves the right to conduct the interview by videoconference, through the use of IT and digital tools, in any case guaranteeing the adoption of technical solutions that ensure its publicity, the identification of participants, and the security of telecommunications and their traceability; any details pertaining to the interview by telematics means will be published on the CNIT institutional website and candidates will be notified individually.

Art.7 Education and approval of the ranking list

After evaluating the qualifications and conducting any interviews, the Commission shall draw up a merit list, in descending order of the overall score obtained by each candidate, based on the sum of the score awarded for the qualifications and the score for the interview, if any. In the event of equal merit, the preferences provided for in Article 6 of this selection notice will be taken into account. Within the limits of the number of places available, the candidates who are favourably placed on the merit list referred to above will be declared the winners.

The acts and the rank lists of the winners and the successful candidates will be approved by a provision of the Director and the rank list will be published on the CNIT site at: https://www.cnit.it (announcements and job competitions section) and in "Transparent Administration".

The ranking list will remain valid according to the terms of the law, and may be used again in the event of renouncement of the winner or resignation of said winner during the period of validity of the contract or in the event of the need to activate a similar position for the same activity as indicated in art. 3 of the selection notice.

Art.8 Address where administrative information can be obtained and person in charge of the process

Consorzio Nazionale Interuniversitario per le Telecomunicazioni - CNIT, Viale G.P. Usberti 181/A-Palazzina 3 - 43124 Parma- ph. 0521-905757- direzione@cnit.it

The purpose of this selection is to identify **one staff unit** to carry out the required tasks and will result in the formation of a ranking list.









The Commission reserves the right to annul the selection in the event that candidates do not meet the requirements set out in Article 2 or if no candidates apply.

Pursuant to Law no. 241 of 7.8.1990, as amended and supplemented by Law no. 15 of 11.2.2005, the person in charge of the selection process is Dr. Paola Magri, Administrative Director of CNIT, e-mail: paola.magri@cnit.it ph. 0521-905757 c/o CNIT registered office Viale G.P. Usberti no. 181/A 43124 Parma (PR).

Article 9 Subject of processing

The data controller is Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) with head office in Viale G.P. Usberti n. 181/A, 43124 Parma (PR) pec: cnit@pec.it ph.: 0521/905757

Article 10 Purposes and modalities of personal data processing

Pursuant to Article 13 of Regulation (EU) 2016/679, you are hereby informed that this Consortium is the data controller of any personal data conferred and that the processing itself will be carried out in compliance with the aforementioned European regulation for the purposes of fulfilling the publication obligations set out in Article 15 of Legislative Decree 33/2013 and subsequent amendments and additions.

The data may be used and stored exclusively for the legal fulfilments related to the assignment. The provision of data is mandatory for these purposes. The data will be processed by the CNIT Consortium, as data controller, in compliance with the provisions of Regulation (EU) 2016/679 in the manner set out in the attached information notice.

Candidates are informed that they may in any case and at any time, in accordance with Articles 15 ff. of Regulation (EU) 2016/679, check their personal data collected by the Controller and have it corrected, updated or deleted by contacting the Data Protection Officer at the following addresses: direzione@cnit.it, cnit@pec.it.

Applicants are informed that in the event of non-compliance with Regulation (EU) 2016/679, they may lodge a complaint with the Data Protection Authority.

Art.11 Access to records

The right of access to the records of the selection procedure, pursuant to Law No. 241 of 7 August 1990 and subsequent additions and amendments, is exercised in the manner set out on the CNIT site www.cnit.it section "accessibility")- Requests for access to the records will be published in the "notices and announcements" area at the above web address.

This publication fulfils all the obligations of communication to interested parties under the above-mentioned law. CNIT is therefore not obliged to notify participants individually.

Art.12 Advertising and dissemination

This selection notice is published on the CNIT website (http://www.cnit.it/) in the "Notices and Announcements" section and on the website of the Civil Service Department https://www.inpa.gov.it.

Art. 13 Final Provisions









For anything not expressly provided for in this notice, the provisions of the regulations cited in the introduction to this notice, as well as the relevant laws in force, shall apply, insofar as they are applicable.

Director

(Prof. Eng. Francesco De Natale)